DIPARTIMENTO DI GIURISPRUDENZA

Cattedra di European Business Law

The reconciliation of State aid and environmental protection in the European Union: regulations and implications.

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Anno Accademico 2023–2024

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Il cambiamento climatico è una tematica sempre più presente nel dibattito pubblico. L'Unione Europea si è prefissata, in relazione ad esso, una varietà di misure sempre più stringenti, nonché vincolanti, che meritano di essere prese sul serio da ciascuno Stato membro, nell'attuazione, fra le altre cose, delle politiche di aiuti alle imprese. Si pone allora il tema circa la compatibilità di tali elargizioni a sostegno dell'economia con le normative per la lotta al cambiamento climatico. Al fine di garantire una maggiore uniformità all'interno dell'Unione, attraverso la normativa in tema di aiuti di Stato, la Commissione cerca, da parte sua, di ottenere un maggior ambito di "movimento" nel controllo su tali aiuti, rischiando di porre in pericolo principi fondanti, come il principio di sussidiarietà. Pare allora urgente analizzare entrambe le normative e chiedersi se un punto di sintesi fra queste due si possa trovare.

Le origini del crescente interesse dell'Unione Europea nella lotta al cambiamento climatico sono di matrice internazionale. Dal riconoscimento delle prime preoccupazioni ambientali nel contesto della Conferenza delle Nazioni Unite sull'Ambiente Umano del 1972 a Stoccolma, passando per la creazione di importanti organizzazioni scientifiche come il Gruppo intergovernativo sui cambiamenti climatici (IPCC), fino all'adozione di trattati cruciali come la Convenzione quadro delle Nazioni Unite sui cambiamenti climatici (UNFCCC) e l'Accordo di Parigi del 2015, la comunità internazionale ha compiuto progressi significativi nella lotta contro il cambiamento climatico. Questi sviluppi hanno introdotto concetti chiave come lo sviluppo sostenibile, il principio precauzionale e il principio del "chi inquina paga", i quali hanno plasmato il quadro normativo e le politiche ambientali a livello globale ed europeo.

Dal canto suo l'UE ha costantemente rafforzato il proprio impegno nei confronti della sostenibilità ambientale. Il Trattato di Maastricht del 1992 e il successivo Trattato di Amsterdam del 1997 hanno formalmente riconosciuto l'ambiente come un aspetto centrale della politica europea. Successivamente, il Trattato di Lisbona del 2009 ha ulteriormente sottolineato l'impegno dell'UE nella protezione ambientale, promuovendo la lotta contro il cambiamento climatico come obiettivo prioritario. Più recentemente, istituti quali il Sistema di Scambio delle Emissioni dell'UE, il Green Deal europeo ed il pacchetto "Pronti per il 55%" hanno assunto un ruolo di primo piano nell'agenda politica dell'UE. In particolare, il Green Deal si prefigge l'ambiziosa sfida del raggiungimento della neutralità climatica entro il 2050. Questa comunicazione, resa vincolante dalla Legge europea sul clima ed incentrata sull'innovazione e la trasformazione verde dell'economia europea, richiederà, come evidenziato dalla lettera del testo, un ingente investimento pubblico ed un coordinato sforzo economico da parte degli Stati membri nel dirigere capitali verso fini climatici ed ambientali.

A una tale esigenza, tuttavia, si contrappongono gli Articoli 107 e 108 del Trattato sul Funzionamento dell'Unione Europea (TFUE), concernenti la disciplina in tema di aiuti di Stato. La *ratio* di tale regolamentazione è volta alla protezione del *level playing field* delle imprese operanti sul mercato e non permette, in linea generale, l'elargizione di aiuti di Stato a beneficio di alcune imprese piuttosto che ad altre.

Per essere vietati, gli aiuti devono prima di tutto essere qualificati come tali. A tale compito provvede l'Articolo 107 TFUE il quale individua cinque caratteristiche cumulative. Esse sono l'impiego di risorse statali, l'attribuzione di un vantaggio, la selettività della misura, l'incidenza sugli scambi tra gli Stati membri e l'alterazione, o la sua minaccia, della concorrenza. A tale primo paragrafo, seguono i successivi due, inerenti a condizioni certe e possibili di compatibilità delle misure con il mercato interno.

La riconducibilità della misura alla definizione di aiuti di Stato avviene ad opera della Commissione, previa notifica da parte dello Stato membro d'interesse. A valle di tale disamina, l'aiuto viene definito compatibile o meno, ai sensi dell'Articolo 107 TFUE. Qualora tale elargizione sia stata attuata in violazione di tali norme, lo Stato ha l'obbligo di sopprimerla o modificarla nel termine concordato.

In definitiva, la disciplina degli aiuti di Stato appare spesso come un ostacolo piuttosto che un innesco del cambiamento in favore di un'economia sostenibile, imponendo un pesante onere amministrativo che scoraggia gli Stati membri dal fornire aiuti alle industrie, rischiando quindi di compromettere il raggiungimento degli obiettivi climatici prefissatisi. Per affrontare questa sfida, l'Unione Europea ha introdotto due provvedimenti significativi: il Regolamento Generale di Esenzione per Categoria (GBER) e la Disciplina in materia di Aiuti di Stato a favore del Clima, dell'Ambiente e dell'Energia (CEEAG).

Il GBER è un elemento chiave del quadro normativo dell'UE che regola gli aiuti di Stato, esentando determinate categorie di aiuti dall'obbligo di notifica preventiva e approvazione da parte della Commissione europea. Esso mira a semplificare il processo decisionale e a ridurre gli ostacoli amministrativi per gli Stati membri. Nel corso del tempo, il GBER è stato periodicamente modificato per rispondere alle esigenze e alle politiche in evoluzione dell'UE, con l'obiettivo di facilitare la transizione verde e digitale.

D'altra parte, la CEEAG fornisce il quadro per il sostegno delle autorità pubbliche agli obiettivi del Green Deal europeo in modo efficiente, con l'obiettivo di minimizzare le distorsioni della concorrenza nel mercato unico. Tra i cambiamenti più significativi introdotti, vi è l'ampliamento delle categorie di investimenti e tecnologie che gli Stati membri possono sostenere, garantendo allo stesso tempo che gli aiuti siano indirizzati dove necessario e che siano conformi agli obiettivi ambientali e concorrenziali dell'UE. L'elargizione delle misure non deve però risultare eccessiva, ma piuttosto è da considerarsi come *extrema ratio*. Le Linee guida richiedono infatti che l'aiuto sia adottato esclusivamente per promuovere sviluppi che il mercato da solo non sarebbe in grado di raggiungere o per evitare fallimenti di mercato. È bene, tuttavia, tenere in considerazione i possibili effetti negativi che possono derivare da un abuso di tale istituto, quali effetti a lungo e breve termine sulla concorrenza, rischi di doppi sussidi e distrazione dei fondi.

La pandemia globale da COVID-19 ha spinto l'Unione Europea a adottare il Quadro Temporaneo come misura di sostegno economico alle imprese in difficoltà. Questo strumento, duttile e derogatorio, non solo ha semplificato l'accesso ai finanziamenti, ma ha anche indirizzato le imprese nella transizione verso un modello più sostenibile ed ecologico. Tuttavia, ritardi burocratici e questioni sulla sua idoneità a lungo termine hanno sollevato dubbi in merito ad esso. Inoltre, il Quadro Temporaneo ha anche suscitato preoccupazioni sull'equità economica tra gli Stati membri e sull'interferenza con le politiche nazionali. Nonostante ciò, la sua flessibilità

si è dimostrata preziosa nell'affrontare le sfide della pandemia e potrebbe essere utile per strategie di aiuto future, specialmente per affrontare l'attuale crisi climatica.

Un'analisi comparativa con le politiche adottate in materia dagli Stati Uniti può risultare utile ai fini di una prospettiva più ampia che possa coadiuvare nella valutazione di luci e ombre della normativa europea. Nella disamina si è evidenziata la vulnerabilità delle politiche ambientali degli Stati Uniti, spesso oggetto di dibattito politico e sensibili all'amministrazione in carica. Mentre l'UE ha adottato normative e direttive volte a integrare la sostenibilità ambientale nel quadro normativo europeo, gli Stati Uniti hanno seguito un percorso caratterizzato da una maggiore frammentazione normativa delle politiche ambientali e della normativa relativa agli aiuti di Stato. Nonostante gli Stati Uniti siano generalmente associati a un regime economico più liberale, che guarda con diffidenza all'interventismo statale, tale paradigma non si configura però nel settore dell'energia rinnovabile, per il quale gli incentivi governativi rappresentano un importante strumento di promozione. Infine, si è evidenziato come l'adozione di recenti atti quali l'IRA (Inflation Reduction Act) e l' IIJA (Infrastructure Invesment and Jobs Act) abbiano spinto gli USA nel perseguimento della produzione interna di energia pulita. D'altro canto, tali strumenti, nonostante fossero stati inizialmente accolti dall'Unione Europea come un allineamento agli gli sforzi globali per combattere il cambiamento climatico, hanno contribuito a generare delle preoccupazioni dal punto di vista concorrenziale. Quest'ultima, pertanto, preoccupata per l'effetto di tali strumenti sulla competitività globale dell'industria europea, è stata costretta ad integrare anche la competitività economica globale come parte integrante delle proprie politiche climatiche ed energetiche.

Il secondo capitolo dell'elaborato è dedicato al cuore della questione, cioè, alla compatibilità delle due discipline. Ciò che risulta evidente è l'assoluta necessità di integrare la disciplina degli aiuti di Stato nella politica climatica dell'Unione europea. In tale ottica, il Green Deal Europeo rappresenta un'opportunità per riconfigurare il ruolo degli aiuti di Stato nel contesto delle politiche ambientali europee. Esso è da intendersi come un punto d'integrazione tra il mercato e il pubblico intervento e, allo stesso tempo, uno strumento mediante il quale le istituzioni europee modellano e dirigono le misure nazionali verso obiettivi coerenti con gli interessi e le necessità dell'Unione europea.

L'analisi della compatibilità delle misure ambientali con la politica europea in materia di aiuti di Stato inizia in primo luogo con la qualificazione della misura come tale. Particolare attenzione in tale contesto viene attribuito all'imputabilità di *risorse pubbliche*, alla *selettività* della misura e a *possibili effetti sulla concorrenza e sul commercio tra Stati Membri*.

In tale contesto, a causa dell'immutabilità dell'Articolo 107 del TFUE, le sentenze adottate negli anni in ossequio a tale disciplina, rappresentano ad oggi importanti precedenti giurisprudenziali. Tra tutti, il caso *PreussenElektra*, ampiamente discusso nel terzo capitolo, ha rappresentato un *unicum* nella qualificazione di una certa misura come aiuto di Stato. Il criterio dell'imputabilità della risorsa pubblica ha mostrato la sua complessità e la sua parziale imperfezione. La Commissione ha successivamente adoperato un'azione di discernimento tra questo caso e i successivi. Tra tutti, il caso olandese *Essent Netwerk Noord* e il francese

Association *Vent de Colère! Fédération nationale*, sono presentati in contrapposizione al caso *PreussenElektra*. A tal proposito, la Commissione, nel 2015, con riferimento al caso *Enea S.A.*, ha ulteriormente arricchito il concetto di "risorsa statale" introducendo la nozione di "origine pubblica dell'aiuto".

Fra i criteri di qualificazione di una misura quale aiuto di Stato, pare opportuno evidenziare che il mero obiettivo ambientale non rientri fra di essi, incentrati, invece, esclusivamente sui suoi effetti. La qualificazione e la compatibilità della misura, infatti, non richiede il perseguimento di alcun fine ambientale, a nulla rilevando se non fra le cause della manovra. È importante evidenziare, inoltre, la rilevanza di una valutazione della misura alla luce del rispetto della normativa europea nella sua interezza. Uno studio della giurisprudenza ha però evidenziato che la compatibilità di un aiuto con le misure ambientali è tenuto in considerazione se e soltanto se tale misura ha un obiettivo ambientale. Ne risulta il paradosso secondo il quale mentre un aiuto ambientale è soggetto alla valutazione della compatibilità con il mercato interno e con le politiche ambientali dell'Unione europea, al contrario, un aiuto non destinato a fini ambientali potrebbe non dover essere soggetto a quest' ultimo tipo di valutazione.

Una volta considerata l'elargizione come un aiuto, viene poi realizzata un'attività volta alla sussunzione della misura sotto i successivi commi 2 e 3 dell'articolo 107 TFUE. Nonostante l'obiettivo ambientale non spicchi come una ragione legittimante l'adozione dell'aiuto, con riferimento al paragrafo 3b, sarebbe possibile inquadrare le misure di protezione ambientale come un "progetto di comune interesse europeo".

La menzionata introduzione della CEEAG ha fornito delle Linee guida utili agli Stati membri nell'attuazione dei finanziamenti alle imprese, in virtù soprattutto dell'efficientamento climatico. Attraverso tali linee guida, la Commissione definisce "tutela ambientale" qualsiasi azione volta a limitare o ridurre il rischio di danni alle attuali risorse ambientali. Il risultato di una tale definizione è una concezione conservativa di sostenibilità che rischia di risultare in una preclusione della promozione e ampliamento della stessa. È importante evidenziare che la comunicazione appare essere una vera e propria direttiva che, pur non formalmente, impone agli Stati Membri l'adozione di misure di aiuto esclusivamente nella forma in essa indicata. Tale valutazione suggerisce la presenza di un deficit democratico in quando adottata dalla Commissione, senza il coinvolgimento di istituzioni legislative.

In tale contesto, è rilevante indagare la sovrapposizione normativa creatasi fra la CEEAG e il GBER. Sebbene il Regolamento costituisca un atto vincolante dell'Unione, in contrasto alla natura di *soft law* delle Linee guida, il rapporto gerarchico fra le fonti è controverso. Infatti, nonostante la CEEAG sembri, considerando il grado di dettaglio, complementare al Regolamento, specificandone il significato, un attento esame rileva una non completa corrispondenza fra le due, escludendo una perfetta funzione di supporto. A livello temporale, inoltre, i due atti si applicano in momenti formalmente differenti, rilevando, il GBER *ex ante*, mentre, le Linee guida, al momento della decisione di concessione degli aiuti da parte degli Stati membri.

Nell'ambito della transizione verde, tra i temi più sensibili alla qualificazione come aiuti di Stato, rientrano le questioni riguardanti la gestione della capacità energetica dei singoli Stati Membri e la *ratio* dell'esclusione dalla CEEAG del settore energetico nucleare.

Relativamente alla prima questione, con l'obiettivo di garantire il rifornimento continuo e sicuro di energia, gli Stati Membri hanno messo in atto vari interventi regolatori, fra i quali, la promessa di compensi ulteriori ai fornitori di energia. A seguito dell'adozione della Relazione finale sull'indagine settoriale sui meccanismi di regolazione della capacità, nel novembre 2016, la Commissione ha sottolineato la legittimità condizionata di tali meccanismi di regolazione. Tale legittimità risiede nell'adozione degli stessi solo quando i fallimenti di mercato non sono altrimenti evitabili. All'esito delle decisioni della Commissione, in seguito trattate nel Capitolo III, sorte con particolare riferimento al contesto britannico ed italiano, il Regolamento 943/19 ha inteso porre un margine alla frammentazione data dalla mancanza di armonizzazione delle regolamentazioni nazionali in tema.

Relativamente alla seconda, il settore energetico nucleare ha da sempre costituito un *unicum* nel panorama europeo, fin dalle sue origini, regolamentato in un trattato *ad hoc*, l'EURATOM che, in forza dell'articolo 106a(3), conferisce a quest'ultimo una posizione di prevalenza rispetto al TFUE. Tuttavia, il Trattato EURATOM non include disposizioni sugli aiuti di Stato, permettendo alla Commissione di applicare le regole sugli aiuti di Stato per evitare distorsioni della concorrenza. Il caso *Hinkley Point C* conferma l'applicabilità dell'intera normativa, compresi i paragrafi 2 e 3 dell'Articolo 107 TFUE, concernenti i casi di compatibilità, al settore nucleare. Nel contesto degli aiuti di Stato, il settore nucleare conserva le sue peculiarità, non essendo contemplato né dalla CEEAG né dal GBER. Nonostante ciò, tale settore ha ricevuto aiuti per promuovere la fonte energetica e ridurre i rischi associati ad essa associati. La liberalizzazione dei mercati energetici ha accentuato in seguito questi rischi, evidenziando la necessità di un maggiore supporto statale, soprattutto per affrontare fallimenti di mercato. L'esclusione del settore nucleare dal CEEAG e dal GBER solleva quindi domande sulla sua giustificazione. Questa esclusione è stata determinata da rischi politici e pressioni sfavorevoli al nucleare. Nonostante ciò, una tale estromissione non avvantaggia necessariamente gli Stati anti-nucleari poiché la maggiore libertà di interpretazione permette alla Commissione di avere più discrezionalità nell'applicazione delle regole del TFEU. Pertanto, come evidenziato nell'analisi dei casi affrontati nel terzo capitolo, questa esclusione potrebbe essere vista come un vantaggio per il settore nucleare, consentendo una maggiore flessibilità nell'ottenimento degli aiuti.

La chiusura delle centrali a combustibili fossili è cruciale per la transizione verso un'economia a basse emissioni di carbonio. Questa transizione è guidata sia da decisioni legislative che dalle dinamiche del mercato, come l'impatto dei prezzi del carbonio e la crescente competitività delle fonti di energia rinnovabile. Tuttavia, gli Stati membri possono anticipare questa transizione con divieti alla generazione di energia da carbone, torba e scisto bituminoso, causando la chiusura anticipata di centrali ancora redditizie e conseguenti perdite finanziarie per le aziende coinvolte, oltre a impatti significativi sulle comunità locali. Per mitigare questi effetti sociali ed economici, gli Stati possono concedere compensazioni, in linea con le Linee guida. Il caso della

centrale a carbone *Hemweg 8* nei Paesi Bassi, chiusa anticipatamente con una compensazione di 52,5 milioni di euro, illustra l'apertura della Commissione alle strategie ambientali degli Stati membri, pur rimanendo attenta a non distorcere la concorrenza.

In conclusione, questa tesi analizza le principali problematiche del regime degli aiuti di Stato, con un focus sul settore delle energie rinnovabili. Dalla ricerca emerge un quadro complesso in cui le questioni legali e politiche sono strettamente collegate. La Commissione tende a interpretare ampiamente il concetto di aiuto di Stato, cercando di armonizzare le politiche economiche degli Stati membri piuttosto che limitarle. La giurisprudenza della CGUE mostra le difficoltà nel bilanciare l'inclinazione della Commissione verso l'europeizzazione e la volontà degli Stati membri di mantenere la loro autonomia. L'attuazione del Green Deal europeo potrebbe ampliare l'autorità della Commissione nelle politiche industriali, promuovendo una maggiore sostenibilità ambientale e sociale. Si auspica che la nuova politica industriale europea riconosca l'importanza dell'uguaglianza e dello sviluppo territoriale e personale, essenziali per il processo di unificazione europea.

Abstract

Climate change is an increasingly prominent topic in public debate. The European Union has set forth a variety of increasingly stringent and binding measures related to this issue, which deserve to be taken seriously by each Member State in the implementation of, among other things, enterprise aid policies. This raises the issue of the compatibility of such economic support with regulations aimed at combating climate change. To ensure greater uniformity within the Union through State aid regulations, the Commission seeks on its part, to gain more "leeway" in controlling such aid, risking endangering foundational principles such as the principle of subsidiarity. It therefore appears urgent to analyze both sets of regulations and question whether a point of synthesis between them can be found.

The origins of the European Union's growing interest in combating climate change are international. From the recognition of the first environmental concerns at the 1972 United Nations Conference on the Human Environment in Stockholm, through the establishment of significant scientific organizations like the Intergovernmental Panel on Climate Change (IPCC), to the adoption of crucial treaties such as the United Nations Framework Convention on Climate Change (UNFCCC) and the 2015 Paris Agreement, the international community has made significant strides in the fight against climate change. These developments have introduced key concepts such as sustainable development, the precautionary principle, and the "polluter pays" principle, which have shaped the regulatory framework and environmental policies at both the global and European levels.

The EU has consistently strengthened its commitment to environmental sustainability. The Maastricht Treaty of 1992 and the subsequent Amsterdam Treaty of 1997 formally recognized the environment as a central aspect of European policy. Subsequently, the Lisbon Treaty of 2009 further emphasized the EU's commitment to environmental protection, promoting the fight against climate change as a priority objective. More recently, initiatives such as the EU Emissions Trading System, the European Green Deal, and the "Fit for 55" package have taken a leading role in the EU's political agenda. In particular, the Green Deal sets the ambitious challenge of achieving climate neutrality by 2050. This communication, made binding by the European Climate Law and focused on innovation and the green transformation of the European economy, will require, as highlighted by the letter of the text, significant public investment and coordinated economic effort by Member States in directing capital toward climate and environmental goals.

However, Articles 107 and 108 of the Treaty on the Functioning of the European Union (TFEU) concerning State aid rules pose a counterbalance to this need. The rationale behind this regulation is to protect the level playing field for businesses operating in the market, generally prohibiting the provision of State aid that benefits some enterprises over others. To be prohibited, aid must first be classified as such.

Article 107 TFEU identifies five cumulative characteristics: the use of State resources, the attribution of an advantage, the selectivity of the measure, the effect on trade between Member States, and the distortion, or the threat thereof, of competition. Following this initial paragraph, the subsequent two paragraphs outline specific and potential conditions for the compatibility of measures with the internal market.

The classification of a measure as State aid is carried out by the Commission, following notification by the interested Member State. Upon completion of this examination, the aid is deemed compatible or not, pursuant to Article 107 TFEU. If such aid has been granted in violation of these rules, the State is obliged to eliminate or modify it within the agreed timeframe.

Ultimately, the State aid regime often appears as an obstacle rather than a trigger for change in favor of a sustainable economy, imposing a heavy administrative burden that discourages Member States from providing aid to industries, potentially jeopardizing the achievement of set climate goals. To address this challenge, the European Union has introduced two significant measures: the General Block Exemption Regulation (GBER) and the Guidelines on State aid for Climate, Environmental Protection, and Energy (CEEAG).

The GBER is a key element of the EU's regulatory framework on State aid, exempting certain categories of aid from the obligation of prior notification and approval by the European Commission. It aims to simplify the decision-making process and reduce administrative obstacles for Member States. Over time, the GBER has been periodically amended to respond to the evolving needs and policies of the EU, with the goal of facilitating the green and digital transition.

On the other hand, the CEEAG provides the framework for public authorities' support for the goals of the European Green Deal in an efficient manner, with the aim of minimizing distortions of competition in the single market. Among the most significant changes introduced is the expansion of the categories of investments and technologies that Member States can support, ensuring that aid is directed where necessary and in compliance with the EU's environmental and competition objectives. The provision of measures must not be excessive but should be considered as a last resort. The guidelines indeed require that aid be adopted solely to promote developments that the market alone would not achieve or to avoid market failures. It is, however, important to consider the potential negative effects that may arise from an abuse of this instrument, such as long- and short-term effects on competition, risks of double subsidies, and diversion of funds.

The global COVID-19 pandemic has prompted the European Union to adopt the Temporary Framework as an economic support measure for struggling enterprises. This flexible and derogatory tool not only simplified access to financing but also guided businesses towards a more sustainable and ecological model. However, bureaucratic delays and questions about its long-term suitability have raised doubts about it. Additionally, the Temporary Framework has also raised concerns about economic equity among Member States and interference with national policies. Despite this, its flexibility has proven valuable in addressing the challenges of the pandemic and could be useful for future aid strategies, especially to tackle the current climate crisis.

A comparative analysis with the policies adopted in the United States may be useful for a broader perspective that can assist in evaluating the strengths and weaknesses of European regulations. The examination has highlighted the vulnerability of U.S. environmental policies, often subject to political debate and sensitive to the administration in power. While the EU has adopted regulations and directives aimed at

integrating environmental sustainability into the European regulatory framework, the United States has followed a path characterized by greater regulatory fragmentation of environmental policies and State aid rules. Despite the United States generally being associated with a more liberal economic regime that is skeptical of state intervention, this paradigm does not apply to the renewable energy sector, where government incentives represent an important promotional tool. Lastly, the adoption of recent acts such as the Inflation Reduction Act (IRA) and the Infrastructure Investment and Jobs Act (IIJA) has pushed the U.S. towards the pursuit of domestic clean energy production. Conversely, these instruments, initially welcomed by the European Union as aligning with global efforts to combat climate change, have raised concerns from a competitive standpoint. Therefore, the EU, worried about the impact of these instruments on the global competitiveness of European industry, has been forced to integrate global economic competitiveness as an integral part of its climate and energy policies.

The second chapter of this thesis is dedicated to the core issue, namely, the compatibility of the two disciplines. What becomes evident is the absolute necessity of integrating State aid rules into the EU's climate policy. In this perspective, the European Green Deal represents an opportunity to reconfigure the role of State aid within the context of European environmental policies. It should be understood as a point of integration between the market and public intervention and, at the same time, as a tool through which European institutions shape and direct national measures towards goals consistent with the interests and needs of the European Union.

The analysis of the compatibility of environmental measures with European State aid policy begins first with the classification of the measure as such. Particular attention in this context is given to the imputability of *State resources*, the *selectivity* of the measure, and *potential effects on competition and trade between Member States.*

In this context, due to the immutability of Article 107 TFEU, the judgments issued over the years in adherence to this discipline represent important precedents today. Among all, the *PreussenElektra* case, extensively discussed in the third chapter, has represented a unique instance in the classification of a certain measure as State aid. The criterion of imputability of the public resource has shown its complexity and partial imperfection. The Commission has subsequently engaged in distinguishing this case from subsequent ones. Among these, the Dutch *Essent Netwerk Noord* and the French Association *Vent de Colère! Fédération nationale*, are presented in contrast to the *PreussenElektra* case. In this regard, in 2015, the Commission further enriched the concept of "State resource" by introducing the notion of "public origin" of the aid with reference to the Enea case.

Among the criteria for classifying a measure as State aid, it is appropriate to highlight that the mere environmental objective does not fall within them, instead being exclusively focused on its effects. The classification and compatibility of the measure, in fact, do not require the pursuit of any environmental goal, which is irrelevant except among the causes of the maneuver. It is also important to note the relevance of evaluating the measure considering compliance with European regulations in their entirety. A study of the case

law has, however, highlighted that the compatibility of aid with environmental measures is considered only if such a measure has an environmental objective. This results in the paradox that while environmental aid is subject to the assessment of compatibility with the internal market and the environmental policies of the European Union, conversely, aid not intended for environmental purposes might not be subject to this latter type of assessment.

Once the provision is considered as aid, an activity aimed at subsuming the measure under the subsequent paragraphs 2 and 3 of Article 107 TFEU is carried out. Although the environmental objective does not stand out as a legitimate reason for the adoption of aid, with reference to paragraph 3b, it would be possible to frame environmental protection measures as a "project of common European interest".

The mentioned introduction of the CEEAG has provided useful guidelines to the Member States in the implementation of financing for businesses, especially in light of climate efficiency. Through these guidelines, the Commission defines "environmental protection" as any action aimed at limiting or reducing the risk of damage to current environmental resources. This results in a conservative conception of sustainability that risks resulting in a preclusion of its promotion and expansion. It is important to highlight that the communication appears to be a veritable directive that, although not formally, imposes on the Member States the adoption of aid measures exclusively in the form indicated therein. Such assessment suggests the presence of a democratic deficit as it is adopted by the Commission without the involvement of legislative institutions.

In this context, it is relevant to investigate the regulatory overlap created between the CEEAG and the GBER. Although the Regulation constitutes a binding act of the Union, contrasting with the soft law nature of the Guidelines, the hierarchical relationship between the sources is controversial. Indeed, despite the CEEAG seeming, considering the level of detail, complementary to the Regulation, specifying its meaning, a careful examination reveals a not complete correspondence between the two, excluding a perfect supportive function. At the temporal level, moreover, the two acts apply at formally different moments, with the GBER *ex ante*, while the Guidelines, at the time of the decision to grant aid by the Member States.

In the context of the green transition, among the most sensitive issues qualifying as State aid are those concerning the management of the energy capacity of individual Member States and the rationale for the exclusion of the nuclear energy sector from the CEEAG. Regarding the former issue, with the aim of ensuring continuous and secure energy supply, Member States have implemented various regulatory interventions, including the promise of additional compensation to energy providers. Following the adoption of the Final Report on the sectoral investigation into capacity remuneration mechanisms in November 2016, the Commission emphasized the conditional legitimacy of such regulatory mechanisms. This legitimacy lies in the adoption thereof only when market failures are otherwise unavoidable. Following the decisions of the Commission, subsequently discussed in Chapter III, arising with particular reference to the British and Italian contexts, Regulation 943/19 aimed to put a margin to the fragmentation resulting from the lack of harmonization of national regulations on the subject.

Regarding the latter, the nuclear energy sector has always constituted a unique feature in the European landscape, since its origins, regulated in an *ad hoc* Treaty, EURATOM, which, under Article 106a(3), gives it a position of precedence over the TFEU. However, the EURATOM Treaty does not include provisions on State aid, allowing the Commission to apply State aid rules to avoid distortions of competition. The *Hinkley Point C* case confirms the applicability of the entire regulatory framework, including paragraphs 2 and 3 of Article 107 TFEU, concerning compatibility cases, to the nuclear sector. In the context of State aid, the nuclear sector retains its peculiarities, not being included in either the CEEAG or the GBER. Nevertheless, the nuclear sector has received State aid to promote this energy source and reduce associated risks. The liberalization of energy markets has subsequently accentuated these risks, highlighting the need for greater State support, especially to address market failures. The exclusion of the nuclear sector from the CEEAG and the GBER thus raises questions about its justification. This exclusion has been determined by political risks and unfavorable pressures on nuclear energy. Nevertheless, such exclusion does not necessarily benefit anti-nuclear States since greater interpretive freedom allows the Commission more discretion in applying the rules of the TFEU. Therefore, as highlighted in the case analysis undertaken in the third chapter, this exclusion could be seen as an advantage for the nuclear sector, allowing greater flexibility in obtaining State aid.

The closure of fossil fuel power plants is crucial for the transition to a low-carbon economy. This transition is driven both by legislative decisions and market dynamics, such as the impact of carbon prices and the increasing competitiveness of renewable energy sources. However, Member States can anticipate this transition with bans on coal, peat, and oil shale energy generation, causing the premature closure of still profitable plants and consequent financial losses for the companies involved, as well as significant impacts on local communities. To mitigate these social and economic effects, States can grant compensations, in line with the Guidelines. The case of the *Hemweg 8* coal-fired power plant in the Netherlands, closed prematurely with a compensation of 52.5 million euros, illustrates the Commission's openness to the environmental strategies of Member States, while remaining attentive not to distort competition.

In conclusion, this thesis analyzes the main issues of the State aid regime, with a focus on the renewable energy sector. The research reveals a complex framework in which legal and political issues are closely intertwined. The Commission tends to broadly interpret the concept of State aid, seeking to harmonize the economic policies of Member States rather than limit them. The case law of the CJEU shows the difficulties in balancing the Commission's inclination towards Europeanization and the willingness of Member States to maintain their autonomy. The implementation of the European Green Deal could broaden the Commission's authority in industrial policies, promoting greater environmental and social sustainability. It is hoped that the new European industrial policy will recognize the importance of equality and territorial and personal development, essential for the process of European unification.

Chapter I

Analysis of the Climate Change Legislation and of the State Aid Regulation

1. Climate Change Legislation

1.1. Origins and Development

1.1.1. International Milestones in Environmental Protection

Understanding the history of international environmental protection is essential to grasp the regulatory environment and current challenges related to transitioning to a more sustainable and climate-resilient economy. It is exciting to reflect on how far we have come and how much more we still have to achieve through cooperation and innovation. Examining the origins and development of environmental protection helps us to contextualize current policies and strategies, thus, providing a clear picture of the challenges faced in the past. The history of environmental protection provides valuable insights into the compatibility between State aid and European climate law. It highlights precedents, critical issues, and opportunities that may influence the design and implementation of public policies aimed at environmental sustainability.

The development of European environmental protection is the result of ongoing international efforts which have culminated in the creation of a comprehensive legal structure. Beginning with sector-specific regulations in the 1990s, the framework now includes a broad range of regulations covering industrial and energy production.

Moreover, key global agreements, including the 1997 Kyoto Protocol and the 2015 Paris Agreement, have significantly influenced the European Union's climate legislation, established obligatory commitments and set ambitious goals to counteract the consequences of climate change[1].

When exploring the origins of global environmental safeguarding, the first United Nations Conference on Human Environment in Stockholm in 1972[2] is a groundbreaking event, paving the way for future progress. The international community has affirmed the importance of protecting the environment as a common concern and upholding the principle of "*prohibition of transboundary*

[1] WOERDMAN, ROGGENKAMP and HOLWERDA, *Essential EU climate law*, 15;

[2] Report of the United Nations Conference on the Human Environment, Stockholm, June 5th-16th, 1972, (No. A/CONF.48/14/ Rev.1);

pollution". This principle grants States the right to utilize their resources, provided that no damage is inflicted upon neighboring States. The Intergovernmental Panel on Climate Change (IPCC) was established in 1988 under the patronage of the United Nations Environment Programme (UNEP) and the World Meteorological Organization (WMO)[3]. As an independent scientific organization, the IPCC has played a pivotal role in evaluating the effects of climate change. The organization's first assessment report, published in 1990, confirmed the connection between human activities and the greenhouse effect[4]. IPCC reports have constantly emphasized the strong correlation between greenhouse gases and climate change[5].

In 1992, the United Nations Conference on Environment and Development in Rio de Janeiro established the concept of "*sustainable development*", which emphasizes the prudent use of finite resources to ensure that future generations will be able to satisfy their needs. Two main principles emerged from the conference: the "*precautionary principle"* empowers States to curtail potentially harmful activities or imports, while the "*polluter pays"* guideline acts as a deterrent. These principles were later incorporated into Article 191 of the TFEU. Moreover, the Rio conference attempted to formulate a thorough action plan named "*Agenda 21*" to develop sustainable economic progress pathways. Regrettably, the plan never came to fruition.

The 1992 IPCC outcomes led to the establishment of the United Nations Framework Convention on Climate Change (UNFCCC), which served as a crucial turning point in international climate policy and is held every year in different cities[6]. The UNFCCC functions through its primary decision-making bodies, the Conference of the Parties (COP), and the Conference of the Parties serving as the Meeting of the Parties to the Kyoto Protocol (CMP).

While the UNFCCC did not initially set enforceable emission reduction targets, it laid the foundation for future protocols and treaties and introduced the concept of "*common but differentiated responsibilities*". This newly introduced principle delegated most of the responsibility for limiting factors which could eventually cause climate change to the larger and more industrially developed nations.

The convention also established a goal to stabilize levels of greenhouse gases sufficiently to avoid dangerous anthropogenic interference with the planetary climate system. In fact, it declared that sustainable development and the timely prevention of harmful interference with the climate system have become critically important «to allow ecosystems to adapt naturally to climate change, to ensure

[3] WOERDMAN, ROGGENKAMP and HOLWERDA, *Essential EU climate law*, 14.

[4] In addition to predicting a subsequent increase in global temperatures and sea levels over the following decades.

[5] Also suggesting several times, the necessity of limiting greenhouse gas emissions, including carbon dioxide (CO2), methane (CH4), and nitrous oxide (N2O).

[6] The first conference was held in Berlin in 1995 and is commonly referred to as COP1.

that food production is not threatened, and to enable economic development to proceed in a sustainable manner».

The UNFCCC then established a global emissions reduction target, making it one of its primary objectives. The introduction of the "Kyoto Protocol" in 1997 resulted in 160 Nations committing to reduce greenhouse gas emissions by at least 5% below 1990 levels, with notable absences such as the United States.

Fast forward to 2015, the international community convened in Paris to address the limitations of the Kyoto Protocol and the escalating global climate crisis, resulting in the historic Paris Agreement. The Agreement, which garnered the commitment of 195 countries, including major emitters such as the United States, China, and India, aims to cap the global temperature increase at two degrees by restricting atmospheric carbon dioxide emissions. The European Union currently accounts for 15% of global pollutant emissions and is recognized for its steadfast commitment to fulfilling its obligations over the years.

The Paris Agreement, which was adopted on December 12th, 2015, through the UNFCCC Decision 1/CP.21, was a milestone for global climate discussions and signified an important shift towards clean energy investments and non-state entity engagement. The Paris Agreement's remarkably rapid ratification process, compared to the previous agreements, culminated in its entry into force on November 4th, 2016, only 11 months after its adoption, demonstrating the urgency and commitment of the international community to climate action[7].

Legally, the Paris Agreement operates as an international treaty, supplementing the UNFCCC but not substituting it. Although the Paris Agreement is binding for its signatories, its structure deviates from the previous conventions. By emphasizing a "*bottom-up*" approach[8], the agreement sets overarching goals and permits nations to tailor their commitments through *Nationally Determined Contributions* (NDCs)[9].

The Paris Agreement comprise essential provisions and institutional arrangements: in its preamble, it stresses the urgency of action and advocates for a comprehensive strategy that includes sustainable development, poverty reduction, and other socioeconomic factors. The main goals outlined in Article 2 are highly ambitious, establishing a worldwide objective of limiting the rise in temperature to below 2°C, with efforts to set a cap at 1.5°C above pre-industrial levels.

[7] Currently, 191 Parties have ratified the Agreement. It is noteworthy that the U.S. temporarily withdrew in 2020 but rejoined in 2021.

[8] DOELLE, *The Paris Agreement: Historic Breakthrough or High Stakes Experiment?*, in 6 *Climate Law* 1-20, 2 (2016).

[9] The implementation of NDCs serves as a reminder of each nation's individual capacities and responsibilities in fostering a collective response to climate challenges. In Articles 4 and 6 mitigating measures are discussed and countries are pushed to be as ambitious as possible in the formation of their NDCs, also considering their different responsibilities and abilities. Article 8 tackles loss and damage caused by the impacts of climate change, promoting a preventive and collaborative approach while avoiding the contentious issues of liability and compensation. Transparency and accountability play a central role in the Agreement, as seen through the mechanisms introduced in Articles 13 and 14 to track progress in mitigation and adaptation efforts.

On the institutional level, the Paris Agreement establishes the Paris Committee on Capacity Building (PCCB) and primarily depends on existing structures for enforcement. The COP meetings after the Agreement, ranging from COP22 to COP25, focused on improving the "*Paris Rulebook"* to ensure successful implementation beginning in 2020. COP26, originally scheduled for 2020 but rescheduled due to the COVID-19 pandemic in October 2021, dealt with, among the most important initiatives, the commitment to increase funding to help developing countries combat climate change, the adoption of the global commitment to reduce methane emissions and the finalization of the Paris Rulebook[10].

Coinciding with the Paris Agreement, the United Nations adopted the 2030 Agenda for Sustainable Development, in September 2015. This global action plan is an ambitious framework, adopted by the United Nations, that aims to address the socio-economic and environmental challenges of the 21st century.

The 2030 Agenda is based on the principles of sustainable development, recognizing the interdependence of economic, social, and environmental objectives and the importance of an integrated approach to achieving fair and lasting prosperity for all[11]. At the center of the Agenda are 17 Sustainable Development Goals (SDGs), which address a range of global challenges, including poverty, hunger, health, education, gender equality, access to clean water and clean energy, reducing inequality, and combating climate change. Each goal is accompanied by specific objectives and targets that establish a clear framework for monitoring and assessing progress towards achieving the SDGs by 2030. The 2030 Agenda emphasizes the importance of global cooperation and the participation of all stakeholders, including governments, international organizations, the private sector and citizens, in achieving positive and sustainable change towards a better future for all.

1.1.2. European Evolution of Environmental Protection

As for the European level, the 1972 Paris European Council marked a key moment in the development of the European Union's environmental policy. Brought about by the Stockholm Conference, the Heads of State and Government recognized the need to balance environmental concerns with economic prosperity, resulting in the establishment of a community-level environmental policy and the implementation of an action program.

The 1986 Single European Act established the legal foundation for a collaborative environmental policy. A distinct "*Environment*" title was introduced for the purpose of fostering environmental quality, protecting human health, and promoting the sustainable utilization of natural

[10] *Climate change summit COP26*. Retrieved on November 8th, 2023.

[11] *Agenda 2030*, in *Themes of Italian parliamentary activity in the XVII legislature*.

resources. The Community reaffirmed its commitment to environmental protection through subsequent treaty amendments that expanded the role of the European Parliament in policy development[12].

The Maastricht Treaty of 1992 formally acknowledged the environment as a core feature of EU policy. In addition, the Treaty of Amsterdam in 1997 required environmental safeguards to be incorporated into all Union sectoral policies, with the goal of advancing sustainable development.

The European Union Emissions Trading Scheme (EU ETS), launched in 2005, is the largest carbon market worldwide and represents a major stride in the EU's efforts to reduce greenhouse gas emissions. Operating on a cap-and-trade principle, the EU ETS sets a limit on permissible emissions from major energy-consuming industries and aviation, which helps reduce emissions.

In 2009, the Treaty of Lisbon emphasized the EU's commitment to environmental protection by designating "*combating climate change*" as a distinct goal. It emphasized the significance of promoting sustainable development in third-country relations and conferred legal personality upon the EU, enabling it to form international agreements[13].

Recently, the European Green Deal has arisen as one of the EU's most daring endeavors, striving to revolutionize its economy and reach climate neutrality by 2050. This roadmap covers various areas, including clean energy, sustainable transportation, biodiversity conservation, energy-efficient construction, and renovation practices. Its main focus is advocating for a pollution-free and toxin-free environment. The central pillar of the Green Deal is the pledge to cut greenhouse gas emissions significantly by 2030, with a goal of reducing them by at least 50% from their 1990 levels. The plan highlights the importance of separating economic growth from resource consumption, promoting innovative industries to establish leadership in the global green economy, and ensuring a fair transition for all individuals and regions during Europe's economic transformation.

1.2. Legal Basis and General Principles of Environmental Protection in the EU

1.2.1. Legal Basis

The Treaty on the Functioning of the European Union (TFEU) serves as the legal basis for the European Union's environmental activities, with specific provisions outlined in Articles 11, 191-193 and 194(2). These articles empower the EU to legislate and act in a wide range of environmental areas, including air and water pollution, waste management, climate change, and more.

In particular, Article 11 ensures that environmental protection is integrated into the Union's policies and actions with a view to promoting sustainable development. Articles 191 to 193, on the

[12] On the topic: FERRARO, *L'evoluzione della politica ambientale dell'Unione: effetto Bruxelles, nuovi obiettivi e vecchi limiti*, in *Riv. giur. amb.*, 2021, 777, *ivi* 778.

[13] *Environment policy: general principles and basic framework*. Retrieved on November 10th, 2023.

other hand, fall under Title XX of the Treaty, which is entirely devoted to the environment, and thus form the basis of the environmental policy of the European Union.

Article 191 TFEU sets out environmental objectives, including the promotion of a high level of environmental protection and the polluter pays principle.

Article 192 concerns the legislative procedure for the adoption of environmental measures, giving the European Parliament and the Council the task of adopting such measures to achieve the environmental objectives set.

Article 193 allows individual Member States to adopt even higher levels of protection than those set by the Union, provided that they are compatible with the Treaties.

As we shall see, the growing relevance of State aid in the climate perspective, necessarily brings with it increased attention to the energy dimension and to issues such as, for example, security of supply. It is here that Article 194 of the TFEU takes on preliminary importance in the examination that this chapter sets out to make. It outlines the Union's energy policy. Its objectives include ensuring the functioning of the energy market and its proper supply, promoting energy saving, efficiency, and the development of renewable energies, as well as promoting the interconnection between energy networks[14]. The European Parliament and the Council are empowered to establish the measures necessary to achieve these objectives, it being understood that such measures shall not interfere with the right of Member States to determine the conditions of use, choice and structure of their energy sources and supply[15].

1.2.2. General Principles

The Union's powers in these areas are limited by the principle of subsidiarity and require unanimity in the Council for matters relating to taxation, choice of energy sources and structure of energy supply[16].

The European Union's environmental policy is based on the so-called "*precautionary principle*", a doctrine that advocates proactive intervention to prevent pollution at its source and insists that the polluter bear the costs of remediation[17].

The "*polluter-pays*" principle finds its practical application in the Environmental Liability Directive (ELD), entered into force in 2007, which obliges companies to prevent or, where necessary,

[14] SCLAFANI, *Aiuti di stato e maccanismi di remunerazione della capacità di energia elettrica*, in *Gli aiuti di stato: profili generali e problematiche energetiche: Convegno annuale di AIDEN 2019: Milano, 1 luglio 2019*, 2020, 205 ff.

[15] Except as provided for in Article 192(2)(c).

[16] As well as land-use planning and quantitative management of water resources.

[17] This principle comes into play as a risk management tool when scientific data is inconclusive about the potential threats a product or policy may pose to public health or the environment. In such cases, the precautionary principle could lead to the suspension or withdrawal of the product from the market through guidelines that must be non-discriminatory, proportionate, and revisable in the light of new scientific evidence.

address and finance the remedying of environmental damage, in particular to protected species, natural habitats, water and soil. In general terms, by making those that have caused environmental damage liable for remediation, the ELD provides a strong incentive to avoid damage occurring in the first place.

The EU environmental policy framework is further enriched by the integration of environmental considerations into other EU policies, a process that has gained momentum since its launch at the Cardiff European Council in 1998. This cross-sectoral integration is particularly evident in the energy sector, as demonstrated by the parallel development of the EU's climate and energy package and the roadmap to a competitive low-carbon economy by 2050.

1.3. EU Emissions Trading Systems

The EU Emission Trading Scheme (EU ETS) represents a seminal component of European environmental policy, conceived to address the multifaceted challenges posed by climate change. It was launched in 2005 when the European Union sought to fulfil its international obligations under the Kyoto Protocol, during the Protocol's first commitment period. The EU ETS operates in *"trading phases*" and has emerged as the world's largest *"cap-and-trade"* system, predicated on a cap set for greenhouse gas emissions across various sectors[18]. With its overarching aim to reduce emissions cost-effectively, it encompasses industries such as energy, manufacturing, and aviation. By issuing tradable emission allowances to participating entities, the EU ETS encourages emission reduction, thereby contributing to environmental objectives. As the EU progressively tightened the cap and expanded the scope, the scheme played a pivotal role in aligning the Union with its ambitious emission reduction goals, enhancing its reputation as a key driver of climate change mitigation within the international community.

The ETS Directive outlines a well-established trading system, now in its fourth phase, after the revision in 2018, which has been modified several times over the years to align it with the EU's overarching climate change objectives.

The system operates according to the following guidelines: first, emission reduction targets are established for designated sectors, such as industry, energy, and aviation, with the overall aim of reducing aggregate emissions. Secondly, companies operating within these sectors are allocated emission allowances, which represent the legally permissible volume of greenhouse gas emissions. The emissions cap restricts the total number of available allowances, and a market for emissions is fostered, allowing companies to trade their emission allowances. Entities that manage to reduce emissions below their allocated allowances may sell their surplus to counterparts exceeding their allocations. Finally, a monitoring and penalty system requires companies to monitor and report their emissions, and in the event of violations where emissions exceed the allocated allowances, companies are obligated to purchase

[18] *What is EU ETS?*. Retrieved on November 10th, 2023.

additional allowances on the market or face penalties. With the introduction of the European Green Deal and its climate targets, a further revision of the Directive was initiated in 2021.

On the 14th of July 2021, the *"Fit for 55"* package was presented. This package comprises proposals from the Commission aimed at reforming the EU climate and energy policies, notably the ETS. By June 2023, the European Parliament and Council had both approved the ETS proposals, which are now legally binding.

1.4. European Green Deal and Climate Law

1.4.1. The Plan

The *"European Green Deal"* is a communication from the Commission dated December 11th, 2019. It envisions a complete transformation of the entire economy, setting ambitious targets that require a paradigm shift in various sectors, such as the energy and the industrial ones. Innovation is emerging as a central component of this transformation, requiring the adoption of new and sustainable technologies for energy generation and transportation, as well as for the production of goods and services that are an integral part of our daily lives.

At the same time, it requires a fundamental shift in the operating models of private entities, urging a transition away from unsustainable practices, particularly those that rely on fossil fuels. It is imperative to recognize that realizing the aspirations of the Green Deal cannot depend solely on public intervention and sector-specific regulation.

Rather, it is necessary to stimulate private sector engagement and foster a collaborative environment in which public and private actions contribute synergistically to the achievement of these sustainability goals. This requires a balanced approach that integrates regulatory frameworks and incentives that promote sustainable practices while encouraging innovation and investment in green technologies.

The European Green Deal outlines two key goals: firstly, as declared in the *"Fit for 55"* package, to attain a noteworthy reduction in greenhouse gas emissions from the 1990 levels by 2030, aiming for 55% as opposed to the prior 40% target; secondly, to accomplish climate neutrality, signifying zero net greenhouse gas emissions, by 2050[19]. This sets the European Union on a strategic trajectory to achieve a climate-neutral continent by the mid-21st century.

[19] FERRARO, *L'evoluzione della politica ambientale dell'Unione: effetto Bruxelles, nuovi obiettivi e vecchi limiti*, 780.

Moreover, a high level of environmental protection is stated as a crucial purpose. It includes not only «preserving and restoring the Europe's natural capital»[20], but also decoupling the use of natural resources from economic growth[21].

The Communication outlines the changes that need to be made both within the EU and in terms of external relations in this context. For the purposes of this thesis, however, it is only necessary to consider the parts of the Communication that relate to internal action.

In an effort to make this strategic vision reality, the European Union Climate Law (Regulation 2021/1119) was published in the Official Journal on July 9th, 2021 and entered into force on July 29th, 2021. It serves as the legislative instrument to make what is contained in the EU Green Deal legally binding. Indeed, this legal framework includes the 2030 interim objective and the aim for climate neutrality by 2050, imposing binding obligations on the Member States.

The roadmap presented to move toward a clean and circular economy and halting climate change by reversing biodiversity loss and reducing pollution has effect above all on sectors of the economy: transportation, energy, agriculture and buildings which are the most polluting industries. For this reason, achieving climate neutrality by 2050 is a monumental challenge that requires comprehensive sectoral transformations, substantial investments, and perhaps modifications to State aid and competition policies to facilitate these green initiatives.

To support these initiatives, the "*EU Green Deal Investment Plan*" was created to mobilize at least one trillion Euros in the next decade. However, it is said that this alone will not be enough. Achieving these goals requires redirecting private capital towards environmental and climate initiatives and implementing various policy levers such as regulation, standardization, and investments in an integrated manner[22].

The following sections will explore some essential aspects of the European Green Deal, providing an overview of its main constituents and establishing the foundation for a thorough examination of the required competition law reforms to achieve the Green Deal's aspirations.

1.4.2. The Energy Sector

The European Green Deal emphasizes the importance of converting the energy system to attain its primary objectives, while acknowledging that over 75% of the EU's greenhouse gas emissions originate from energy production and utilization. Indeed, the Communication explicitly indicates the urgency of a rapid shift from fossil fuels, including coal and natural gas, to a swift adoption of

[20] EU guidelines SWD (2019)305 FINAL "*EU guidance on integrating ecosystems and their services into decision-making*".

[21] And protecting EU citizens from environment-related risks to their health and well-being.

[22] GUPTA, *EU State Aid Rules and the European Green Deal: Will Their Stars Align?*, in 48(3) *Air & Space Law* 353–362, 356 (2023).

renewable energy sources[23]. This measure shows the EU's commitment to cutting back on carbon emissions and achieving net-zero emissions.

On the other hand, the shift only in the energy production system cannot guarantee the successful implementation of the maneuver. Indeed, the rise in renewable energy requires a sturdy and interconnected energy infrastructure across the Union. Article 170 of the TFEU mandates the EU's participation in creating and advancing trans-European networks, including the energy infrastructure[24].

1.4.3. The Industrial Sector

The industrial sector is a key area for the objectives of the European Green Deal due to its significant role in greenhouse gas emissions and environmental damage. According to the Communication, the extraction of resources and the processing of materials, fuels, and food account for almost half of all greenhouse gas emissions. To address these challenges, the Green Deal outlines two primary objectives. Firstly, it demands a substantial reduction in greenhouse gas emissions from the EU's industrial sector. Secondly, it emphasizes the necessity to decouple industrial processes from the consumption of new materials, advocating for a more sustainable approach to resource utilization.

The document acknowledges the vital role that resource-intensive industries, like steel, chemicals, and textiles, play in the EU economy. The pressing need to develop and implement sustainable production methods for these industries is emphasized in order to reconcile their economic importance with environmental sustainability.

The European Green Deal presents a thorough plan to tackle the industrial sector's environmental impact, promoting emission reduction, resource efficiency, and a circular method of material utilization.

1.5. Fit for 55 package

The "*Fit for 55*"[25] package is a set of European Commission proposals to review and improve EU legislation to enforce the 55% greenhouse gas emission reduction target by 2030 set out in the European

[23] Offshore wind power and hydrogen as energy carrier have been highlighted as means to help the EU in the shift towards renewable energy.

[24] On June 23rd, 2022, the revised Trans-European Networks for Energy (TEN-E) Regulation laying down new EU rules for cross-border energy infrastructure entered into force. The TEN-E is a policy that is focused on linking the energy infrastructure of EU countries. As part of the policy, eleven priority corridors cover different geographic regions in the field of electricity, offshore grid and hydrogen infrastructure and three priority thematic areas - including smart electricity grids deployment, smart gas grids, and a cross-border captured carbon dioxide network - have been identified. The aim is to guarantee and enhance the connection of regions currently isolated from European energy markets, strengthen existing cross-border interconnections and help integrate renewable energy.

[25] *European Green Deal: Commission proposes transformation of EU economy and society to meet climate ambitions*. Retrieved on November 10th, 2023.

Union's climate change legislation[26]. It sets out new measures to ensure that EU policies are consistent with the climate change targets adopted by the Council and the European Parliament.

The "*Fit for 55*" package builds on previous climate policies such as the 2020 Climate and Energy Framework, which reinforces the EU's commitment to the Paris Agreement's goal of limiting the global temperature increase to below two degrees Celsius. The main objective of the package is to achieve a 55% reduction in greenhouse gas emissions by 2030 compared to 1990 levels through a multi-faceted strategy. It comprises a diverse set of policy initiatives[27] and reforms to the current *EU Emissions Trading Scheme* (*EU ETS*) and the *Effort Sharing Regulation* (*ESR*) between Member States.

The Commission's proposals include a mix of changes to existing instruments and the introduction of new ones, such as the second *EU ETS* for the buildings and transport sectors, *the Carbon Boundary Adjustment Mechanism,* and *the Social Climate Fund*. In terms of changing the cornerstones of European energy-environment legislation, there are reforms to regulations and directives such as the *ETS Directive* mentioned above, the *ESR* and others[28].

2. State Aid Law

2.1. Overview

In theory, competition law should be based on the free market principle. This so-called classical liberal view goes back to Friedrich Hayek's assertion that the tendency of market economies is to arrive automatically at a spontaneous order. Entrepreneurs, according to this logic, create networks in which they carry out their activities, i.e., produce and distribute goods and services. This distribution is therefore not the result of any planning but of the spontaneous individual decisions of each economic agent.

This theory can be traced back to Adam Smith's concept of the invisible hand, according to which the individual, driven solely by the pursuit of personal gain, also pursues, without being aware of it, an ulterior goal that can bring about social progress.

The theory is the one most applied in Western States, but, often, adjustments are needed from national and/or supranational sources to avoid distortions in competition. In the European Union, according to Article 3 of the TFEU, the «definition of the competition rules necessary for the functioning of the internal market » falls within the exclusive competence of the Union. In other words, this is an area in which only

[26]Communication from The Commission (COM/2021/550 final), " 'Fit for 55': delivering the EU's 2030 Climate Target on the way to climate neutrality".

[27] These initiatives include an overhaul of energy taxation, improvements in energy efficiency, integration of renewable energy, carbon pricing mechanisms and stringent emission reduction targets for a wide range of sectors.

[28] The other reforms include *the Land Use, Land Use Change and Forestry (LULUCF)* Regulation, the *Renewable Energy Directive II (RED II),* the *Energy Efficiency Directive (EED)* and the *Energy Taxation Directive (ETD).* On the topic: SCHLACKE, WENTZIEN, THIERJUNG and KÖSTER*, Implementing the EU Climate Law via the 'Fit for 55' package*, in 1 *Oxford Open Energy* 1-13, 3 (2022).

the Union can legislate and adopt binding acts, while the EU Member States can do so autonomously only if the Union grants them the power to enforce such acts.

The proper functioning of the Union's internal market is therefore the main purpose of the EU competition rules. To this end, rules to prevent restrictions and distortions of competition in the internal market are laid down in the TFEU.

In particular, it prohibits anti-competitive agreements between companies and abuses of dominant positions that may affect trade between Member States.

Mergers and acquisitions with a European dimension are also subject to Commission scrutiny and may be prohibited if they have a significant impact on competition.

Finally, State aid to certain companies or products that distorts competition is also prohibited. However, they can be authorized in certain specific cases.

The European Union is allocating a considerable amount of funds, a large percentage of which is to be devoted to green investments, in order to achieve the goals set by the *EU Green Deal*. However, industries are still reluctant to undertake a green transition path. It appears to be unclear how companies will be able to apply for this funding, what the conditions are for receiving such funding, and how the European Union State Aid Law will relate to public funding. In fact, obstacles to the provision of public financial resources are generated mainly by the State Aid Law.

2.2. Art. 107 TFEU

The concept of State aid is explicitly defined in Art. 107[29] of the TFUE: «Save as otherwise provided in the Treaties, any aid granted by a Member State or through State resources in any form whatsoever which distorts or threatens to distort competition by favouring certain undertakings or the production of certain goods shall, in so far as it affects trade between Member States, be incompatible with the internal market».

It seems appropriate to highlight five key cumulative elements of the rule: State resources, advantage, selectivity, the concept of undertaking and the effect on trade and competition. The basic feature of State

[29] Article 107 TFEU (*ex* Article 87 TEC): (**1**) Save as otherwise provided in the Treaties, any aid granted by a Member State or through State resources in any form whatsoever which distorts or threatens to distort competition by favoring certain undertakings or the production of certain goods shall, in so far as it affects trade between Member States, be incompatible with the internal market. (**2**) The following shall be compatible with the internal market: (a) aid having a social character, granted to individual consumers, provided that such aid is granted without discrimination related to the origin of the products concerned; (b) aid to make good the damage caused by natural disasters or exceptional occurrences; (c) aid granted to the economy of certain areas of the Federal Republic of Germany affected by the division of Germany, in so far as such aid is required in order to compensate for the economic disadvantages caused by that division. Five years after the entry into force of the Treaty of Lisbon, the Council, acting on a proposal from the Commission, may adopt a decision repealing this point. (**3**) The following may be considered to be compatible with the internal market: (a) aid to promote the economic development of areas where the standard of living is abnormally low or where there is serious underemployment, and of the regions referred to in Article 349, in view of their structural, economic and social situation; (b) aid to promote the execution of an important project of common European interest or to remedy a serious disturbance in the economy of a Member State; (c) aid to facilitate the development of certain economic activities or of certain economic areas, where such aid does not adversely affect trading conditions to an extent contrary to the common interest; (d) aid to promote culture and heritage conservation where such aid does not affect trading conditions and competition in the Union to an extent that is contrary to the common interest; (e) such other categories of aid as may be specified by decision of the Council on a proposal from the Commission.

Aid, thus, consists of funding granted to undertakings through the State or State resources, which is selective and distorts the internal market.

"Granted by or through State resources" indicates that advantage can only qualify as State Aid if it is linked to funding from the State. The Court of Justice of the European Union (CJEU) explained, in cases such as Sloman Neptun, that State aid is not restricted to direct grants from the State but also encompasses aid supplied by entities designated or formed by the State. Further, State resources may consist of direct payments to companies, or they may take various forms such as grants, tax exemptions, guarantees, loans, and tax deferrals. This second type of aid is not excluded from the scope of the Framework, as State aid rules apply equally to distortions by object and distortions by effect.

Effect-based State aid analysis, often referred to as the "*effects approach*", focuses on a pragmatic assessment of the actual impact of a State aid measure on market dynamics. This approach requires a thorough examination of whether a given aid measure actually distorts competition, usually in terms of reduced consumer welfare, barriers to market entry or reduced economic efficiency require empirical evidence and economic analysis to establish the negative effects of the aid.

In contrast, object-based distortions of competition sometimes referred to as "*per se*" distortions, classify certain types of State aid as inherently anti-competitive without the need for a detailed analysis of their effects. These practices are anti-competitive by their very nature. Examples include aid schemes that favour certain companies without any justification, or aid that merely creates excess capacity. Object-based analysis provides a quick way of identifying and tackling blatantly anti-competitive aid measures.

Understanding the difference between effect-based and object-based State aid distortions is essential for State aid enforcement: it allows authorities to effectively address potential infringements.

Another condition is the *imputation or attribution to the State*. This involves evaluating whether the benefit can be attributed to the State. In this context, the term "*State*" includes all public authorities, regional bodies, and public or private entities authorized by the State to provide aid. The assessment considers factors such as the level of influence of public authorities, integration into the public administration structure, the nature of an entity's operations, and its legal status.

Let us examine the term "*favour*"*:* as per the ruling in case C 39/94, SFEI vs. La Poste, «the beneficiary enjoys an economic advantage which it would not have enjoyed under 'normal market conditions». Furthermore, according to a different ruling, C 301/87, France vs Commission, «the recipient does not have to bear certain costs which it would normally have to bear out of its own financial resources».

Defining the meaning to be given to the term "*undertaking*" in the competition context is crucial. The definition of an undertaking differs from one Member State to another and has been the subject of numerous case law decisions over time, adopting a substantive approach that does not consider the form of an entity, but only the nature of the business. Since the Treaty does not define it has been the task of the EU courts to clarify its meaning. There are two reasons for this.

The first is that the definition of the term varies in different areas of law, be it criminal, commercial, industrial or competition law. The second reason is that competition law, particularly, applies only to undertakings. There, the concept of *"undertaking"* covers any entity engaged in an economic activity, regardless of the legal status of the entity and the way in which it is financed. Economic activity also means any activity consisting of offering goods or services on a given market.

Further, it is worth noting that Articles 107(2) and 107(3) of the TFEU provide for exceptions designed to serve specific policy objectives, particularly those related to overall economic progression.

There are two types of such exceptions: equitable and incentive. The former is mainly found in the provisions of Art. 107(2), as well as in certain Commission practices concerning the restructuring of companies in crisis. Equalizing purpose means that the ratio of the regulatory provision is a re-establishment of equality, disturbed because of external events. Such exogenous factors are to be considered exceptional, and, as the article itself denotes, are reserved for events such as natural disasters or a pandemic such as Covid-19.

The second type of exception, on the other hand, is of an incentive nature, i.e., its purpose is to change the behavior of market players, achieving results that would not otherwise be achievable. The list of permissible benefits is much broader, provided that these exceptions are consistent with the objectives protected by the Union[30]. In particular, according to the provisions of Article 107(3)(c), the Commission, by analyzing the existence of the so-called "*positive conditions*", such as the objective of developing certain economic activities within the Union, and of the so-called "*negative condition*", i.e. the lack of negative impact of the aid on trading conditions in the common interest, may, following a balancing judgment, consider certain aid to be compatible with the internal market.

The exemption with incentive function was elaborated by the Court of Justice in 1980 in the judgment Philip Morris Holland BV v Commission. In it, the principle of "*compensatory justification*" is affirmed, which refers to the possibility for Member States to adopt measures restrictive of free trade, provided that these measures are justified by a legitimate interest and are proportionate to the objective pursued. In essence, if a restrictive action is necessary to achieve a legitimate objective, such as the protection of public health, such action may be considered compatible with European law, provided that it does not go beyond what is strictly necessary to achieve that objective.

Mutatis mutandis, in State aid law, the principle mentioned can be applied when assessing whether a State aid, which could distort competition, can be justified by other legitimate benefits or interests. For example, if an EU Member State provides State aid to a domestic industry to promote the transition to a low-carbon economy, it could be considered an obstacle to free trade, as it gives a competitive advantage to domestic companies over other European companies. However, if the Member State can demonstrate that such aid is necessary to achieve public interest objectives, such as the reduction of greenhouse gas

[30] The list ranges from R&D, youth entrepreneurship, energy, SMEs development, to what interests this thesis, which is the environment.

emissions or the creation of jobs in the renewable energy sector, it could be justified under the principle of compensatory justification. In this case, the benefits for the environment and the national economy could compensate for the negative effects on free trade.

According to this ruling, therefore, Article 107(3) is to be regarded in a restrictive sense: the Commission must be able to establish that these exemptions will contribute to the achievement of the specified objectives and that under normal market conditions, the beneficiaries would not be able to achieve these objectives on their own. The aid must therefore be a *conditio sine qua non* of the achievement of the desired objective. Otherwise, the granting of the aid would not be justified by any compensatory justification and would unlawfully distort the level playing field.

Entities providing aid must undergo an advance notification process to the European Commission to obtain approval, except for measures falling under block exemptions, such as the General Block Exemption Regulation (GBER) and the *de minimis* aid. Clear communication with the EC is essential for meeting regulatory standards.

2.3 Art. 108 TFEU

On the other hand, Article 108 TFEU[31] outlines the procedural rules for granting financial aid. It introduces a "*stand-still obligation*" for Member States wishing to grant any financial resources. Indeed, States are obliged to wait for authorization from the European Commission before providing the aid.

In addition, the Commission is empowered to exercise supervisory powers over the so-called "*unlawful aid*": i.e., aid granted by Member States without the proper authorization or that has been improperly administered by Member States after the Commission's approval. For those, the Commission has the power to enact an order to recover the aid in accordance with the national rules of the Member State.

[31] Article 108 TFEU (*ex* Article 88 TEC): (**1**) The Commission shall, in cooperation with Member States, keep under constant review all systems of aid existing in those States. It shall propose to the latter any appropriate measures required by the progressive development or by the functioning of the internal market. (**2**) If, after giving notice to the parties concerned to submit their comments, the Commission finds that aid granted by a State or through State resources is not compatible with the internal market having regard to Article 107, or that such aid is being misused, it shall decide that the State concerned shall abolish or alter such aid within a period of time to be determined by the Commission. If the State concerned does not comply with this decision within the prescribed time, the Commission or any other interested State may, in derogation from the provisions of Articles 258 and 259, refer the matter to the Court of Justice of the European Union direct. On application by a Member State, the Council may, acting unanimously, decide that aid which that State is granting or intends to grant shall be considered to be compatible with the internal market, in derogation from the provisions of Article 107 or from the regulations provided for in Article 109, if such a decision is justified by exceptional circumstances. If, as regards the aid in question, the Commission has already initiated the procedure provided for in the first subparagraph of this paragraph, the fact that the State concerned has made its application to the Council shall have the effect of suspending that procedure until the Council has made its attitude known. If, however, the Council has not made its attitude known within three months of the said application being made, the Commission shall give its decision on the case. (**3**) The Commission shall be informed, in sufficient time to enable it to submit its comments, of any plans to grant or alter aid. If it considers that any such plan is not compatible with the internal market having regard to Article 107, it shall without delay initiate the procedure provided for in paragraph 2. The Member State concerned shall not put its proposed measures into effect until this procedure has resulted in a final decision. (**4**) The Commission may adopt regulations relating to the categories of State aid that the Council has, pursuant to Article 109, determined may be exempted from the procedure provided for by paragraph 3 of this Article.

3. Two Important Pieces of Legislation Recently Adopted by the EU to Mitigate the Effects of Climate Change

3.1. Overview

It is quite clear that the State aid regulation seems to be cumbersome, not facilitating the ecological transition of undertakings to a more sustainable version. In fact, it imposes a huge administrative burden for public funding that discourages Member States from providing aid to industries. In principle, the procedure leading to a decision by the Commission should be no longer than 18 months, however, this deadline is not legally binding.

To counterbalance this, the EU recently enacted two provisions related to combating climate change, thereby marking a strong indication that the EU is moving toward a greener economy: the *General Block Exemption Regulation (GBER)* and the *Guidelines on State Aid for Climate, Environmental Protection and Energy (CEEAG).*

First, the European Commission has recently approved an amendment to the *GBER* to facilitate support for a green transition. Indeed, specific categories of State Aid have been declared compatible with the TFEU, as long as they fulfil certain requirements, thus allowing them to be exempt from the duty of prior notification and approval by the Commission and allowing Member States to grant aid directly and inform the Commission only after the fact.

Secondly, The *Guidelines on State Aid for Climate, Environmental Protection and Energy (CEEAG)* are the most effective tool in the fight against climate change, as they provide the framework for public authorities to support the goals of the *European Green Deal* in an efficient way, aiming for minimal distortion of competition. Among the most notable changes is the broadening of the categories of investments and technologies that Member States can support (e.g., electricity storage, biodiversity, resource efficiency, and renewable hydrogen). In addition, it includes the implementation of safeguards to ensure that aid is effectively addressed where it is needed, such as a mandatory public consultation procedure above a certain threshold.

3.2. The "General Block Exemption Regulation" (GBER)

The General Block Exemption Regulation (GBER) is a key element of the EU framework regulating State aid.

The European Commission has the authority under Council Regulation 994/98 (so-called Enabling Regulation), as amended in 2013, to establish "exemption regulations" for certain categories of State aid, provided they meet specific criteria. The benefit conferred to the covered categories exempts them from the obligation of prior notification and approval by the Commission, as stipulated in Article 108(3) TFEU.

Initially enacted in 2014, the GBER was designed to exempt certain categories of State aid from the need for prior notification to the Commission, mainly due to their inherent low capacity to distort

competition and at the same time the possible benefits that such aid provides to the society[32]. As a result, over 96% of newly introduced State aid measures implemented by Member States are exempted from prior notification, thus simplifying the process and minimizing administrative hurdles.

In November 2018, the Council of the European Union adopted an amendment to the EU Enabling Regulation on State Aid (Council Regulation (EU) 2015/1588), following a Commission proposal made in the previous June, with the dual aim of facilitating the implementation of the next Multiannual Financial Framework and improving the way EU rules governing funding and those governing State aid interact. Following this reform of the Enabling Regulation, the Commission may specifically amend the GBER. The proposed amendments to the GBER were subject to two public consultations and three meetings between the Commission's advisory committee and the Member States.

The GBER outlines qualified beneficiaries, upper limits for aid intensities (representing the percentage of eligible project expenditure that can receive State aid) and aid amounts. These specifications were developed on the basis of the Commission's considerable expertise and experience in market decision-making. It is important to note that a State aid measure that does not meet the GBER criteria does not necessarily mean that it is incompatible with EU State aid rules. However, the measure must be notified to the Commission in advance and will be assessed under the alternative EU State aid rules.

The GBER is periodically amended by the European Commission to respond to changing needs and policies. Indeed, the Commission last amended the GBER to further facilitate and accelerate the green and digital transition with Commission Regulation (EU) 2023/1315 of June 23rd, 2023 amending Regulation (EU) 651/2014.

The amendment on July 23rd, 2021 had several objectives. Firstly, to seek to harmonize EU funding rules in particular areas with EU State aid rules under the new Multiannual Financial Framework. This convergence results in simplified procedures and reduced complexity for Member States. Organizations can rely on project evaluations at the EU programme level, avoiding the need for a separate evaluation for State aid purposes when integrating national programme funding and shared management. This coordination supports competition within the EU single market, ensuring that public funding addresses market failures while avoiding interfering with private investment and limiting public policy objectives.

Moreover, the extension of the GBER implements new regulations in several areas, including the support of financing and investment operations by the InvestEU Fund, Research, Development and Innovation (RD&I) projects, European Territorial Cooperation (ETC) initiatives (also known as Interreg), European Innovation Partnership (EIP) programs aimed at increasing agricultural productivity and sustainability, and community-led local development (CLLD) projects conducted by Operational Groups. It is thanks to this amendment that the above-mentioned measures can be implemented directly by the

[32] *State aid: Commission widens scope of General Block Exemption Regulation – frequently asked questions*. Retrieved on November 12th, 2023.

Member States without prior notification to the Commission. This is made feasible by the safeguard measures integrated into the EU programs that are centrally managed by the Commission.

Furthermore, this amendment improves the prospects for Member States to support the shift towards a sustainable and resilient green and digital economy, while accelerating economic recovery from the COVID-19 pandemic. The extension allows for rapid implementation of essential State assistance measures in areas such as energy-efficient building projects, publicly accessible electric charging and hydrogen refueling infrastructure for road vehicles, fixed broadband networks, 4G and 5G mobile networks, trans-European digital connectivity infrastructure projects, and vouchers to support teleworking, online education, training services or SMEs.

The extension of the GBER also addressed the consequences of the pandemic by extending the right to State aid under the GBER until the 31st of December 2021 for companies that experienced difficulties during the crisis.

The latest amendment was made on the 23rd of June 2023, in order to support the green and digital transition dictated by the Green Deal, also taking into account the economic effects of the war in Ukraine.

3.3. *The "Guidelines on State Aid for Climate, Environmental Protection and Energy" (CEEAG)*

The General Block Exemption Regulation, which is responsible for establishing *ex ante* the conditions of compatibility under which Member States may not notify the implementation of measures to the Commission, is to be complemented by the new *Guidelines on State Aid for Climate, Environmental Protection and Energy*.

On 21st December 2021, the College of Commissioners approved them, which were then formally adopted in January 2022. These guidelines, the main aim of which is to achieve European energy and environmental objectives while minimizing costs for taxpayers, and avoiding competitive distortions in the single market, represent a significant alignment with the ambitious objectives set out in the European Green Deal, in other recent regulatory changes and in the Commission's proposals in the energy and environment sectors, including the *"Fit for 55*" package.

The introduction of these guidelines replaces the previous so-called "*Guidelines on State aid for Environmental Protection and Energy 2014-2020"* (EEAG) and is the result of a broad consultation of stakeholders such as companies, business associations, citizens, NGOs, as well as the Commission's own experience, which was launched by the Commission and that gathered more than 700 contributions, then merged into the new discipline. In September 2020 the Commission initiated a public consultation, calling for contributions, which was followed by a high-profile conference in February 2021, organized by Executive Vice-President Margrethe Vestager, the result of which was the publication by the Directorate-

General for Competition of the *"Competition Policy Brief"*[33]. The latter prefigures a series of proposed changes in all branches of competition: State aid, antitrust and mergers. As far as our area of interest is concerned, the proposals made by the Commission concern texts such as the CEEAG, the GBER and more[34].

Competition Commissioner Margrethe Vestager underlined the importance of these guidelines, saying: « Europe will need a considerable amount of sustainable investments to support its green transition. Although a significant share will come from the private sector, public support will play a role in ensuring that the green transition happens fast. The new Guidelines endorsed today will increase everything we do to decarbonise our society. Among others, they will facilitate investments by Member States, including in renewables, to accelerate the achievement of our Green Deal, in a cost-effective way. This is a major step to ensuring that our State aid rules play their full role in supporting the European Green Deal »[35].

To gain a better understanding of the new Guidelines, it is appropriate to begin by analyzing the provisions of the Guidelines on State Aid for Environmental Protection and Energy 2014-2020. These guidelines serve as a common framework for all European aid branches and regulate the authorization of aid schemes, provided they adhere to the general principles. The criteria for granting aid include achieving a European objective, demonstrating necessity, ensuring appropriateness and proportionality, and proving the incentive effect of the measure. An example of a European objective could be improving energy efficiency to meet decarbonization goals. Necessity means that the aid is required due to market failures that cannot be addressed by other means. The adequacy requirement stipulates that the specific effect cannot be achieved through less anti-competitive means and also that between different types of aid, the one with the least impact should be selected.

The State Aid Guidelines were modernized in 2010, introducing the principle of incentive effect. This principle mandates that the aid is a necessary condition for the company to engage in the particular behavior. In fact, if the undertaking would act in that particular way even without the aid, then the requirement is not met, and the aid cannot be granted. It is relevant to emphasize that the burden of proof for this requirement rests on the beneficiaries, who must demonstrate that such conduct would not be possible without the handout. This is where the Commission has the greatest discretion and can adjust subsidies accordingly. Finally, the limit of proportionality ensures that the amount of aid is limited to what is necessary to achieve the ultimate goal.

[33] Also referred to as Sustainable Europe Investment Plan (SEIP).

[34] On the topic: A. GUPTA, *EU State Aid Rules and the European Green Deal: Will Their Stars Align?*, 356.

[35] *State aid: Commission endorses the new Guidelines on State aid for Climate, Environmental protection and Energy*. Retrieved on March 21st, 2024.

The 2014-2020 EEAG's lifespan ended with a positive assessment in the sector. In fact, this instrument has enabled Member States to adopt incentives, particularly in the energy sector, while ensuring fair competition.

Regarding the updated version of the EEAG, the first chapter's energy-climate targets were considered during its drafting. These targets were made binding with the proposed European climate law during this amendment, as previously explained. The Green Deal's goal of achieving zero climate impact is now mandatory. To ensure the effectiveness of regulation 2021/1119, it is crucial to couple its binding nature with a long-term pathway that considers all European policies and guarantees the achievement of the target. Another tool that can be used is a monitoring system that tracks progress at set deadlines, along with a system of penalties to encourage Member States to ensure that the goals outlined in the European Green Deal are not ignored. In fact, as a binding "European law", non-compliance with the climate law would result in a series of consequences, including the possibility of an infringement procedure against the State that fails to apply the regulation's objectives, and the imposition of financial penalties. The climate law also includes monitoring and review mechanisms to assess Member States' progress in achieving climate objectives.

Let us now dwell on the novelties of the recent reform: firstly, the broadening of the scope of the guidelines to new areas and technologies is evident, with greater flexibility of the compatibility rules compared to earlier sets of 2014 - 2020. Indeed, it can be stated that the scope of these guidelines is extended to all technologies that can deliver the Green Deal, including the participation of renewable energy communities and SMEs and, also underlining the fact that the aid is granted up to 100 per cent of the additional costs of more environmentally friendly investments. At the same time, it is necessary to accompany this wider scope with guarantees to ensure that the aid is actually directed where it is needed to improve environmental protection, that it is limited to what is necessary to achieve the environmental objective, and that it does not distort competition or the integrity of the internal market. On the other hand, the reform also aims at ensuring alignment and coherence with relevant EU legislation and policies in the environmental and energy fields.

To minimize the distortion of competition or the integrity of the single market, the CEEAG framework introduces safeguards to ensure that the aid is only granted when it is necessary, appropriate, and proportional. To demonstrate its necessity, there is a distinction between fully regulated and partially/fully exempted infrastructure. The first category includes institutions such as «projects of common interest», as defined in EU Regulation No. 347/2013 in Art. 2(4). For such projects «the Commission considers that», as they are «fully subject to internal market energy legislation, market failures due to coordination problems are such that financing through tariffs may not be sufficient and that State aid may be granted».

For partially or fully exempted infrastructure, on the other hand, «the Commission will make a case-by-case assessment» considering factors such as «the extent to which a market failure leads to sub-optimal provision of the necessary infrastructure, the extent to which the infrastructure is open to third-party access

and subject to tariff regulation, and the extent to which the project contributes to the security of energy supply or climate neutrality objectives».

During the communication, we find section 4, dedicated to *"aid categories"*, which are informally classified into *"green"*, *"grey"* and *"brown"*.

In particular, the *"green"* category refers to the measures indicated in section 4.1 entitled "*Aid for the reduction and elimination of greenhouse gas emissions, including through support for renewable energies"*. This section represents a significant new element which covers aid measures for the promotion of energy from renewable sources «including aid for the production of renewable energy or synthetic fuels produced using renewable energy» and aid measures involving a wide range of other technologies aimed primarily at reducing greenhouse gas emissions[36].

With regard to the *"grey"* aid categories, this problem has been remedied by stipulating that in order to avoid lock-in effects, i.e., situations where a company is locked in by a choice made earlier, such as large previous investments, which make it difficult for it to change, grey measures will have to be compatible with the 2050 climate target in order to receive aid. For example, support for investments in natural gas infrastructure will be conditional on the infrastructure being ready for hydrogen by a deadline.

As far as the most polluting fossil fuels are concerned, CEEAG envisages the elimination of subsidies against them, which are unlikely to produce positive environmental effects, but on the contrary, may increase negative environmental externalities in the market. The same applies to measures involving new investments in natural gas unless the investments are shown to be compatible with the 2050 carbon neutrality target. Therefore, such measures are unlikely to pass the balancing test.

Returning to the analysis of Article 107(3)(c) TFEU, it can now be interpreted in the light of the new CEEAG Guidelines.

In assessing the positive condition that the aid is intended to promote economic activity in the Union, the Commission will verify that the advantage for the beneficiary's economic activity is conferred in order to promote the green economy or increase its sustainability. The Commission will also check that the aid has an incentive effect, i.e., that it is expected to have a compliance effect, encouraging the beneficiary to engage in environmentally friendly activities. Finally, it will be verified that there is no breach of European law.

When assessing whether the aid has a negative impact on the market, the primary focus will be on examining the necessity, appropriateness, proportionality, transparency, and foreseeability of the potential adverse effects of the aid on competition and trade resulting from State intervention.

[36] However, the CEEAG is not only aimed at reducing greenhouse gas emissions: there are sections dealing with aid for the prevention or reduction of non-greenhouse gas pollution, such as noise pollution, and still covering aid for biodiversity, repair of environmental damage, resource efficiency and the circular economy.

In light of the above factors, the Commission will conduct a weighing process, considering both the benefits and drawbacks and following principles such as *"do no significant harm",* to determine whether to authorize the State aid.

The case of natural or legal monopolies is now analyzed. According to point 373 of the Communication, «support for energy infrastructure in the framework of the legal monopoly is not subject to State aid rules». The exemption from the State aid rules of natural monopolies, on the other hand, must cumulatively fulfil the conditions expressed in paragraph 375. According to the latter, the infrastructure is not in direct competition with others, i.e., where «the energy infrastructure cannot be economically replicated». The infrastructure also provides «benefits to society at large» and «is not designed to selectively favor a specific undertaking or sector». Furthermore, «Member States must ensure that the financing provided for construction and/or operation cannot be used to cross-subsidize or indirectly subsidize other economic activities».

Paragraph 374, on the other hand, analyses the legal monopoly, which again is subject to the cumulative fulfilment of several conditions, the first of which requires that there is a legal monopoly within the meaning of EU law, i.e., when the TSO/DSO is legally «the only entity authorized to carry out a certain type of investment or activity and no other entity may operate an alternative network». Such a legal monopoly must also exclude «not only competition on the market but also competition for the market, i.e., competition for the position of exclusive operator of the infrastructure in question». Finally, if the operator is active in another geographic or product market open to competition, cross-subsidization is excluded.

Member States had to amend, where necessary, their existing environmental protection and energy aid schemes in order to bring them into line with the CEEAG no later than 31st December 2023.

In conclusion, it seems appropriate to see the CEEAG framework as a significant step towards compliance with European climate law. By streamlining the existing rules, it also makes them more flexible by, among other things, removing the requirement for individual notification of large-scale green projects under aid schemes already approved by the Commission.

4. Application of State Aid Guidelines in the Context of Pandemic COVID-19

In the context of the global pandemic, the Temporary Framework was introduced as a measure to support the economy by providing financial assistance to businesses facing challenges during and after the crisis[37]. The Temporary Framework was designed to streamline the access to funding for businesses, while also reducing the procedural and substantive limitations of the previous state aid regulations.

The Temporary Framework proved to be a flexible instrument, also widely described as derogatory, by relaxing the Commission's strict approach to assessing the compatibility of state aid. This has facilitated significant public intervention to support the economy through measures that would otherwise be

[37] Communication from the Commission (2020/C 91 I/01), *Temporary Framework for State aid measures to support the economy in the current COVID-19 outbreak.*

incompatible with existing state aid rules. Initially set to be in force until December 31st, 2020, it was later extended until December 31st, 2021.

The Commission's Communication provides precise and targeted guidance, setting out the conditions under which aid might be granted and its compatibility with the general rules. Measures to ensure the liquidity of companies include grants, support for uncovered fixed costs, state guarantees for loans, tax relief and specific aid schemes for health activities and to prevent job losses during the crisis.

However, in order to prevent abuse and ensure compliance with the general rules, the Commission retains a control role by developing specific objectives and precise conditions. While the Temporary Framework focused primarily on addressing the consequences of the pandemic, it demonstrated greater support for businesses in achieving a rapid ecological transition by directing aid towards energy, environmental and digital efficiency.

The Temporary Framework widened the scope of state aid control, making compatible aid aimed at compensating for the direct damage caused by the COVID-19 pandemic. Other types of aid aimed at addressing the wider economic crisis caused by the pandemic, however, still need to be assessed in the light of the different compatibility basis provided by Article 107(3)(b) of the TFUE.

In parallel with the Commission's guidance, Member States have developed specific rules for aid schemes that respect EU conditions and competition principles. Notable examples in Italy include decrees such as the "*Decreto Liquidità*", the "*Decreto Rilancio*" and the series of "*Decreti Ricoveri*".

In conclusion, despite efforts to mitigate the consequences of the pandemic, bureaucratic difficulties hindered the timely delivery of aid, prompting the European Union to call for greater speed and simplification of EU and national administrative procedures. In addition, both during and after the pandemic crisis, questions have been raised about the legal nature and appropriateness of the instrument in the long term, the effectiveness and efficiency of the instrument itself, the deep involvement of the EU in state aid policy, and potential concerns related to the risk of economic arbitrage, but also positive comments highlighting a conception of the instrument as being both flexible and dynamic. These issues will be addressed in the following chapter.

5. Comparison with the U.S. Policy

A comparative analysis of the relationship between State aid and environmental policies in the European Union and the United States is of crucial importance in environmental and economic law policy studies. This comparison provides a unique opportunity to assess the different regulatory approaches taken by two of the largest global economies in balancing the needs of fair economic development and environmental sustainability. While the EU has adopted a number of regulations and directives aimed at integrating environmental sustainability into the regulatory framework, the United States has followed a path characterized by greater regulatory fragmentation and less centralization of the environmental policies. An examination of the *modus operandi* of these two legal frameworks in addressing the dilemma of

government assistance in relation to environmental issues provides an important perspective for understanding the challenges and opportunities in achieving a globally sustainable economy.

Usually, the United States are often associated with economic liberalism. This principle is thought to stem from a general distrust of State interventionism, possibly influenced by events such as World War II and the war in Vietnam[38]. In contrast, the European economic system is also liberal, but cultivates more interventionistic ideals. However, this interventionism can sometimes lead to a cumbersome and slow bureaucratic apparatus in the implementation of policies.

It is tempting to think that this is also the case in the energy sector: in line with standard liberal policy, the US should not allow government aid, leaving the green energy market to the liberal ideal of *laissez-faire*. However, government aid management in this sector is a crucial policy in both the EU and the US, although the differences between the two jurisdictions are quite pronounced.

While Europe has developed the legal regime outlined so far to manage and regulate State aid, the US has no centralized system that comes close to such an organizational effort. However, this disparity cannot be explained by the absence of State aid in the US economy, as such public aid exist at the federal, state, and local level. Indeed, the research conducted by Diane P. Wood[39] shows that, despite the lack of a regulatory framework, concrete contractual instruments exist in the US that can be considered among the most valuable in ensuring reliable State aid management. However, external forces, such as constitutional, political, and judicial constraints, can limit or completely interrupt such efforts.

It seems that in renewable energy policy, the two historical legal systems have completely switched roles. In fact, the US heavily relies on government incentives for renewable energy, while the EU is more committed to market-based instruments. In Europe, the main objective is to prevent aid from creating unjustified discrimination between companies or distorting the internal market. Indeed, while the EU has constructed specific legislation regulating State aid to ensure the proper functioning of the internal market, without neglecting the ambitious environmental objectives set, in the United States, there is no real specific regulatory framework setting out the conditions for the compatibility of State aid with climate objectives.

From the perspective of the free movement of goods within the internal market, the EU Court of Justice has shown a willingness to incentivize renewable energy support schemes even if they could result in a restriction of this freedom. In contrast, the US prioritizes interstate competition. These differences can be attributed to laws and judicial enforcement. The EU prioritizes the transition to a low-carbon economy over interstate competition, while the US maintains a focus on interstateism.

The US is more likely to adopt individual laws and regulations to address environmental issues, including regulations for greenhouse gas emissions and policies for the transition to cleaner energy. US

[38] MORMANN, *Of Markets and Subsidies: Counter-intuitive Trends for Clean Energy Policy in the European Union and the United States*, 10(2) *Transnational Environmental Law* 321-337, 323 (2021).

[39] WOOD, *State Aid Management in the United States*, 12(1) *European State Aid Law Quarterly* 40-45, 40 (2013).

climate policy is frequently a topic of political debate and can vary depending on the administration in office.

In the US, State aid assessment is often based on antitrust laws and consideration of the anticompetitive effect on the market. Federal laws address specific state aid issues, such as the Federal Trade Commission Act and the Clayton Antitrust Act, which aim to prevent anticompetitive practices. In addition, federal laws such as the Clean Air Act, which sets standards for reducing air pollution, and the Clean Power Plan, an initiative to reduce greenhouse gas emissions in the electricity sector, may indirectly influence climate policy. However, climate policy in the US is largely determined at the State and local level, with some States adopting more ambitious policies than others, such as renewable energy mandates, emissions regulations, and renewable energy quota obligations. The absence of a unified federal climate policy may result in greater variability between States, lack of consistency in the approach to reducing greenhouse gas emissions, and increased complexity in assessing the compatibility of State aid with national climate goals.

The United States has demonstrated a fluctuating commitment to international climate agreements over the past three decades. President Clinton signed the Kyoto Protocol, but President Bush did not pursue that policy. President Obama signed the Paris Protocol, which followed the Kyoto Protocol, but President Trump reversed these policies. Finally, President Biden opted back into the Paris Protocol. However, it is worth noting that under the Biden presidency, two acts stand out aimed at accelerating domestic clean energy production: the Infrastructure Investment and Jobs Act (IIJA) and the Inflation Reduction Act (IRA). In particular, the latter contains very heterogeneous measures, represents one of the largest funds ever issued and is more than just about climate. Indeed, over a period of ten years, the IRA is estimated to generate approximately USD 739 billion in revenue, which will be allocated to addressing domestic energy security and climate change. Its primary instruments will be tax credits and deductions. In a less substantial manner, the IRA will also offer grants, loans, and loan guarantees.

Although the Biden administration's markedly pro-climate stance and the IRA were welcomed by the EU as a valuable alignment with the global effort to tackle climate change[40], the magnitude of the financial means involved, the "*Buy American*" slogan, and the encouragement of European firms to settle in the US, sent a strong signal to the EU[41]. The first impression was that following the global pandemic of COVID-19 and the Russian invasion of Ukraine, a new, significant shock was about to hit the EU economy. The Inflation Reduction Act is causing tensions within the Union due to concerns that the EU industry may

[40] Some estimates suggest that as early as 2030, the IRA could reduce US net greenhouse gas emissions by between 31 and 44 per cent compared to 2005 levels. For further information, refer to KING, LARSEN and KOLUS, *A Congressional Climate Breakthrough*, Rhodium Group, 2022 (retrieved on December 5th, 2023).

[41] CIOTTI, *L'Unione europea di fronte all'Inflation Reduction Act americano*, in *Osservatorio sui Conti Pubblici Italiani*, 2023. Retrieved on December 5th, 2023.

lose in the global race for competitiveness, with clean technology industries being among the most affected[42].

The EU must now consider how to integrate its climate, energy and industrial policies to contribute to climate goals and energy security while maintaining the global competitiveness of its economy. In order to counterbalance the imminent risk posed by the IRA, a possible solution for safeguarding European global competitiveness could lie in the relaxation of state aid rules. This prospect, strongly supported by France and Germany, would risk endangering the internal market[43]. However, before mitigation measures can be designed and implemented, it will be necessary to assess the impact of the IRA on the EU and its industry and, where possible, to compare US and EU climate-related policies.

However, the response of the European institutions was reassuring, supported by the Commission President's statement that Europe will respond in a coherent and calibrated manner to the US aid plan[44]. On the regulatory side, a first European reaction led to the presentation by the Commission in January 2023 of the proposed "*Green Deal Industrial Plan*", aimed at improving the competitiveness of zero-emission industry[45]. Nevertheless, it does not seem to be in the interest of either side to stand against each other, setting up a subsidy race, preferring instead a common and alternative alignment to the Chinese monopoly on critical raw materials[46].

The primary disparity between the United States and the European Union environmental measure lies in their respective funding mechanisms. Unlike the US, where the IRA does not involve funds and certainly not debt-financed ones, the EU heavily relies on funded initiatives, often financed through debt. According to estimates by the Congressional Budget Office (CBO), the Inflation Reduction Act will reduce the federal deficit by USD 238 billion over the next ten years, through the balance of lower outgoings and higher revenues[47]. However, in the case of a significant uptake of the program in the US, the IRA could become a victim of its own success, as it is not cap limited. In fact, a substantial tax exemption could lead to a significant reduction in government revenue, which would have to be compensated by government debt, thus requiring corrective measures in case of pressure from the financial markets.

A differing philosophical approach also emerges. The US government aims to reallocate existing resources within its budget by reducing allocations to older priorities and redirecting them to new ones,

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[42] SCHEINERT, *EU's response to the US InflationReduction Act (IRA)*, Directorate-General for Internal Policies, Policy Department for Economic, Scientific and Quality of Life Policies, June 2023. Retrieved on December 5th, 2023.

[43] CIOTTI, *L'Unione europea di fronte all'Inflation Reduction Act americano*, 8.

[44] *Speech by President von der Leyen at the College of Europe in Bruges*, December 4th, 2022. Retrieved on December 7th, 2023.

[45] *The Green Deal Industrial Plan: putting Europe's net-zero industry in the lead*. Retrieved on May 2nd, 2024.

[46] CIOTTI, *L'Unione europea di fronte all'Inflation Reduction Act americano*, 7.

[47] *CBO Scores IRA with $238 Billion of Deficit Reduction*, Committee for a Responsible Federal Budget, September 2022. Retrieved on May 1st, 2024.

such as climate-related initiatives. In fact, this is reflected in the estimated and expected reduction of the deficit in the IRA, largely due to higher taxes of USD 457 billion, of which as much as USD 281 billion would come from various provisions to reduce drug spending by the government[48]. Contrarily, the EU introduces new environmental policy priorities without corresponding cuts to existing ones, placing the burden of additional expenses primarily on taxpayers in the distant future.

Furthermore, the Inflation Reduction Act and European Green Deal differ also due to their different macroeconomic effects. The former, as suggested by its name, is geared toward combating inflation by increasing taxes, thereby mitigating inflationary pressure by reducing purchasing power within the economy. The latter, in contrast, relies on debt-financed funds amplifying current purchasing power, and conflicting with the Eurosystem's objective of maintaining inflation levels close to 2% [49]. This may necessitate a more stringent monetary policy approach.

The IRA program faces also political risks from two primary sources. First, the Republican opposition to the possible statal indebtedness, caused by the aforementioned reduction in the government revenue, particularly during the biannual debt ceiling negotiations, poses a significant threat. Failure to reach a consensus on raising the debt ceiling could lead to a default on U.S. debt obligations, which could have a negative impact on the IRA. Second, the outcome of the presidential election has significant implications for the program. An electoral defeat for the current president would likely result in a shift in policy priorities, particularly with respect to climate change initiatives. Given the sharp ideological divide on climate change, a Republican administration would likely recalibrate or even dismantle certain aspects of the Biden administration's climate programs. Thus, the long-term viability of the IRA remains uncertain and subject to the prevailing political landscape.

Regarding both the US, the EU programs, inflation and the rise in interest rates pose significant challenges. These factors make debt acquisition and repayment more burdensome for nations with high levels of debt. Regarding the European experience, the Recovery and Resilience Facility in 2020 occurred during a period of near-zero interest rates, fostering the belief in an era of sustained low rates. This perception led many EU governments to overlook warnings about the limitations of increasing debt. However, the current landscape diverges from these initial expectations, with interest rates projected to remain elevated for an extended period. Consequently, servicing debt becomes considerably more expensive.

In summary, although both the US and the EU have climate change mitigation objectives, their regulatory approaches to state aid regulation and climate compatibility differ due to the differences both in the legal and political systems of the two blocks. This difference in regulatory approach may influence

[48] CUBANSKI, NEUMAN, AND FREED, *Explaining the Prescription Drug Provisions in the Inflation Reduction Act*, *Kaiser Family Foundation*, January 24th, 2023. Retrieved on May 2, 2024.

[49] European Central Bank, *Account of the monetary policy meeting of the Governing Council of the European Central Bank held in Frankfurt am Main on Wednesday, 7th July 2021*, Retrieved on April 27th, 2024.

the assessment of State aid compatibility with climate objectives and may have significant implications for companies and investors active in both the US and the EU.

Proof of that lies in the attraction of a number of large European multinationals operating mainly in the production of chemicals, batteries and other energy-intensive products, attracted by the incentives arranged by Washington. For example, Volkswagen has announced expansions in the US in the early 2023 by redirecting a 10 billion investment to build its second battery factory, while Tesla is rumored to be suspending its plans for battery cell production in Germany in an attempt to qualify for tax credits under the IRA[50]

Chapter II

Compatibility of EU State Aid Law with Climate Change Legislation

1. Overview

The European Green Deal and the subsequent regulations, as outlined in the preceding chapter, represent an ambitious objective of the European Commission, underscoring the indispensable role of collaboration among governmental entities, industries, and society as a whole in driving the necessary transitions toward a more sustainable future. To realize the desired outcomes, it is imperative that both the European institutions and Member States demonstrate commitment to both political and economic initiatives.

In this scenario, emphasizing the ambitious targets proposed both in ecological and time terms, public economic investments become a key instrument to ensure a complete and rapid inversion point in comparison to the past decades. A multitude of scientific studies emphasize the imperative of timely intervention to forestall surpassing irreversible temperature thresholds that would lead to a cascade of climatic warming effects[1]. The impact of human activity on the Earth system, and particularly on climate

[50] UBERTI, *High Natural-Gas Prices Push European Manufacturers to Shift to the U.S*, in *The Wall Street Journal*, September 21th, 2022. Retrieved on May 2nd, 2024.

[1] In 1992 over 1700 scientists, among them most of Nobel laureates alive at the time, cooperate in the redaction of "*World Scientists Warning to Humanity*", urging humanity to cease environmental degradation and institute profound alterations to the human-nature dynamic, aiming to avert '*vast human misery*' (KENDALL, *World Scientists Warning to Humanity*). This appeal was reiterated a quarter-century later, as more than 15,000 scientists endorsed a subsequent admonition, underscoring the alarming exacerbation of most environmental indicators since the first warning (RIPPLE, NEWSOME, BARNARD, MOOMAW, and GRANDCOLAS, *World scientists' warning of a climate emergency*).The declaration proposed various measures for humanity to transition toward sustainability, including the cessation of deforestation, the expansion of habitat protection through the establishment of reserves, the large-scale

warming, is most pronounced in the context of industrial activity. While it is evident that raising awareness of the population towards more sustainable lifestyle choices is a crucial step, it is also essential to ensure the delivery of the same services to the population in a less environmentally polluting manner. Consequently, the modernization of existing infrastructure towards less polluting and eco-friendly solutions, the increasing utilization and production of renewable energy sources, the development of carbon capture technologies, and other related fields assume critical importance.

By 2022, sustained cooperation between institutions and companies made it possible to achieve that 23% of the EU's energy consumption comes from renewable sources. In order to reach the climate neutrality by 2050, similar with the ambitions of the European Green Deal, the Commission's objective is to increase this value to 42,5% before 2030[2]. This maneuver is expected to require an investment of around 40 billion Euros over the next ten years, which will be used to finance research into more efficient production technologies, the construction of new plants and the modernization of the existing ones. From this brief analysis, the reader can clearly see the fundamental support that both the Member States and the European institutions must ensure for companies during this transition phase, in order to guarantee stability and support for investors and market operators.

Although targeted and timely action is essential, there is a risk of distorting the free market. To prevent this from happening, these interventions are subject to meticulous scrutiny by the European authorities in accordance with European State aid rules. The essence of this discipline is to ensure the preservation of free trade and the proper functioning of competition, thus contributing to the maintenance of a fair playing field between companies at national, European, and international levels.

Given these considerations, it seems appropriate to examine the manner in which these two regulatory pillars interact, the potential for one to undermine the effectiveness and realization of the proposed goals of the other, and the possibility of identifying an appropriate solution to ensure the achievement of climate targets while simultaneously minimizing market manipulation.

Having already conducted a comprehensive review of the regulations in both sectors, the thesis in this chapter addresses the aforementioned issues. The aim is to offer a clear analysis of the interaction between the economic commitments of the European institutions and Member States regarding environmental sustainability and the monitoring procedures and limits established by State aid regulations. This analysis is conducted always bearing in mind the implications and potential risks of underestimating the side effects of a lack of or late application of either. Finally, the focus will be on the nuclear sector, which is a controversial area subject to specific regulation.

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restoration of ecosystems, and the formulation of effective policy mechanisms to address the trade of endangered species (RIPPLE et al., *World Scientists' warning to humanity: A second notice*).

[2] The revised Renewable Energy Directive EU/2023/2413, which came into force in all EU countries on November 20th, 2023, increases the EU's minimum mandatory renewable energy target for 2030 from 32% to 42.5%, with the ambition to reach 45%.

2. Assessment and Critic Points of the Compatibility of European Environmental Objectives with State Aid Rules

2.1 Historic evolution of compatibility

From the analysis in the previous chapter, the interference of the Commission in the economic and political choices of the Member States becomes clear from the onset.

It can be noted from the first chapter that State aid established in the primary law of the European Union has remained essentially unchanged from the original formulation of the founding Treaties up to the current Articles 107-109 of the TFEU. Indeed, its normative development is determined by other sources, such as the practice of the Commission in its decision-making activity on the compatibility of State aid measures and the Court of Justice sentences following preliminary rulings and appeals against Commission decisions. Within this framework, as the concept of aid has remained unchanged, although it has been progressively clarified by case law and practice, also the grounds and objectives that may lead to an assessment of the compatibility of the measure have remained formally unaltered, although they have been progressively specified in secondary law.

Article 107 TFEU, the primary reference point for the State Aid Guidelines, delineates the four primary cumulative characteristics that define State aid. These include the public origin of the funding[3], the selective nature of the intervention[4], and the potential to affect trade between Member States and competition[5]. However, the Commission's discretionary authority with regard to the latter two aspects is less pronounced than that exercised with respect to the other constituent elements.

From one perspective, State aid can be considered to be a limiting factor insofar as it introduces substantial prohibitions on Member States regarding the disbursement of funds that are considered by the Commission to be distorting competition within the internal market, participating in the so-called "negative integration". Conversely, when the Commission is entrusted with the approval of such measures, as they are deemed to be compatible with the criteria of Article 107(2) and (3) TFEU [6], it expresses the "positive integration".

[3] In other words, it must be provided by the State, intended through all its articulations, or by formally private entities, organisations, designated or delegated by the State for the management of public resources, or are under public control, even if they are materially held by a subject of a private nature.

[4] This means favouring certain undertakings or the production of certain goods. Only those measures that are de jure and de facto general in scope, irrespective of the sector of activity and the geographical and regional location of the beneficiaries, are excluded from the concept of aid.

[5] Although these two requirements are formulated separately in Art. 107(1), they are normally treated together. It is sufficient that the measure strengthens the position of certain undertakings compared with that of their competitors in the internal market, regardless of the fact that there is no even potential competition at the time the aid is arranged.

[6] On this topic: ROBERTI, *Gli aiuti di stato nel sistema europeo: incentivazione e perequazione nel settore dell'energia*, in *Gli aiuti di stato: profili generali e problematiche energetiche: Convegno annuale di AIDEN 2019: Milano, 1 luglio 2019*, 2020, 183, *ivi* 184.

This ambivalence is deliberately entrusted to the Commission by the Treaty, in line with the "constitutional" objective entrusted to State aid regulation. Already in 1971, in its Report on Competition Policy, the Commission stated that undertakings are required to operate in the markets independently and that State aid is prevented from reducing the scope of the free movement of goods and jeopardizing the optimal distribution of production factors. The Commission, however, also affirmed that State intervention is necessary if the market alone does not allow the achievement of development objectives «justified for the sake of better quantitative or qualitative growth or when it leads to intolerable social tension» [7].

Economic manoeuvres that exhibit those characteristics previously mentioned are deemed to be incompatible with the regulations of the internal market, with the exception of the cases that fall under the purview of Art. 107(2) and (3), which encompass certain objectives and motivations behind the aid [8]. In the current framework, the Treaty does not explicitly address the environmental aspect in the provision of State aid, neither through automatic exemptions under Article 107(2) TFEU, nor through discretionary powers of the Commission in determining compatibility under Article 107(3) TFEU. This absence can be explained by the historical development of the law. In the past, the European Economic Community had no specific competence in environmental matters and ecological sensitivity was weaker than it is today. Moreover, the jurisprudence of the time adopted a restrictive approach and tended to refuse to authorize aid if the beneficiary companies were responsible for pollution and could bear the costs of complying with environmental legislation on its own. Exceptions were only allowed in cases of particular difficulties, such as those of a regional or industrial nature, in complying with environmental standards[9].

However, growing environmental awareness has soon led to a development in the field of State aid regulation, albeit not through primary law established by the Treaty. The integration of environmental objectives into economic policy was formalized and catalyzed by the adoption of the so-called "*enabling regulation*" on State aid in 1998, amended in 2015 [10]. Its particular feature is that it gives the Commission the power to adopt regulations exempting Member States from the obligation

[7] Commission of the European Communities, *First Report on Competition Policy*, (OOPEC, Luxemburg, 1972), point 132.

[8] Par. 2 describes the types of aid that are automatically compatible (always conditional on an assessment of appropriateness and proportionality by the European Commission) that are aimed at restoring a level playing field in the market or granting non-discriminatory social benefits to consumers. Par. 3, in contrast, identifies other purposes that may respond to the general interest and may therefore be declared compatible by the Commission through a discretionary appreciation under Art. 108 TFEU and Regulation 2015/1589 of July 13th, 2015 which defines the modalities of application of the aforementioned article. The guideline remains that any potential disadvantages in terms of distortion of competition are outweighed by the objectives actually achieved through the public support.

[9] Commission of the European Communities, *Third report on Competition Policy - Addendum to the "Seventh General Report on the Activities of the Communities*", 1974. Retrieved on the April 25th, 2024.

[10] Refer to Ch. 1 Sec. 3.2

to notify certain specifically listed categories of aid as being compatible with the internal market. On the basis of this legal framework, the Commission adopted the "General Block Exemption Regulation" (GBER) [11].

Given the current political context of the European Union, with a particular focus on the new approach to environmental and climate issues outlined in the European Green Deal, it is an opportune moment to rethink the role of State aid in the environmental context. It is both timely and necessary to consider a future perspective that allows the pursuit of the European Union's ambitious environmental goals, including public intervention. State aid should not be seen as an obstacle to supporting the economy, provided that it is structured so as to maintain fair competition. Strengthening the link between State aid and environmental protection is crucial. As Gian Michele Roberti points out, the Treaty thus becomes an integration point between market and public intervention, and at the same time an instrument through which the European institutions shape national measures, directing them towards objectives and instruments considered consistent with the interests and needs of the European Union[12].

Consequently, in order to assess the compatibility and the critical aspects of the EU's environmental and State aid policy, it is therefore essential to determine whether environmental protection has an impact on the concept of State aid. Secondly, it is important to understand how the achievement of environmental objectives affects the compatibility of State aid. Finally, it is crucial to identify the conditions under which such aid can be authorized, both according to the Treaty or to secondary law.

2.2 Qualification of the measure as State aid

The preliminary examination of the interaction between environmental and economic policies begins with the qualification of the measure as State aid. The analysis of the constitutive elements of such aid becomes particularly interesting when environmental concerns are taken into account, since the complexity of the measures and the sensitivity of the issue have led the Court of Justice of the European Union to conduct in-depth analyses of the current definition of State aid. These analyses have been followed by rulings that have become important legal milestones.

Firstly, an examination of the criterion of imputability to the public authorities shows that not every government intervention meets this requirement. Indeed, the allocation of strictly private resources as the result of neutral national rules excludes the public origin of the financing. A leading

[11] Refer to Ch. 1 Sec. 3.2

[12] ROBERTI in *Gli aiuti di stato nel sistema europeo: incentivazione e perequazione nel settore dell'energia*: «Il disegno complessivo comprende quindi componenti diverse: di ordine «sostanziale», atteso che il regime fondato sul Trattato è chiamato a tracciare un punto di sintesi (ovviamente evolutivo) fra intervento pubblico e mercato. E di ordine «istituzionale», dato che mediante l'esercizio dei poteri di controllo e decisori, contemplati dalle (fondamentali) disposizioni di cui all'articolo 108, paragrafi 1-3, la Commissione (e in misura minore Consiglio e Parlamento) ha modo di inquadrare gli interventi nazionali, orientandoli verso obiettivi e strumenti ritenuti coerenti con le priorità e le esigenze dell'Unione».

case in this context is the *Preussenelektra* judgment[13]. With regard to measures taken by Member States to promote the use of energy from renewable sources, the Court of Justice examined the German system of minimum purchase of energy from certain producers and found that it did not involve State resources since it used exclusively private funds. Consequently, the economic advantage conferred on certain operators is not sufficient to classify the measure as State aid.

However, this decision remains almost an exception. Other national manoeuvres with the same objective have raised objections concerning the transfer of resources by the State[14]. The Court carefully assesses the involvement, albeit minimal, of activities, resources, or public control in each measure. In this effort to differentiate with respect to the *Preussenelektra* judgment, the Court has been strongly criticized because some passages seem to focus more on the form than on the effects of the measures and their methods of financing. This approach leads to the identification of a State resource even in schemes that are very similar to the German one. In these cases, the criterion of the imputability of the public resources used to finance the aid has shown its complexity and, in some cases, its imperfection[15]. As a result, schemes similar to the *Preussenelektra* case, such as the French "*Vent de Colère!*" and the Dutch "*Essent*", could be considered formally different enough by the Commission. The environmental purpose, which looks at the effects, is therefore not relevant in determining the involvement of State resources, which is a mere formal requirement. Such formality could be an obstacle to the implementation of complex measures.

Selectivity constitutes the second cumulative element in the characterization of State aid, particularly relevant when it concerns measures with environmental objectives. Indeed, the latter implies a differentiated treatment of categories of undertakings, considering that the environmental impact of their activities can be objectively different. However, the European jurisprudence has introduced the "*polluter pays*" principle, which justifies differential treatment of companies on the basis of their environmental impact. This principle has been successfully applied in the case of the additional taxation of nuclear energy producers (and the subsequent exemption of all the other categories of enterprises), where the increased tax revenue has been allocated to the decontamination

[13] V. infra, Ch. 3 Sec. 2.1.

[14] The reasons underlying the Court's decision can vary: it might be due to the fact that the entity tasked with fundraising lacks the authority to use the money for purposes other than those stipulated by law (European Court of Justice, July 17th, 2008, C-206/06, *Essent*, ECLI:EU:C:2008:413); or it could be due to the waiver of revenues derived from the emission trading system (European Court of Justice, September 8th, 2011, C-279/08, *Commission v. Netherlands*, ECLI:EU:C:2011:551); or it might be because the funds, collected through the imposition of obligations to purchase green energy, are initially deposited into a public fund and then reinvested with renewable energy producers (European Court of Justice, December 19th, 2013, C-262/12, *Vent de Colère!*, ECLI:EU:C:2013:851); or finally, it could be because the entity responsible for managing the funds is subject to full control by public authorities (General Court, May 10, 2016, T-47/15, *Germany v. Commission*, ECLI:EU:T:2016:281).

[15] According to: PEIFFERT, *L'application du droit des aides d'État aux mesures de protection de l'environnment*, Bruylant, Paris, 2015, 64.

of contaminated sites[16]. The rationale behind the imposition of the tax is based on the principle that the specific cause of the type of pollution, which is intended to be reduced and cleaned up, is to be attributed solely to the activities of the enterprises subject to the tax. The coherence of the environmental objective, the identification of the effects of the economical maneuver and the consequent identification of the undertakings not subject to the tax, namely those using nuclear energy or producing other forms of electricity, preclude the selectivity of the measure.

Similarly, companies producing electricity from hydroelectric sources may not be in a comparable situation to enterprises generating electricity from other sources if only the former are subject to a tax whose revenue is allocated to the protection and improvement of water resources[17]. Moreover, for example, companies using renewable energy sources may legitimately benefit from incentives such as "*green certificates*", without such measures constituting a selective advantage, since their purpose is to reduce environmental pollution[18].

However, it is worth noting that a general environmental justification is not always sufficient to justify the selectivity of an aid measure. On the contrary, in other judgments, the Member States involved have defended the selection of certain categories of beneficiaries solely on the basis of apparent environmental objectives. Among these cases, the most relevant are CETM[19] and Adria Wien[20].

In the first case, the Court considered that the environmental purpose was not to be considered as relevant, since even the excluded categories from the aid could have been using polluting vehicles. Similarly, the differentiation between companies according to their purpose - service provider or producer of goods - and therefore according to their energy consumption, as in the Adria Wien case, must be justified by a real and objective environmental impact of their activities, without being able to attribute a specific tax advantage only to the first group. In fact, in both cases, energy consumption can be considered harmful to the environment.

In general, the "polluter pays" principle does not simply mean higher taxes for the most polluting companies, but rather the precise identification of a category of companies whose activities are specifically responsible for the polluting effects that are sought to be tackled. Consequently, these companies can rightly be exempted from certain financial, economic or fiscal burdens. However, it is

[16] European Court of Justice, June 4th, 2015, C-5/14, *Kernkraftwerke Lippe Ems GmbH*, ECLI:EU:C:2015:354.

[17] European Court of Justice, November 7th, 2019, C-105/18 a C-113/18, *UNESA*, ECLI:EU:C:2019:935.

[18] Opinion of Advocate General C. SÁNCHEZ-BORDONA, submitted on the 3rd of December 2020, C-705/19, *Axpo Trading Ag*, ECLI:EU:C:2020:989.

[19] General Court, September 29th, 2000, T-55/99, *CETM*, ECLI:EU:T:2000:223.

[20] European Court of Justice, November 8th, 2001, C-143/99, *Adria Wien*, ECLI:EU:C:2001:598.

common doctrine that the "polluter pays" principle only confirms the principles and exceptions established in Article 107(2) and (3)[21].

In conclusion, while it is crucial to apply the "polluter pays" principle in order to ensure a fair allocation of environmental costs, it is equally important to avoid unjustified selectivity in State aid by ensuring that all the measures adopted are based on objective environmental criteria and do not penalize one type of pollution over another.

The last characterization of State aid concerns the assessment of the effect on competition and trade between Member States. Some scholars have highlighted a possible distinctive feature in the tax area[22].

Since taxation falls within the exclusive competence of Member States, divergent environmental tax regimes, such as eco-taxes and green certificate schemes, have the potential to distort competition and trade between Member States. The discretionary power of Member States to introduce such taxes and to regulate their implementation can lead to distortions in infra-EU competition, as companies could face different environmental tax burdens despite similar levels of pollution. Paradoxically, this scenario could make polluting activities in certain countries or regions more economically favorable than in others. Furthermore, exemptions for less polluting companies, coupled with different punitive measures for more polluting companies, could exacerbate this distortion[23].

Consequently, in certain cases, a more in-depth assessment by the European Commission during the evaluation of the aid could be helpful in ensuring greater market competitiveness, thereby mitigating the effects of differentiated tax treatment of polluting activities. However, harmonization of such instruments by the European Union could potentially violate the principle of subsidiarity and may therefore not be the most suitable solution[24]. Ultimately, it is important to point out that certain market distortions are caused by objective factors that cannot be overcome by the companies involved on their own. For example, in the environmental sector, renewable energy producers may be disadvantaged by higher production costs. Favorable tax treatments could enable these companies to compete on a level playing field with traditional producers. Given the specificities of environmental issues, it is plausible that aid could facilitate fair competition in the internal market and thus contribute to the achievement of objectives without jeopardizing the qualification of measures as State aid.

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[21] Opinion of: PEIFFERT, *L'application du droit des aides d'État aux mesures de protection de l'environnment,* 480.

[22] Particularly relevant are the insights from: VERRIGNI, *Tributi di scopo, tutela ambientale e divieto di esecuzione degli aiuti di Stato*, in *Riv. dir. finanziario e scienza finanze*, 2006, 8; and also of VILLAR EZCURRA, *The concept of 'Environmental Tax' in a state aid context when a fiscal energy measure is concerned*, in 16 *European State Aid Law Quarterly* 11-24, (2017).

[23] A detailed analysis in ROSSEAUX, *La compatibilité des instruments économiques au regard des dispositions relatives aux aides d'état. L'exemple de la taxe CO2/énergie et des échanges de droits d'émission dans le cadre de la lutte contre l'effet de serre*, in 5(1) *Rev. eur. droit environnement* 3-15, 3 (2001).

[24] As highlighted by ROSSEAUX in *La compatibilité des instruments économiques au regard des dispositions relatives aux aides d'état. L'exemple de la taxe CO2/énergie et des échanges de droits d'émission dans le cadre de la lutte contre l'effet de serre*, 10.

In conclusion, due to the specificities of environmental issues, it cannot be completely excluded that the aid may facilitate fair competition on the internal market rather than distorting it, thereby hindering the fulfilment of the last condition for a measure to be qualified as State aid.

2.3 Paradox in the Broad Compatibility of State Aid with EU Law

Once the preliminary analysis to classify the proposed economic measure as State aid according to the criteria previously examined has been completed, a further assessment of the compatibility of the measure must be carried out in accordance with Art. 107(2) or 107(3) of the TFEU. It is important to note that the mere environmental objective does not affect the qualification and compatibility of the measure, since it cannot be used to justify the adoption of selective measures; it only constitutes the reason for which the aid is granted. The compatibility of the aid must be assessed solely on the basis of its effects [25].

In its adjudicative capacity, the CJEU typically requires that acts under analysis be evaluated for compliance with EU law in its entirety[26]. Consequently, the violation of any EU rule, in particular those pertaining to the freedom of movement of people[27] and the principle of non-discrimination[28], makes the aid incompatible. It follows that the same principle should be applied in defining the compatibility of other rules with regard to the EU environmental rules.

However, the Court of Justice partially restricts the application of such an assessment. Currently, in order to analyze the environmental scope of aid and to assess its environmental impact, it is necessary to identify a link between the objectives of the aid and the sustainability policy of the European Union[29]. Therefore, if the aid does not have any environmental purpose, it could be declared compatible without a detailed assessment of its compliance with environmental standards, since aid not originally design for the benefit of environment aid does not necessarily hinder the proper functioning of the internal market.

A distinction has emerged based on the purpose of the aid, which has an impact on its possible approval, with paradoxical results that require prompt reflection by the ECJ. While aid with environmental objectives is assessed on the basis of the proper functioning of the internal market and

[25] This is a classic assertion in the jurisprudence of the ECJ, also in relation to other objectives widely shared by the European Union. See, *inter alia*, judgment of the European Court of Justice of July 2nd, 1974, C-173/73, *Italy v Commission*, ECLI:EU:C:1974:71; judgment of the General Court, December 3rd, 2014, T-57/11, Castelnou Energía, ECLI:EU:T:2014:1021.

[26] As pointed out by PEIFFERT, *L'application du droit des aides d'État aux mesures de protection de l'environnment*, 200.

[27] General Court, February 26th, 2019, T-865/16, *Fútbol Club Barcelona*, ECLI:EU:T:2019:113.

[28] European Court of Justice, April 15th, 2008, C-390/06, *Nuova Agricast*, ECLI:EU:C:2008:224.

[29] Thoroughly analysed by BANET, *Legal Status and Legal Effects of the Commission's State Aid Guidelines: The Case of the Guidelines on State Aid for Environmental Protection and Energy* (EEAG) (2014-2020), in 19 *European State Aid Law Quarterly*, 172-184, 182 (2020).

their consistency with the environmental and energy policies of the European Union, aid with other objectives do not seem to be subject to the latter type of control.

2.4 The purpose of State aid with Green Objectives according to Art. 107 TFUE

Once the legitimacy of the prerequisites of the aid has been verified, the reasons adduced in support of such aid are considered in assessing its admissibility[30]. The TFEU, Art. 107 (2) and (3), remains the reference norm.

In general, the environmental objective does not stand out or differ in any way from other reasons that may justify the granting of aid. The promoting Member State carefully assesses the utility and necessity of the aid, including the proportionality of the proposed measure. Although clarification of the environmental objective is already an ongoing process, Member States prefer to act within the boundaries already established by existing jurisprudence, which ensures the compatibility of the planned measure. However, the possibility of reviewing the measure on the basis of Article 107(2) and (3), which constitutes primary law, should not be excluded.

In general, with reference to paragraph 3(b), it is possible to define environmental protection as an important objective of «common European interest», as part of a coordinated action by several Member States to address a common challenge, i.e. to tackle environmental pollution[31]. In addition, a careful consideration of point (c) also makes it possible to combine environmental goals with regional development, particularly in areas which may have a particular difficulty in meeting high standards of environmental protection[32].

2.5 Assessment of Compatibility in the light of Current Guidelines (CEEAG)

The Commission's communication of March 1974[33] was the first step towards a uniform interpretation of the conditions of compatibility of State aid in relation to defined environmental objectives. This framework introduced guidelines for achieving compatibility between these objectives and the support policies of the Member State, foreseeing a gradual reduction of the eligibility of such aid in line with the future alignment of the system with environmental objectives. However, the tightening of environmental pressures, stricter regulations and a market that discouraged more sustainable solutions

[30] SOLTÉSZ, and SCHATZ, *State Aid for Environmental Protection. The Commission's new Guidelines and the new General Block Exemption Regulation*, in 6(2) *Journal European Environmental Planning Law* 141-170, 144 (2009).

[31] European Court of Justice, March 8th, 1988, Joined cases 62/87 and 72/87, *Exécutif Régional Wallon v. Commission*, ECLI:EU:C:1988:132.

[32] PORCHIA, *Aiuti di Stato in materia ambientale e competenze regionali*, in *Il Diritto Dell'Unione Europea*, 2009, 857.

[33] Council Recommendation of March 3rd, 1975 (75/436/Euratom), Regarding cost allocation and action by public authorities on environmental matters.

had the opposite effect. Subsequent communications provided greater precision and detail, outlining the limits and procedural obligations for the compatibility of State aid.

The most recent guidelines from the Commission on environmental State aid for the year 2022[34] comprise three sections. The initial section provides an overview of the key terms and concepts used in the document. The second part concerns general principles, while the third part offers a more detailed specification of these principles within predetermined categories of intervention in the environmental sector.

The term "environmental protection" is of particular importance among the other definitions, and it is understood primarily in a negative sense, as actions aimed at limiting or reducing the risk of damage to natural resources or the environment. In this way, the attribute of "sustainability" can be defined as productive activity and economic growth that avoids damage to existing natural resources. This does not, however, include the active promotion of different production methods or the expansion of the natural resources. The guiding principles of the rules are closely linked to the macro-economic objectives aimed at achieving a resource-efficient and low-emissions economy. The intervention types specified in the guidelines aim to reduce the environmental impact of economic activities, without environmental promotional "velleity". For example, the decontamination of a contaminated site does not necessarily involve the subsequent improvement of the site in a naturalistic way[35].

According to the guidelines, aid must be appropriate both in relation to its purpose and to the unavailability of less environmentally invasive solutions and means less likely to distort competition. The justification for State intervention is based on an improvement that cannot be achieved by the market, as in the case of market failures[36]. State intervention should therefore be considered as an *extrema ratio* compared to other preventive regulatory instruments that can achieve environmental objectives with equal effectiveness. Therefore, aid should only be granted in order to achieve tangible improvements that cannot be achieved without the specific State intervention.
Finally, the principle of proportionality is underlined, without which public intervention risks being oversized.

The regulatory framework is complex. Greater precision in the regulations would allow Member States to forecast the compatibility of the measures supported, as the complex nature of the Commission's preliminary assessment risks undermining certainty and predictability [37].

[34] Communication from European Commission (2022/C 80/01), Guidelines on State aid for climate, environmental protection, and energy 2022.

[35] Unless it can be justified as an extension of the region's natural resources for the effective capture of carbon dioxide released into the atmosphere.

[36] Discussed in the next section.

[37] PORCHIA, *Aiuti di Stato in materia ambientale e competenze regionali,* 871.

The 2014 Communication[38] appears to be a proper directive that essentially, although not formally, imposes the adoption of aid measures exclusively in the forms indicated therein on Member States, rather than a guideline in which the Commission shares principles. Such instruments may suggest a democratic deficit, as they are adopted by the Commission without the involvement of legislative institutions or democratic representation[39]. In view of the current importance of State aid, the Commission interferes politically in the Member States by influencing socio-economic and industrial processes. Therefore, an application for annulment of the guidelines was proposed, which was declared inadmissible due to the lack of legitimacy of the applicant, the European Renewable Energies Federation (EREF), a private association, under Article 263(4) of the TFEU[40].

It is important to emphasize that, despite the considerable influence attributed to the Commission, its power to act remains exclusively indirect, always leaving the initiative to the Member States, which may or may not implement the "directive" adopted by the Commission.

2.6 Compatibility between Commission's Guidelines and GBER

Regulation no. 651/2014, commonly known as the GBER, dedicates a specific section to the regulation of environmentally related aid. As previously highlighted, the key feature of the regulation's scope is the exemption from the obligation to notify aid projects that meet all the criteria established for each type of authorized interventions, leaving the assessment of the compatibility to the Member States during the design and implementation phase of the aid[41].

The general principles on which the entire State aid system is based are substantially similar in both the regulation under consideration and the guidelines examined above. However, this normative overlap may cause some difficulties of interpretation and application, as the relationship between the two sources is not clear. In general, the guidelines seem to be much more detailed than the regulation and seem to provide some sort of interpretation and specification of the latter. Thus, they seem to be in a subordinate relationship, with the GBER at the top. However, a closer examination reveals not only that there is no complete correspondence between them, excluding a supporting function, but, above

[38] Communication from The Commission (2014/C 198/01), Framework for State aid for research and development and innovation.

[39] BANET, *Legal Status and Legal Effects of the Commission's State Aid Guidelines: The Case of the Guidelines on State Aid for Environmental Protection and Energy (EEAG) (2014-2020)*, 173.

[40] General Court, November 23th, 2015, T-694/14, European renewable, ECLI:EU:T:2015:915.

[41] However, since formally the verification of the compatibility is always a matter exclusively of the Commission, the Member States have an obligation of publicity. The public nature, in fact, allows the interested parties to understand the reasons why the measure may be implemented even in the absence of prior notification to and expressed authorization by the Commission. Moreover, the public nature allows the Commission to exercise its own subsequent control. In fact, the control phase by the Commission is postponed and only carried out if there are doubts as to whether the conditions laid down in the regulation are fulfilled. For details, consult: NICOLADEIS, *Decentralised State Aid Control in an Enlarged European Union: Feasible, Necessary or Both?*, in 26(2) *World Competition* 263-276, (2003); ROSS, *Decentralisation, Effectiveness, and Modernisation: Contradiction in Terms?*, in BIONDI, EECKHOUT, FLYNN, *The Law of State Aid of the European Union* 85-102, Oxford University Press, Oxford, 2003.

all, that the effects of the two legislative acts are different. While the Regulation affects the *ex-ante* assessment of the merits of the case by the Member States, the guidelines instead restrict the Commission's discretion in the compatibility assessment process.

It cannot even be argued that the relationship between the two sources is reversed, with the regulation playing a subordinate role to the guidelines. Indeed, such an interpretation would be contrary to the basic concept of the difference between a "binding act" (i.e., the Regulation) and "soft law" (i.e., the Guidelines). Moreover, this inverted relationship, considering the stricter requisites of the CEEAG, would make the notification to the Commission mandatory even in cases where the Regulation would provide for an exemption, thereby nullifying its effectiveness and normative effort[42].

2.7 Assessment of Compatibility in the light of the European Green Deal

The European Green Deal is the cornerstone of the European Union's future policy to improve environmental protection and address climate change, with the ultimate goal of achieving zero net emissions by 2050. Achieving this ambitious goal will require a major legislative revision, as outlined in the roadmap annexed to the Communication.

Nevertheless, the Green Deal only briefly alludes to the subject of State aid. The first mention is found in the context of "*Mobilizing industry for a clean and circular economy*", where the Commission intends to support initiatives in the form of «important projects of common European interest» through the use of State aid[43]. This statement, as highlighted in the assessment of compatibility with Art. 107 of the Treaty, does not bring any novel insights into the current state of the discipline of State aid for environmental purposes. The second mention is found in the brief section dedicated to "*greening*" national budgets, where a future revision of the guidelines on State aid is announced. Nevertheless, it is evident that State aid does not play a pivotal role in a comprehensive programme such as the Green Deal.

Although this choice is controversial because strengthening environmental objectives in the State aid discipline could accelerate the transition, there are several reasons why the Green Deal may not be the most appropriate instrument to promote such policies[44].

The first observation is that it is challenging to envisage a radically different implementation of State aid without any change to the primary legal framework referred to in Articles 107-108 of the TFEU. This is because it would always be necessary to identify each measure as falling under one of the existing schemes. Second, the Green Deal focuses on EU policies and cooperation with Member

[42] PEIFFERT, *L'application du droit des aides d'État aux mesures de protection de l'environnment*, 424.

[43] Communication from the Commission (COM/2019/640 Final), The European Green Deal.

[44] Further discussion in MARINO, *La tutela ambientale nella politica dell'Unione europea in materia di aiuti di Stato*, in *Il Diritto dell'Unione Europea*, 2021, 43.

States and is not an appropriate instrument for revising the State aid framework. Third, although the European Union can encourage the use of public funds for environmental purposes, the EU cannot enforce it, as the decision on public support and its modalities depend on the choices of each Member State. Moreover, from a political point of view, interference in national financial policies could be seen as illegitimate intrusion in internal affairs. Indeed, there are other aid objectives that are compatible with the current State aid rules, such as education and employment, which must be pursued in parallel with the environmental policy. By focusing all economic efforts on environmental protection, the pursuit of these other objectives could potentially be undermined.

2.8 Conclusions

In conclusion, while it is clear that environmental objectives have gained significant emphasis within the European Union's State aid regulatory framework, a more detailed characterization is needed to facilitate their implementation.

The full integration of environmental protection into State aid policy requires that each approved measure respects the principles of sustainability and environmental protection, regardless of its main purpose. Otherwise, paradoxical conclusions could be drawn, such as the notion that aid with different objectives could be harmful to the environment or not in compliance with EU environmental policy. This does not imply that environmental policy must be explicitly embedded in every aid measure, but rather that such aid should not degrade the environment or natural resources. Ideally, the measure should be at least environmentally neutral, although such verification may increase bureaucracy and lengthen implementation times.

To further improve the situation, the adoption of a specific discipline for State aid aimed at environmental goals could be beneficial. This could consist of two different documents, a regulation and a directive, in order to limit the Commission's discretion and to clarify the currently overlapping regulations. In the interests of legal certainty, a clear distinction should be made between aid exempted from notification and aid deemed to be compatible only after a thorough analysis by the Commission. In addition, new categories of exempted or compatible aid could be introduced or the threshold of allowable costs could be increased.

Finally, the European Green Deal represents an opportunity to strengthen the role of environmental objectives within the state aid discipline. This instrument allows for the integration of environmental protection into all EU policies and actions, reflecting the concept of “environment” as a constitutionally protected “value” rather than a mere technical subject, as confirmed by the Italian Constitutional Court in 2002[45]. Furthermore, the Green Deal can be used to strengthen the applicability of State aid in the environmental sector by updating the definition of environmental protection to

[45] Italian Constitutional Court, July 26th, 2002, No. 407.

include not only negative measures but also positive ones. In fact, environmental sustainability requires not only the adaptation of industrial production, but also a green generation policy and the continuous improvement of ecosystems.

3. *Challenges in State Aid Allocation for EU Climate Objectives*

While it is true that the non-application of the State aid rules is nothing more than a prerogative of the single Member State, as a guarantee of the subsidiarity principle, the possible risks that may arise from the missing application should not be underestimated. It is crucial to be fully aware of those threats to ensure an effective crossover between the State aid regulations and EU climate objectives.

As mentioned above, in order to avoid economically risky situations, such as market failures, it is important to follow a stepwise procedure before granting State aid. They should only be considered as an *extrema ratio*. Thus, firstly, it must be ascertained that such a risk cannot be prevented otherwise. To prevent the granting of aid, preliminary measures must be implemented trying to tackle market failures. In the current environmental legislative framework, examples of such measures include the EU's Emissions Trading System, carbon tax, sectorial legislations, and mandatory EU pollution standards.

The CEEAG guidelines require that State intervention is adopted only to promote a development that the market alone could not achieve or to prevent a market failure. Only once these prerequisites are met, State intervention is considered as an option. At this point, concerns would arise regarding potential market distortions that may result from such intervention.

This section discusses the most common risks associated with granting or rejecting a State aid measure.

3.1 Market failures

Market failure is an important potential market risk, as it could undermine the objectives of fair competition and economic efficiency pursued by the CEEAG and also threaten to undermine the ability to regulate State aid effectively. For example, if competent authorities do not take into account negative or positive externalities when assessing aid, they may be inclined to grant aid that does not lead to efficient use of resources or that has undesirable environmental or energy effects. In addition, State aid decisions may be hindered by information asymmetries, which may create potential for an opportunistic behavior or unfair advantage, thereby reducing transparency and fairness. The main

market failures identified in the environment and energy context are negative externalities, positive externalities[46], information asymmetries[47] and coordination failures[48].

In the environmental context, the most common type of externality is the negative one. This occurs when firms do not bear the full cost of pollution as part of their investment, due to inadequate pricing, and, therefore, do not have sufficient incentives to reduce pollution. Positive externalities, on the other hand, occur when some of the benefits of an investment accrue to market participants other than the investor, making firms less interested in making the investment. Again, asymmetric information results from information asymmetries between market participants, increasing the risk and uncertainty of environmental investments. Finally, coordination failures can hinder project development due to diverging interests and incentives among investors.

3.2 Short- and long-term effects and other potential competitive effects

Having established that State aid is the only viable option, it is important to consider the potential consequences and how economic investment in renewable energy is compatible with state aid rules. Environmental aid, by definition, favors environmentally friendly companies and technologies, often at the expense of more polluting alternatives. Furthermore, it is essential that the Commission, as outlined in the guidelines, takes into account all the risks that an incentive for sustainability, while necessary, may entail, so that this preference is not seen as an undue distortion of competition.

In the first place, it is necessary to evaluate the phenomenon of *conditional aid*. This type of aid is granted to less sustainable companies in order to encourage their transition to more environmentally friendly practices: it is therefore linked to certain conditions or obligations on the part of the recipient companies, such as the adoption of cleaner technologies or the reduction of emissions. It is in line with the negative definition related to environmental sustainability actions defined in the previous section, and contrary to the "polluter pays" policy. The first risk is that companies that are naturally committed to sustainability, and therefore not recipients of this type of aid, may be the victims of competitive distortions. They risk losing part of the market that they have won through their innovative and sustainable practices. This could ultimately undermine research, development, and the adoption of more sustainable techniques. The concern is that an apparently excellent, but temporary and limited, short-term result is achieved, which could ultimately limit the development of further

[46] In economics, externalities refer to indirect effects on third parties caused by the actions of others. Negative externalities, like air pollution from vehicles, impose costs on society not paid by producers or consumers. Positive externalities occur when an activity benefits others without compensation, such as an apartment above a bakery receiving free heat.

[47] An information asymmetry arises when one party possesses superior or greater information compared to the other. This discrepancy in information levels leads to an unequal distribution of power, potentially resulting in inefficiencies within the transactions.

[48] The failure to coordinate among firms and other price setters can elucidate recessions, a phenomenon termed coordination failure. Within an economic structure characterized by multiple equilibria, coordination failure arises when a cluster of firms could potentially attain a preferable equilibrium yet falter due to a lack of synchronized decision-making.

cleaner technologies needed to meet European targets. For example, incentives for natural gas, if not carefully assessed, may provide short-term benefits by reducing oil consumption statistics, but hinder the transition to more sustainable energy solutions in the long term.

In fact, according to some scholars « All other things being equal, the closer the aided investment is in time to the relevant target date, the greater the likelihood that its transitory benefits may be outweighed by the possible disincentives for cleaner technologies»[49].

3.3 Double subsidies and fictitious decarbonization

In order to avoid distortions caused by double subsidies that circumvent State aid rules, it is necessary to carefully assess the potential risks and to put in place control and monitoring mechanisms. In addition, the implementation of rules and regulations limiting access to aid for companies already benefiting from other financial incentives could help to reduce the risk of double subsidies and ensure an efficient use of public resources. Commission Regulation (EU) No 651/2014 (GBER) contains detailed provisions to ensure that investment and operating aid for the promotion of energy from renewable sources is free from possible risks of double subsidization.

Furthermore, in order to achieve positive environmental effects in the context of decarbonization, it is crucial that the aid does not only avoid a shift of emissions from one sector to another, but also leads to an overall reduction of greenhouse gas emissions. Therefore, in order to ensure the verifiability of greenhouse gas emission reductions, aid for the decarbonization of industrial activities must focus on the direct reduction of emissions from these activities. To avoid this problem, for example, a mandatory reporting system could be established for companies receiving aid in order to verify the actual reduction of greenhouse gas emissions and to ensure transparency in the decision-making process.

3.4 Competitive distortion

Other possible consequences that may result from the implementation of State aid measures are the strengthening or maintenance of market power by the beneficiaries and the distortion of competition on the basis of geography and products. It is important for the Commission to be aware of these effects and to encourage schemes with a wide range of beneficiaries. The more beneficiaries there are, the less distortive the effects will be.

Although it is impossible to completely eliminate the distortive effects on market competition, the Commission must take into account both the negative and positive effects that would result from the disbursement of funds. Taking into account the fourth section of the CEEAG guidelines and the informal classification of aid by color, it can be inferred that measures which contribute, even

[49] QUIGLEY, *European State Aid Law and Policy (and UK Subsudy Control)[4],* Bloomsbury Publishing, London, 2022, 452.

indirectly, to the maintenance or promotion of the most polluting fossil fuels or natural gases will not have a positive effect on the environment. They are likely to increase negative externalities in the market. Furthermore, it is preferable that such support be provided through an open tendering process to all potential recipients, in order to reduce the risk of bias and to achieve cost-effectiveness.

3.5 Misappropriation of funds

Finally, a further risk arising from the allocation of State aid to achieve European climate targets may be the risk of misappropriation of funds by recipient companies. This behavior could have serious environmental and legal consequences. Misusing funds could directly undermine efforts to mitigate climate change and the transition to a low-carbon economy, thereby jeopardizing the investments earmarked for this purpose. In Italy, misappropriation of public funds, such as State aid, is considered aggravated fraud to obtain public funds under Article 640-bis of the Penal Code.

Additionally, Legislative Decree 231/2001 provides for the administrative liability of legal entities for offenses committed in the interest or to the advantage of the company, making them subject to penalties such as significant fines and other restrictive measures. The legislative decree identifies the misappropriation of aid as one of the predicate offences. In fact, article 24 specifically addresses the undue receipt of funds, fraud against the State, a public body or the European Union to obtain public funds[50].

The European Convention “Protection of Financial Interests” (PFI), established in 1995 and amended in 2017 by Directive 1371/2017, is relevant to mention in the context of the European Commission's Anti-Fraud Strategy (CAFS).

The CAFS introduced the European Public Prosecutor's Office (EPPO) among other measures. This Convention addresses the issue of fraud against the EU, which involves the misuse of European funds for purposes other than their intended use. COLAF, the Committee for the Fight against Fraud against the European Union, is responsible for monitoring the proper use of European funds at the European level. Since its establishment, COLAF has coordinated efforts to combat fraud against the financial interests of the Union. To support this body, in Italy, the "*Nucleo Speciale Spesa Pubblica e Repressione Frodi Comunitarie of the Guardia di Finanza*" (literally, Special Public Expenditure and Community Fraud Repression Unit of the Finance Police) has been established. This unit has powers of investigation in the tax field which can also be used to identify and prevent violations of European law and of the national budget related to European Union infringements. The *Guardia di Finanza*'s work highlights the importance of an integrated strategic approach to combat European fraud. This approach enables the utilization of information gathered from various areas, particularly in taxation, therefore facilitating the detection of offences.

[50] Art. 24 of Legislative Decree No. 231/2001 (Italian Law): «Undue receipt of payments, fraud against the State, a public entity, or the European Union for the purpose of obtaining public payments [...]».

According to the Impact Assessment Office of the Senate of the Republic [51], the main issue is the lack of international administrative cooperation regarding structural funds and direct expenditure. While the exchange of information between supervisory authorities is common, there is currently no law in place that provides for mutual assistance between Member States. In today's globalized commercial and financial environment, this flaw is a significant shortcoming. Italy demonstrated its hope for overcoming this issue during its Presidency of the Council of the European Union (July 1st-December 31st, 2014) by pushing for the adoption of a legal instrument for direct administrative cooperation.

Following this push, the European Parliament emphasized the need to develop an effective system of direct cooperation between Member States to counter transnational fraud related to the European Structural and Investment Funds (EIS) in its Resolution on the 2015 Annual Report on the Protection of the European Union's Financial Interests adopted on May 16th, 2017. However, the report praises cooperation with OLAF (European Anti-Fraud Office), which is currently the only channel of administrative cooperation for investigations concerning structural funds.

Therefore, it is essential that competent national authorities also adopt strict supervisory and control measures to prevent and counter the misappropriation of State funds. This will ensure transparency and integrity in the decision-making processes regarding State aid. Strict supervision and enforcement are necessary to ensure effective use of State aid in achieving climate objectives while maintaining business ethics and legal compliance.

4. The Effects of the Pandemic "Temporary Framework" on the actual State Aid Guidelines

As previously outlined in Chapter I, the global COVID-19 pandemic has constituted a significant challenge for the economic and social policies of the European Union. In response, the EU has been forced to adopt measures that are unprecedented in its history, both in terms of the means employed and the urgency with which they have been implemented. Scientific literature indicates that the climate issue could potentially cause comparable damages to the society and economy like that caused by the pandemic[52]. The intensity will depend on the effectiveness and promptness of policies globally implemented. Given the common urgency characteristic, it is considered appropriate to examine the temporary discipline introduced by the Commission during the pandemic crisis regarding State aid,

[51] LAMBIASE, *A spese dell'Europa. Le mille e una frode sui fondi comunitari: come funzionano? A quanto ammontano? Chi le combatte, e con quali risultati?*, Impact Assessment Office, Senato della Repubblica Italiana, 2018. Retrieved on April 3rd, 2024.

[52] FUENTES, GALEOTTI, LANZA, and MANZANO, *COVID-19 and climate change: a tale of two global problems*" in *Sustainability* 8560-8574, (2020).

usually referred to as "Temporary Framework", in order to identify, in light of the previous experience, any potential concerns not already assessed regarding the current State aid policy.

Despite the extensive efforts made to mitigate the consequences of the pandemic, bureaucratic obstacles have delayed the timely delivery of aid, prompting the European Union to call for greater speed and simplification of EU and national administrative procedures. Furthermore, questions have arisen regarding the legal nature and suitability of the instrument in the long term, the effectiveness and efficiency of the instrument itself and the deep involvement of the EU in State aid policy. At last, another concern arose regarding the possible massive relocation of companies to more economically stable States. Nevertheless, there have been positive comments indicating a perception of the instrument as a flexible and dynamic tool[53].

The provisional operational framework was based on the idea that interventions should benefit all productive sectors proportionately, not just as pure assistance, but as a driving component of investment. This consideration strongly influenced the ideological assumptions of EU fiscal policy, which was (and still seems to be) suspicious of State aid practices and sought to regulate them in a substantially restrictive manner.

The main risk associated with the Temporary Framework was the possibility of exacerbating intra-Community competition resulting in a disadvantage for the weaker States which, playing on the same regulatory field, would have to maintain stricter and more austere financial regimes compared to economically more stable States[54]. The latter could become the preferred destination for companies, which could benefit more from the aid policy of the country to which they could transfer their headquarters. For a better understanding, with the adoption of the Temporary Framework, by loosening the constraints on State aid, there has been an increase in the availability of aid, especially from those States that have greater fund disposal, and which presented a particularly flexible and "company-friendly" regulatory structure. These could be preferred by the companies to other States characterized by strict and mandatory provisions.

This eventuality would also undermine the actual aid policies implemented to limit, slow down and reverse climate change. Fortunately, it is believed that the lessons learned during the pandemic crisis and the reduced actual sense of urgency can ensure more careful scrutiny by the Commission and a European regulatory structure aimed at mitigating this potential economic, and therefore social, risk of disparity between States.

The second point that requires careful analysis, given the strong analogies with the current State aid policy, is the possible interference of the EU regarding policies that are purely within the competence

[53]GIOSA, *Assessing the Use of the State Aid Covid Temporary Framework with Regard to the Healthcare and Media Sector*", in 14(5) *Journal of European Competition Law & Practice* 274-289, (2023).

[54] AGNOLUCCI, *Will COVID-19 Make or Break EU State Aid Control? An Analysis of Commission Decisions Authorising Pandemic State Aid Measures*, in 13(1) *Journal of European Competition Law & Practice* 3-16, (2022).

of Member States. As highlighted above, the Temporary Framework had a certain ambition to orient the spending decisions of Member States towards virtuous objectives of digitalization and effective ecological transition. This brings up another dimension of the problem, namely if aid regulation can be used to enforce national policies. This question remains unsolved and open to many interpretations, even today, given the current, and totally different, economic and political context.

However, the Commission's responses to the challenges presented by the global pandemic can be understood in another light when viewed through the lens of the pandemic's highly dynamic and unpredictable nature. This perspective supports the utilization of flexible instruments, such as the Temporary Framework, which allows EU institutions to swiftly adjust their strategies to address evolving challenges in real time. In light of the contemporary circumstances, this perspective advocates for the Commission to assume a more prominent role in the subsidization policies of the Member States, perceiving it as the sole means to achieve the ambitious objective of establishing a European environmental policy that can yield profound and radical outcomes for the entire Union. It can be argued that the dynamism of the Temporary Framework, as evidenced by the adaptable solutions proposed by the Union, with a methodology capable of undergoing amendments during execution, could be of benefit in the development of eco-sustainable aid strategies.

The global pandemic has led to the emergence of new principles and strategies, some of which are closely related to the urgency and exceptional nature of the pandemic phenomenon and designed to last until the end of the crisis, and some of which represent an improvement and development of the European Union's previous principles and values, which have been maintained and strengthened. The significant relaxation of restrictions on State aid must be understood as a transitional measure linked to the absolute emergency and exceptional nature of the pandemic. However, in the post-pandemic phase, this instrument has been partially restored and aligned with new European Union policies.

While normally the *running-in* of a new engine is done at low speed, in the case of the Temporary Framework, the State aid system was pushed to the limit and operated at its maximum potential from the very beginning. Today, with the EU's climate ambitions, the State aid machine has not been dismantled, but is running at a more cautious rate.

5. Assessing Compatibility between State Aid and European Capacity Market

It seems appropriate to address the question concerning the management of energy capacity by the European Union and the individual Member States, and whether or not certain actions implemented by the latter can constitute State aid. After a theoretical analysis, the issue will be concluded with the recognition of two cases, one of which is jurisprudential and the other not, in the dedicated chapter.

It is indeed recognized that the European Union is in a situation where there is an excess of electricity capacity[55]. However, this is true for every single Member States, where, in order to avoid the risk of finding themselves without energy and to secure continuous supply, they have put in place various regulatory interventions. Among these, some interventions have included the promise of additional compensation to energy suppliers if they, in turn, ensure energy stability in the present and future. In this period of energy transition, these mechanisms have actually increased compared to the past. In fact, the market failures discussed in the previous section represent a significant risk to countries in the EU that have prioritized achieving certain standards of energy from renewable sources, phasing out coal-fired plants and ensuring security and adequacy of supply.

In the analysis of the legal basis set out in the Chapter 1, as previously stated, in accordance with Article 194 TFEU, the issue of energy security falls within the shared competence of the Member States and the European Union[56]. Consequently, the growing tension between those who believe they cannot do without such regulatory mechanisms and those who instead seek to minimize anti-competitive models that hinder the free development of the internal market is evident.

With regard to the thesis's topic, the question arises whether these activities, implemented by Member States, may be considered State aid. Such measures, while pursuing a general interest, may imply selectivity and anti-competitiveness.

This framework led the Commission to adopt a final report on November 30th, 2016[57]. The report was the result of a consultation and emphasized the importance of securing supply across all Member States. However, it also highlighted the conditional legitimacy of capacity regulation mechanisms. As expected, the conditionality lies in the fact that they should only be adopted in cases where market failures cannot otherwise be prevented. Consequently, such mechanisms are regarded by the Commission as State aid, which is subject to notification. Nevertheless, despite their necessity, they must be designed to minimize selectivity and anti-competitiveness, and therefore be open, even across borders, and be awarded following a transparent and competitive procedure. As the result of this report, several procedures for approving regulatory mechanisms have been implemented, including an Italian one which, together with the *Tempus Energy* ruling, will be analyzed in Chapter 3.

In line with the Commission's findings, EU Regulation 943/19 on the internal electricity market was adopted on the 14th of June[58]. This regulation represents an important innovation in the energy landscape, as it aims to reduce the fragmentation caused by the lack of harmonization of national

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[55] SCLAFANI, Aiuti di stato e maccanismi di remunerazione della capacità di energia elettrica, 209.

[56] AMMANNATI, *I meccanismi di remunerazione della capacità: il caso italiano*, in *Esperienze regolatorie europee a confronto nel settore dell'energia: Atti del Convegno AIDEN 2015: Milano, 3 dicembre 2015*, 2016, 115.

[57] Report from the Commission (COM(2016) 752 final), *Final Report of the Sector Inquiry on Capacity Mechanisms*.

[58] Regulation (EU) 2019/943 of the European Parliament and of the Council of June 5th, 2019 on the internal market for electricity (OJ L 158).

regulations in this field. It is important to stress that a strict progressive discipline is in force, requiring compliance with measures ranging from the less invasive to the most invasive, with a maximum period of effectiveness for the latter. In this sense, some of the novelties introduced by the framework include an implementation plan, a program to address market failures that Member States must adopt when energy adequacy problems arise. If the plan is not sufficient, capacity mechanisms can be adopted, while respecting the priority given to strategic reserves and awaiting the Commission's favorable opinion, as well as all the principles reaffirmed by the Regulation itself (temporary, proportionate, open, etc.). In any event, the maximum period for authorizing capacity mechanisms is ten years, after which they must be phased out or reduced on the basis of implementation plans.

The Regulation, which entered into force on January 1st, 2020, confirms European distrust[59] of capacity mechanisms, which are no longer covered by State aid rules but by the one just reviewed, but which remain a remedy in *extrema ratio*.

With regard to this discipline, it has been noted[60] that, although the Regulation is a laudable attempt at harmonization, it confers a great degree of discretion on the Commission, whose approval is a necessary condition for the adoption of the mechanisms. A further observation concerns the dual regime: having left the application of the previous discipline until the end of 2019, the Regulation has established a differentiated harmonization[61], which allows previously adopted mechanisms not to comply with the conditions of the new legislation, even if they are intended to remain in force for a long time.

6. *Discussion on the Rationale for Exemptions Denials in the Nuclear Energy Sector*

The regulation of nuclear energy in Europe is unique in terms of its origins and the way it is dealt with in current legislation.

Unlike other energy sources, nuclear energy began its regulation with an *ad hoc* treaty, the EURATOM Treaty, which is still in force. The establishment of a treaty exclusively concerned with the regulation of atomic energy is similar to that of the ECSC Treaty in 1951. The aim was to follow Jean Monnet's belief that the pooling of Franco-German coal and steel production was the only way to achieve and maintain peace. Similarly, in 1957, nuclear energy emerged as a new, highly potent source of energy with both peaceful and warlike implications. The treaty aimed to regulate the civil use of

[59] SCLAFANI in *Aiuti di stato e maccanismi di remunerazione della capacità di energia elettrica*, 210.

[60] SCLAFANI in *Aiuti di stato e maccanismi di remunerazione della capacità di energia elettrica*, 213.

[61] In accordance with Art. 22(5) of the Reg., «Member States applying capacity mechanisms as of July 4th, 2019 shall adapt them to comply with Chapter IV, without prejudice to commitments or contracts concluded before 31th December 2019 ».

atomic energy, which also served as a means of controlling the circulation of this source at the time, thus acting as a safety measure between member States.

Returning to the context of State aid, the nuclear energy sector has also received State aid to promote this energy source and reduce associated risks[62]. The main reason for the handout is to promote this energy source and reduce the risks associated with it. In fact, this sector faces various risks, including political, construction, and market risks. The first, the most intuitive and politically discussed risk is associated with society's perception of the use of nuclear energy. Accidents in power plants, such as Chernobyl and Fukushima, have led to a widespread mistrust of nuclear energy. This has resulted in politicians excluding it from their programs. The second risk is associated with the construction of power stations and the difficulty of estimating reliable construction costs that do not systematically underestimate actual costs.

Finally, market risk arises from the need for nuclear power plants to operate for a long time to recoup the significant investments required for their construction, despite their relatively low operating costs[63] . This inflexibility makes them vulnerable to price declines, exposing them to market risk[64]

The liberalization of energy markets has only increased the risks mentioned above particularly in the nuclear sector. It has become increasingly clear that private investors cannot bear these risks alone, and that the need for State support is growing. This is especially true considering the presence of energy market failures, such as supply insecurity and the promotion of low-carbon energy sources. In terms of supply insecurity, inadequate pricing is the main cause. In the second case, however, the nuclear sector is not given enough incentives because the negative externalities of fossil fuels are not taken into account. This has repercussions for the nuclear sector, which, on the contrary, would guarantee a reliable supply and low carbon emissions.

When considering the application of State aid regulations to nuclear energy, it is necessary to begin by examining Article 106 a(3) of the EURATOM Treaty. This article states that the provisions of the TFEU cannot result in the disregard of the EURATOM provisions, which places the latter in a position of specialty and therefore of prevalence. However, the EURATOM Treaty does not include any provisions on State aid regulation. Therefore, in theory, no disregard of State aid regulations should occur. The Commission, therefore, has been applying State aid discipline to this field, in order to prevent competition distortions. This thesis will address case law in the next chapter, culminating in the Hinkley judgment, which confirms the applicability of State aid rules to the nuclear energy sector.

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[62] TROMANS, *State support for nuclear new build*, in 12(1) *The Journal of World Energy Law & Business* 36-51, 41(2019).

[63] THOMAS, *The Economics of Nuclear Power: An Update*, Heinrich-Böll-Stiftung, Cologne, 2010.

[64] THOMAS, *Competitive energy markets and nuclear power: Can we have both, do we want either?*, in *Energy Policy* 4903-4908, 4904 (2010).

The exclusion of the nuclear energy sector from CEEAG and the GBER raises questions about its rationale. The doctrine justifies this exclusion, which came about following the inclusion of nuclear power in the draft guidelines, due to political risks and pressures unfavorable to nuclear power. It is important to consider how the State aid rules are to be applied and whether this exclusion is convenient for anti-nuclear States. Since the guidelines do not apply, in fact, Article 107.3 TFEU applies directly and exclusively.

This exclusion, on closer inspection, does not entail a pro for the anti-nuclear States because the greater detail contained in the CEEAG would have entailed less freedom of interpretation in application, as for all other energy sources included therein. By only having to apply the rules in the TFEU, the Commission has more discretion in its assessment. The exclusion of nuclear energy from CEEAG and the GBER is, after all, presumably therefore to be seen as an advantage for this energy sector.

In conclusion, anticipating the jurisprudential analysis in the following chapter, it can be asserted that the TFEU State aid discipline is fully applicable and applied to the nuclear energy sector, despite its exclusion from CEEAG and the GBER. The doctrine also predicts an increase in the amount of aid granted, proportionate to the rise in competition in the energy market.

7. Closure of Power Plants

The closure of fossil-fuel power plants is a crucial aspect of the broader transition to a low-carbon economy. This transition is necessary to counter climate change and promote environmental sustainability. Therefore, it is important to examine the economic, social, environmental, and political consequences of the closure of these power plants.

The reasons for this transition are often a combination of legislative decisions and market forces, such as the impact of carbon prices and the increasing competitiveness of renewable energy sources. It is important to maintain objectivity and avoid subjective evaluations. Anticipating an unavoidable transition due to the aforementioned factors, Member States may choose to accelerate this transition by implementing bans on power generation based on fuels such as coal, peat and oil shale. These bans may result in the premature closure of profitable power plants, causing financial losses for the companies involved and significant impacts on local communities that depend on these activities. Therefore, specific interventions are necessary to mitigate the social and employment effects of the transition.

The Member State may grant compensation to cover such losses, including additional social and environmental costs resulting from the early closure of activities. As per Section 4.12 of the CEEAG guidelines, aid may be granted with the purpose of inducing a change in the economic behavior of operators who intend to cease their activities before the end of their economic life.

Furthermore, the closure of fossil fuel power plants raises significant political and regulatory questions. It is essential to coordinate efforts at national and supranational levels to ensure a fair and effective transition to a more sustainable energy system. This may involve defining compensation policies for affected companies and promoting investments in regions impacted by power plant closures.

In addition, another significant signal comes from a recent Commission decision in the so-called "*Dutch coal case*", providing compensation for the early closure of the Hemweg 8 coal-fired power plant in the Netherlands[65]. This decision, apart from the controversy it has encountered, and which will be dealt with in the next chapter, is a demonstration of the Commission's increasing openness to the environmental strategy of the Member States. The Commission, while refraining from assessing whether the measure constitutes State aid, considered that the strategy contributes to the reduction of CO2 emissions and that the agreed payment sufficiently compensates Hemweg for the profits it would have made had it continued to operate. Therefore, the contribution of the measure to the environmental and climate objectives set by the EU outweighs any potential distortion of competition caused by the support.

Finally, it is important to note that the GBER does not contain a similar provision, indicating that regulating the granting of such handouts in advance is not possible. The Commission must be able to assess whether the same benefit from the closure of the plant would have been obtained without the measure. If, for instance, such assistance can incentivize the mitigation of social and environmental disadvantages resulting from plant closure, the Commission is likely to consider it as meeting the requirements of necessity and appropriateness. Additionally, it is assumed that if the aid resulted from a bidding procedure, that is proportionate and limited to the minimum necessary to achieve the objective.

Chapter III:

Case Studies

The third chapter of this report will undertake a comprehensive examination of a selection of case laws. The objective of this chapter is to meticulously examine these legal precedents, elucidating key aspects and reinforcing arguments established in the preceding chapters. It aims also to provide conclusive evidence that either corroborates or disputes the challenges previously highlighted in the previous chapters of the thesis.

[65] General Court, November 16th, 2022, T-469/20, *Netherlands v Commission.*

1. Case law guidelines on the interpretation of State aid rules, with a special focus on the definition of "State resources"

In line with the analysis carried out in Chapter II, the first group of judgments deals with the qualification of support schemes for renewable energy introduced by various Member States as State aid. In order for a support measure to constitute State aid, it must cumulatively meet the conditions required by the TFEU, i.e., the effect of State intervention or the use of State resources, the granting of a selective advantage to the beneficiary, the potential impact of the economic strategy on trade in the internal market and, finally, the potential or actual distortion of competition.

1.1. C-379/98: *PreussenElektra*

A jurisprudential analysis of the criterion of imputability to the public authorities shows that not every government intervention meets this crucial State aid requirement. Indeed, the implementation of measures that allocate only private resources excludes the public origin of the financing. A leading case in this context is the *Preussenelektra* ruling[1]. It concerns the eligibility of an aid for renewable energies within the scope of State Aid. The Court of Justice examined the German case and found that it did not involve State resources since it used exclusively private funds. Consequently, the economic strategy does not respect all requirements to be classified as State Aid. However, this decision remains almost *unicum*. As highlighted below, other national manoeuvres with the similar objective have raised objections concerning the involvement of resources by the State.

The analyzed case, whose judgment was delivered on the 13th of March 2001, concerns a legal dispute that arose between *PreussenElektra AG*, a German company active in the electricity sector, and the *Land Schleswig-Holstein*, the northernmost of the sixteen States of Germany, in order to obtain a refund for what was contributed in fulfillment of a German rule deemed by the applicant to be in violation of the European Union law. In detail, the dispute stemmed from measures taken by the Land Schleswig-Holstein, which imposed an obligation on *PreussenElektra*, and other electric energy productors, to purchase a certain amount of electric energy produced from wind at a fixed price set by law. However, *PreussenElektra* argued that the measure, as the purchase price was fixed independently on the market price, constituted a restriction on free competition and on freedom of establishment guaranteed by EU law.

The Court of Justice of the European Union was therefore called upon to rule on the German subsidy scheme, which took the form of a fixed price purchase obligation. However, this obligation was not subsidized with State funds, as the companies subject to this obligation had to fulfil it with their own financial resources. Thus, there was no direct or indirect transfer of State resources to the companies producing the renewable electric energy that the other companies were forced to buy.

[1] European Court of Justice, March 13th, 2001, C-379/98, *PreussenElektra*, ECLI:EU:C:2001:160

Despite the economic advantage conferred by the measure to renewable electric energy producer companies, the Court ruled that it did not constitute State aid, as aimed by *PreussenElektra*, according to the definition of Art. 92(1) of the EC Treaty (now, Art. 107 TFUE). The Court emphasized that the mere fact that the obligation was imposed by the German State and conferred an economic advantage was not sufficient for it to qualify as State aid. This is evidenced by the text of the judgment, which states that: «there is no dispute that an obligation to purchase electricity produced from renewable energy sources at minimum prices [...] confers a certain economic advantage on producers of that type of electricity, since it guarantees them, with no risk, higher profits than they would make in its absence». Nevertheless: «the fact that the purchase obligation is imposed by statute and confers an undeniable advantage on certain undertakings is not capable of conferring upon it the character of State aid within the meaning of Article 92(1) of the Treaty»[2].

This ruling, broadly interpreted, proved to be the precursor of a number of initiatives designed to support the development of renewable energy sources without the transfer of State resources from Member States. On the basis of the dispute, Member States were considered exempt from the obligation to notify the Commission of such initiatives. However, this decision remains almost an exception, as other national maneuvers have raised objections concerning the involvement of State resources.

In the period following the judgment, the European Court begins to address the issue of renewable energy support mechanisms that impose a financial burden or levy on the community. In this context, the Court developed the "imputability test", also known as the "*Stardust test*" with the objective of determining whether an economic mechanism is considered to be of public origin[3]. The genesis of this test can be traced back to case C-482/99 (*French Republic v. Commission*)[4], where it was first expressed in the Court's ruling of May 16th, 2002. The implemented test focuses on the analysis of the relationship between the State or public authorities and the resources used to provide the aid. If the resources in question are directly controlled or influenced by the State, or if the State has the power to direct their allocation and use, then those resources are deemed to be of public origin. In the French Republic case, a private company, Stardust Marine (from which the name "*Stardust test*"), whose main business developed in the pleasure-boat market, was the beneficiary of a series of loans that came from a private bank controlled by the State. In brief, in Stardust scenario, the maneuver implemented was considered as State aid and thus subjected to EU competition and State aid rules.

In conclusion, the *PreussenElektra* case has played a key role in defining the criteria for determining whether state intervention constitutes State Aid under European law and for the correct application of European law by Member States when designing support schemes for renewable energy. The Court ruled

[2] European Court of Justice, March 13th, 2001, C-379/98, *PreussenElektra*, ECLI:EU:C:2001:160. Cited paragraphs 54 and 61.

[3] RANDAZZO, *Aiuti di stato e rinnovabili*, in *Gli aiuti di stato: profili generali e problematiche energetiche: Convegno annuale di AIDEN 2019: Milano, 1 luglio 2019*, 2020, 231, *ivi* 239.

[4] European Court of Justice, May 16th, 2002, C-482/99, *French Republic v. Commission*, ECLI:EU:C:2002:294.

that not every intervention that confers an economic advantage automatically constitutes State aid. This interpretation has had a significant impact on the way European governments design and implement their support schemes for renewable energy while ensuring compliance with EU competition and internal market rules. The purpose of the Stardust test is to ensure that the use of public funds is both transparent and in line with EU rules. It is intended to prevent Member States from avoiding these rules through the use of private or semi-private funds. However, the question of State attribution still requires a case-by-case assessment, with an analysis of the nature of the intended scheme and the way it is implemented, as the existing case law does not provide a comprehensive solution. The Court carefully examines whether each measure involves public activity, resources or control, however minimal. In this distinction from the *Preussenelektra* ruling, the Court has been strongly criticized for seeming to focus more on form than on the measures effects or their funding methods.

The criterion of the imputability of the public resources used to finance the aid has shown its complexity and, in some cases, its imperfection. As a result, schemes similar to the *Preussenelektra* case, such as the Dutch "*Essent*" and the French "*Vent de Colère!*", discussed in the next sections, has been considered formally different enough by the Commission. The environmental purpose, which looks at the effects, is therefore not relevant in determining the involvement of State resources, which is a mere formal requirement. Such formality could be an obstacle to the implementation of complex measures.

1.2. C-206/06: *Essent Netwerk Noord*

The legal dispute underlying the *Essent* case[5] concerns the regulation of the energy sector in the Netherlands and its compliance with EU law. The case involved *Essent Netwerk Noord BV*, a Dutch energy company active as an electricity and gas distributor in the northern region of the Netherlands, and the European Commission.

These issues arose in proceedings brought by *Essent* against *Aldel*, a Dutch company active in the aluminum processing market, for payment of an amount calculated on the basis of the volume of electricity supplied by the claimant to the defendant, the levying of which is mandated by Article 9 of the *Overgangswet ElektriciteitsProductieSector* (also known as "OEPS" or literally, Dutch Transitional Act on the Electricity Generation Sector), adopted on December 21st, 2000, and is intended to cover non-recoverable costs incurred by domestic electricity generation companies in the period prior to the commencement of the process of liberalization of the electricity market in the Netherlands.

In addition, the European Commission launched an investigation to determine whether such a measure granted by Dutch local authorities to finance energy infrastructure projects complied with EU State aid and competition rules. The European Commission argued that certain financial support provided by local authorities to Essent constituted State aid and was therefore incompatible with EU competition rules. In particular, the Commission expressed reservations about the amount of the aid and the manner in which it

[5] European Court of Justice, July 17th, 2008, C-206/06, *Essent*, ECLI:EU:C:2008:413.

was provided, suggesting that it could potentially distort competition in the energy market in the Netherlands and in the European Union.

Essent challenged the Commission's decision, arguing that the funding in question did not constitute State aid or, if it did, that it was compatible with EU law. The dispute was referred to the Dutch judicial authorities, who requested the Court of Justice for a preliminary ruling on the correct interpretation and application of EU energy law.

The Court was therefore called upon to assess the compatibility of the Dutch renewable energy support scheme with EU state aid and competition law. As previously expected, the Court ruled in favor of the integration of the State aid requirements, in particular the requirement of the use of public funds. In particular, as stated in paragraph 66 of the ruling, it must be taken into account that the funds required by Essent originate from the tax surcharge imposed by the State on electricity purchasers in accordance with Article 9 of the OEPS. These amounts therefore come from a State resource.

The present judgment differs from the previous *PreussenElektra* case, in which the Court held that the obligation imposed on private electricity distributors to purchase electricity produced from renewable energy sources at fixed minimum prices did not involve any direct or indirect transfer of State resources to the undertakings producing that type of electricity. In the latter case, as pointed out in paragraph 74 of the judgment, the companies were not required by the State to manage a State resource but were obligated to purchase using their own financial resources.

The CJEU ruling in the *Essent Netwerk Noord* case provided important clarifications on the implementation of European regulations in the energy sector at the national level. In particular, it confirmed the obligation of Member States to comply with fundamental principles of European law, such as the promotion of competition and the liberalization of the electricity market, when adopting national regulations in the energy sector.

1.3. C-262/12: *Association Vent De Colère! Fédération nationale*

The case concerning the association "*Vent De Colère! Fédération nationale*" is another case in which a certain economic maneuver undertaken by a Member State has been defined as State aid, since the use of State resources was established by the Court. This ruling[6], dated December 19th, 2013, further clarifies the definition of "*State resources*" and continues the interpretative work begun with the *PreussenElektra* case, which more properly concerns the purchase obligation.

The Court was involved in an appeal brought by the "*Association Vent De Colère! Fédération Nationale*" against the provisions of the French Minister for Ecology, Energy, Sustainable Development and the French Minister for the Economy, Industry and Employment concerning the conditions and, consequently, the supplementary costs, for the purchase of electricity produced by wind powered plants.

[6] European Court of Justice, December 19th, 2013, C-262/12, *Vent de Colère!*, ECLI:EU:C:2013:851.

In this scenario, part of the funds collected through the payment of this extra tax pass through the *Caisse des dépôts et consignations*, a state-controlled company, which, collects the sums received in a specific account before transferring them to the respective operators, thus intervening as an intermediary in the management of the funds in question.

For this reason, the Court considered the French purchase obligation as to constitute State Aid. Again, the Court drew a distinguishing with the *PreussenElektra* judgment. As pointed out in paragraph 34 of the ruling, the *Vent De Colère!* case differs from the *PreussenElektra* case, in which no direct or indirect transfer of State resources was found. Indeed, as the Court pointed out in paragraph 74 of the *Essent* judgment, in *PreussenElektra*, unlike in the present case, private companies were not entrusted by the competent Member State with the management of a State resource, but were subject to a purchase obligation out of their own financial resources, whereas in the present case the management of the surcharge on consumers' bills, which is intended to offset the cost of the wind power purchase obligation imposed on the companies, has been entrusted to the *Caisse des dépôts et consignations* and therefore involves State control.

1.4. C-329/15: *Enea S.A.*

The judgment in question, unlike the previous ones, has not been previously presented in Chapter II, but the author thought it worthwhile to discuss it in order to clarify not only the concept of "*State resources*", dealt with in sections 1.1 to 1.3 of this chapter, but also the slightly different concept of "public origin" of the aid. Moreover, this judgment shows how blurred the line between the use of public and private resources still is, leaving a wide margin of discretion to the Court and undermining the principles of certainty and predictability in the implementation of such measures, thereby discouraging Member States from using economic maneuvers to achieve the objectives set by the Green Deal.

In this ruling[7], dated September 13th, 2017, the concept of "*public origin*" of aid is addressed. This attribute is ascribed to an aid if it is not only granted with State resources but is also attributable to the State.

The case C-329/15 concerns a legal dispute between *ENEA S.A.,* a wholly state-owned subsidiary engaged in the production and sale of energy, and the president of the Polish Office for the Regulation of Energy (*Prezes Urzędu Regulacji Energetyki - URE*). In the context of an incentive scheme, ENEA S.A. contested the obligation to purchase electricity produced by cogeneration with the production of heat in court, claiming that it constitutes State aid, which was unlawful, given that the European Commission had not been notified. According to ENEA, the financial penalty imposed on the company by the president of the URE due to the missing compliance with the obligation was also unlawful.

[7] European Court of Justice, September 13th, 2017, C-329/15, *ENEA S.A. v. Prezes Urzędu Regulacji Energetyki*, ECLI:EU:C:2017:671

The pivotal issue pertained to the interpretation of the concept of "*public origin*" of the aid, in light of Article 107 of the TFEU. In particular, the question was posed as to whether the purchase obligation, despite leaving the purchase price to the free negotiation of the parties, could be attributed to the State or carried out through State resources, being ENEA totally controlled by the Polish State.

The European Union Court of Justice clarified that the purchase obligation applied indiscriminately to electricity suppliers, regardless of whether their capital was in the majority held by the State or by private operators. Consequently, in this scenario, the Court ruled out that this obligation could be regarded as an intervention by the State or put into effect through State resources, as it did not result in any direct or indirect transfer of State resources to cogeneration energy companies.

The ENEA S.A. ruling serves to illustrate the intricacies involved in determining the public origin of State aid, as well as the nuance between State and private resources. It emphasizes the importance of a thorough and detailed analysis in this regard. Furthermore, the decision had a significant impact on the regulation of the energy sector in Poland, helping to ensure greater consistency and harmonization of European energy regulations at the national level.

2. Case law guidelines on the compatibility of State aid rules with climate transition

The second block of judgments is concerned with the analysis of key rulings in the area of compatibility between the State aid framework and initiatives taken by various Member States to pursue or anticipate the fight against climate change. The first case to be discussed, however, represents a point of intersection with the previous section, since, although it concerns a case of State aid for environmental purposes, it also raises the question of the interpretation of the concept of "*State resources*".

2.1. C-405/16 P: *Federal Republic of Germany*

The judgment, issued by the Court of Justice of the European Union on March 28th, 2019, arising between the *Federal Republic of Germany* and the European Commission, represents a point of intersection with the previous section, since, although it concerns a case of State aid employed for environmental purposes, it also raises the question of the interpretation of the concept of "State resources".

Regarding the latter, the present ruling aligns with the same interpretative framework of some of the previous judgments that have been considered (i.e., *PreussenElektra* and *ENEA*), interpreting the notion of "*State resources*" in a formalistic and rigorous manner. On the contrary, this line of jurisprudence diverges from the one followed in judgments such as *Essent* and *Association Vent De Colère!* which interpreted the notion in a more comprehensive meaning, including in the definition, and categorizing as State Aid, grants over which there was only a lateral implication of state.

The case C-405/16 P is an annulment judgment[8], whose dispute originates from the modification made by Germany in 2011 to the Renewable Energy Sources Act (EEG), which then came into force in 2012. The amendment to the EEG 2012 legislation aimed at supporting the production of energy from renewable sources through a system of subsidies, more precisely, through *Feed in Tariffs* (FiT). These are a form of support mechanism for renewable energies in which the producers of such electricity receive a guaranteed payment for the renewable energy they generate and feed into the grid, at a price higher than the market price.

In the context of this judgment, in particular, the question was whether the "*EEG surcharge*" system, imposed on electricity suppliers, which in practice was then passed on to final consumers, constituted a state resource within the meaning of Article 107 of the TFEU. Or, in other words, whether it is still possible to configure a regime that, even if supported by consumers, can escape integration under Article 107 TFEU.

After rejecting the interpretation first made by the European Commission and then by the General Court, the Court upheld the appeal based on two elements[9]. The first was based on the interpretation the concept of "*State resources*": the funds could not be considered state resources because there had been no determination of the actual ability of the State to dispose of them, nor were the entities responsible for management subject to actual public control. Secondly, according to the Court, the transfer of costs that occurred in practice to final consumers did not automatically equate to a legal obligation to do so, thus not constituting the existence of a tax. Thus, regarding the degree of public control exercised over the funds, the Court emphasizes the need for a close correlation between the benefit provided and the potential impact on the State budget to qualify a benefit as State aid.

In analyzing the impact of this dispute, the number of measures notified to the Commission increased drastically following the case in question. This increase in the number of notifications may have been due precisely to the Commission's decision, which contributed to increased concern about non-notification[10]. With this judgment, therefore, the Court reattributed to the Member States discretion in designing regulations for incentives for renewable energies and energy efficiency, which, in this way, do not require the compulsive notification that was the effect of the Commission's decision.

Furthermore, it seems appropriate to underline that since most of the aid subject to the GBER concern the environment and energy, the frequency of application of the General Block Exemption Regulation is

[8] European Court of Justice, March 28th, 2019, C-405/16 P, Federal Republic of Germany, ECLI:EU:C:2019:268

[9] *Important State Aid Decision: European Court of Justice Upheld Germany`s Renewable Energy Law - Case Comment C-405/16 P Germany v Commission*. Retrieved on March 17th, 2024.

[10] As suggested by: HANCHER, *Il Regime Generale degli Aiuti di Stato in materia di Energia ed Ambiente: la Comunicazione della Commissione del 2014 e la sua prossima revisione*, in *Gli aiuti di stato: profili generali e problematiche energetiche: Convegno annuale di AIDEN 2019: Milano, 1 luglio 2019*, 2020, 197 ff..

increasing due to pressure from the Commission. In this way, the Commission can focus on the most relevant cases, determining the automatic clearance of aid covered by the Regulation.

All this is aimed at modernizing state aid to allow Member States to be autonomous in evaluating regimes, allowing them not to notify *ex ante* but to subject only those grants exceeding €150 million or those that, although not falling under the GBER, fall under the CEEAG to *ex post* control. This system indicates a greater speed of the system, which differs from the previous one that did not allow to understand whether the set objectives had been achieved or not. According to the Leigh Hancher reasoning[11], this change in monitoring considers more the quality-price ratio of the measures and could presumably lead to greater effectiveness.

This decision thus represents a significant change in the interpretation of State aid rules, giving Member States greater flexibility in designing support schemes for renewable energies. However, it also raises important questions about the coherence and uniform application of European rules on state aid, highlighting the need for further clarification and greater harmonization of legal practices among Member States.

2.2. T-469/20: *Dutch Coal Compensation case*

Case T-469/20, also known as the "*Dutch Coal Compensation case*"[12], is a legal dispute between *the Netherlands* and *the European Commission* concerning the ban introduced by the former on the production of electricity through the combustion of coal.

In the context of growing concern about the environmental impact of coal and the need to reduce greenhouse gas emissions, the Netherlands enacted a law in December 2019 that prohibits the use of coal for power generation, with the ban taking effect on January 1st, 2030. At the time the law was passed, there were five coal-fired power plants in the Netherlands.

In response to the ban, a transitional period of between five and ten years was granted to all power plants operating in the country. This period was designed to allow the plants to repay their investments, adjust to other energy sources if necessary, or, ultimately, to be ready for closure. However, this benefit was not extended to the *Hemweg 8* power plant, which, due to its inability to burn biomass, lack of production of renewable energy, and lower efficiency than other coal-fired power plants, was forced to cease operations immediately. Nevertheless, it was compensated with an early closure indemnity of EUR 52.5 million.

The European Commission initiated an investigation into the measure in 2020, prior to formally opening an investigation. It concluded that the compensation was compatible with the internal market under Article 107(3)(c). The controversy surrounding the measure commenced with this decision, which,

[11] HANCHER, *Il Regime Generale degli Aiuti di Stato in materia di Energia ed Ambiente: la Comunicazione della Commissione del 2014 e la sua prossima revisione*, 200.

[12] General Court, November 16th, 2022, T-469/20, Netherlands v. Commission, ECLI:EU:T:2022:713;

while qualifying the measure as compatible with State aid law, did not address whether it constituted State aid and thus falling within the scope of that provision. The Netherlands alleges that the Commission acted beyond its powers, creating legal uncertainty, and undermining the requirements of clarity and predictability imposed by the principle of legal certainty.

Thus, the Netherlands challenged the decision to the General Court of the European Union, seeking the annulment of the aforementioned decision. After rejecting the Commission's claim of inadmissibility and declaring the action to be admissible, the General Court upheld the action, ruling that the Commission was not entitled to rule on the measure's compatibility with the internal market, given that the measure had not first been classified as State aid. It was thus concluded that only "State aid" can in fact be subject to the compatibility test.

The General Court, thus upholding the Netherlands' action for annulment, ruled that the Commission had exceeded its powers and violated the principle of legal certainty. The case not only demonstrates that, in the event that the Commission encounters difficulties in classifying a measure as aid, it is obliged to initiate the formal procedure, but also illustrates a bias on the part of the Commission towards those measures that pursue climate objectives set at the European level.

3. Case law on the Member State Capacity Market regulatory mechanisms

The following paragraph aims to provide an examination of the Commission's decisions regarding capacity markets regulatory mechanisms, following the final report of the Commission's inquiry dated November 30th, 2016[13]. Following the elaboration of the principles outlined therein, in the context of the State Aid assessing procedure, the Commission approved regulatory mechanisms proposed by six different Member States[14]. Those deserving further exploration are represented by Italy and the United Kingdom[15]. The latter, although subject to approval as early as 2014, is worthy of further analysis because it was subsequently addressed in a judgment in 2018, the so-called *Tempus Energy* case. The analysis will begin precisely with this case. It is worth noting, as a preliminary point, that these cases date back to a period preceding the adoption of EU Regulation 943/2019. Consequently, these cases serve to illustrate the treatment of capacity mechanisms at a time when they were still subject to the State aid regime.

[13] Report from the Commission (COM(2016) 752 final) "Final Report of the Sector Inquiry on Capacity Mechanisms" and the Commission Staff WORKING DOCUMENT (SWD(2016) 385 final) accompanying the report.

[14] They are those of Belgium and Germany (related to strategic storage), those of France and Greece (related to demand management), and those of Italy and Poland (related to the whole market).

[15] On the topic: SCLAFANI, *Aiuti di stato e maccanismi di remunerazione della capacità di energia elettrica*, 207 ff.

3.1. The British mechanism

The capacity market regulatory mechanism proposed by the United Kingdom, that at the time of the report was a Member State, is worth being discussed as it was annulled four years after the approval from the Commission by the EU General Court. Indeed, following the receipt of notification of the mechanism, in accordance with the State aid rules, the Commission proceeded to approve it. Four years later, the act was annulled by the EU General Court (Case T-793/14[16]), which ruled that the Commission decision had been taken despite doubts about the compatibility of the measure. Consequently, a formal procedure under Article 108(2) TFEU should have been initiated.

This judgment is relevant, primarily in order to provide a brief reconstruction of the CJEU's interpretation of the evaluation procedure for alleged State aid, as well as to briefly reconstruct the procedure necessary to obtain approval for a measure. With regard to the issue of capacity mechanisms, however, the case represents a criticism of the Commission's practice, an issue that should have been resolved following the adoption of Regulation 943/2019.

3.2. The Italian mechanism

Similarly, in order to obtain Commission approval of its own capacity market regulation mechanism, the Italy notified the European Commission about the capacity compensation mechanism outlined by the Italian Regulatory Authority for Energy Networks and Environment (ARERA), as established by Legislative Decree No. 379/2003. The notification identified three market failures that could justify the measure from a competition perspective: the need to ensure the adequacy of generation capacity, the lack of coordination between the development of generation and transmission capacity, and the lack of incentives for the investments necessary to ensure the adequacy of generation capacity.

Although the Commission declared the measure to be compatible with the state aid rules, its decision has been criticized for its apparent bias towards considering such a mechanism as state aid almost automatically, in a relatively dismissive manner. In fact, the reasoning used by the Commission in assessing the cumulative criteria necessary for such maneuver to be configured as state aid seems superficial, as the issue of selective advantage and the distortion of competition were not properly analyzed[17].

Therefore, the Italian capacity compensation mechanism may not constitute State aid as it provides an adequate compensation for the provision of generation capacity rather than an unjustified selective advantage. In addition, the selection of suppliers is carried out through transparent procedures open to all generation capacities, while the commitments made do not affect competition in the electricity markets, thus ensuring a minimal, if any, distortion of competition.

[16] General Court, November 15th, 2018, T-793/14, *Tempus Energy*, ECLI:EU:T:2018:790;

[17] SCLAFANI, *Aiuti di stato e maccanismi di remunerazione della capacità di energia elettrica*, 210.

A clear divergence emerges between the Commission's position and EU case law on the definition of state aid. The Commission tends to automatically consider such mechanisms as aid, while the Court, as highlighted in section 2 and 3 of this chapter, conducts a more detailed and factual assessment[18]. Furthermore, it would seem that the Commission is disregarding the principle that state intervention may not be considered state aid if it constitutes a compensation for services provided in order to fulfil public service obligations, as long as certain criteria, such as a clear definition of the obligations and transparency of the remuneration, are met.[19]. Moreover, the selectivity of the suspected advantage has also been questioned, since the selection of suppliers is based on economic merit and does not seem to favor any particular operator. Finally, as regards the distortion of competition, it is unclear how capacity compensation contracts can affect competitiveness in the electricity markets.

In conclusion, the Commission's approach appears to deviate from established case law. Despite the compatibility outcomes, there are compelling reasons to question the legitimacy of automatically categorizing capacity remuneration mechanisms as State aid. Once again, such ambiguity and lack of uniformity undermine legal certainty and hinder the implementation of innovative measures by Member States.

4. Nuclear Energy cases

The third block of cases investigates pivotal legal rulings regarding the compatibility of State aid regulations with the intricacies of nuclear energy. Through a careful examination of these jurisprudential landmarks, this study aims to elucidate the challenges inherent in reconciling the regulatory frameworks governing State aid with the unique exigencies and complexities characterizing the nuclear energy domain.

4.1. State aid NN 137/01: *German Reserves for Nuclear Power Station Waste Management and Decommissioning*

In the aid NN-137/01 case, also known as the "*Germany Reserves for nuclear power station waste management and decommissioning*" aid, the concept of selectivity, one of the fundamental requirements for determining State aid, was clarified and further reinforced[20]. In general terms, the selectivity criterion serves to differentiate between general measures and State aid. It mandates that aid provided by the State must favor specific undertakings or the production of only particular types of goods. Consequently, aid

[18] BRUTI LIBERATI, *I meccanismi di remunerazione della capacità di generazione elettrica e la disciplina sugli aiuti di Stato: alcune osservazioni critiche sugli orientamenti della Commissione europea*, in *Esperienze regolatorie europee a confronto nel settore dell'energia: Atti del Convegno AIDEN 2015: Milano, 3 dicembre 2015*, 2016, 133 ff.;

[19] The fallacy of this approach was demonstrated by the Italian Regional Administrative Court of Lombardy, which in a 2013 decision (TAR Lombardia, Milano, April 8th, 2013, no. 862), after a thorough analysis of the functioning of the Italian mechanism, concluded that the supply contract is an aleatory agreement that results in the transfer of the risk of shortage of supply from consumers to producers against the payment of a premium.

[20] Official Journal 2002/C 77/27, in Authorisation for State aid pursuant to Articles 87 and 88 of the EC Treaty Cases where the Commission raises no objections, "Germany Reserves for nuclear power station waste management and decommissioning" - State aid NN 137/01.

provided under broad legislative or regulatory frameworks fails to meet the selectivity criteria and therefore does not constitute State aid.

In this judgment, it was explicitly emphasized that providing incidental benefits to one undertaking through a State measure equally applicable to all does not inherently render the measure selective. What prevents State measures from being deemed selective is the establishment of uniform criteria for undertaking eligibility, rather than treating all undertakings as equally benefiting from the measure.

The case in question arose when a consortium of electricity generation and distribution companies in Germany raised concerns to the European Commission regarding part of the German Income Tax Act, alleging it conferred a selective advantage to nuclear power plant operators. Indeed, according to German law, companies were obligated to establish contingency reserves to cover potential future statutory liabilities. In this framework, nuclear power plant operators, in compliance with the Nuclear Power Act, allocated reserves for radioactive waste disposal and decommissioning costs, which were tax-exempt under the German Income Tax Act. The complainants contended that this tax exemption favored nuclear operators disproportionately, given the substantial amounts reserved compared to other sectors.

However, the Commission rebutted the complainants' arguments, asserting that the Income Tax Act did not selectively benefit nuclear operators, as the tax exemption applied universally to all companies subject to reserve obligations. Asserting that the significant reserves and associated tax advantages in the nuclear sector were commensurate with its substantial liabilities, thus not conferring an undue advantage. Despite the Commission's decision, the complainants challenged it. The Court of First Instance (CFI) acknowledged that the tax exemption conferred an advantage by alleviating companies' financial burdens but ruled that the measure did not meet the selectivity criterion since all companies could benefit from the exemption. Echoing the Commission's stance, the CFI emphasized that differential benefits received by nuclear operators did not imply selectivity. Finally, the complainants further appealed to the European Court of Justice to overturn the CFI's judgment, but their appeal was dismissed due to lack of standing.

In this instance, the complainants failed to substantiate claims of concealed or de facto selectivity adequately. Even if substantiated, their claims would likely have been rejected since the advantages conferred by nuclear reserves were proportional to their liabilities. As previously stated, incidental benefits arising from general measures do not inherently imply selectivity.

4.2. State Aid NN 101/2002 – *United Kingdom Rescue aid to British Energy plc*

The European Commission State aid NN 101/2002[21], concerning the British Energy plc (BE) case, highlighted the growing necessity of State aid for nuclear energy within competitive energy markets. This recognition was based on the understanding that nuclear power plant operators would encounter substantial challenges in increasingly competitive energy landscapes without State support. The combination of declining prices and a dearth of financial instruments capable of mitigating market risks exposed nuclear

[21] Communication from The Commission (C(2002) 4480 fin), "State Aid NN 101/2002 – United Kingdom Rescue aid to British Energy plc".

power plant operators to considerable vulnerabilities. The subsequent proliferation of nuclear State aid cases across Europe followed the aforementioned European Commission communication.

The case involved British Energy plc, the operator of several nuclear power stations in the UK. Following a fall in electricity prices in 2002 due to increased competition in the electricity market, British Energy began to incur substantial losses. This predicament highlighted the acute vulnerability of nuclear power stations to low prices due to their cost structure, characterized by high initial investment but low running costs. In order to save British Energy, the UK government implemented a rescue aid package consisting of credit facilities and a State guarantee for BE's loans, which was subsequently assessed by the Commission for compliance with State aid rules.

The Commission's assessment focused on determining whether the necessary elements of State aid were present. As regards the advantage element, the Commission considered that the credit facility provided by the UK conferred an advantage that was not available to BE under normal market conditions. Consequently, the rescue package was found to constitute State aid and had to be assessed for compatibility. Assessed under the "Guidelines on State aid for rescuing and restructuring non-financial undertakings in difficulty", the aid was found to be compatible with State aid rules subject to certain conditions. Accordingly, the UK undertook to monitor the aid and to submit British Energy's restructuring plans to the Commission within six months.

The Commission opened a second State aid investigation because it had reservations that the plan might involve further State aid. The plan included various measures involving BE, the UK Government and BE's creditors. One of these measures, the Government's funding of BE's nuclear liabilities, was considered to be State aid and was assessed under the Rescue and Restructuring Guidelines[22], which were ultimately found to be compatible. Conversely, other measures involving creditors and BE, which were not funded from public resources, were found not to involve State aid.

4.3. T-156/04: *Électricité de France (EDF)*

The major development in State aid law came from the EDF cases, which broadened the scope of the private investor test. These cases established that, irrespective of the regulatory nature of the State measures, the Commission must assess the applicability of the private investor test on the basis of their effect rather than their form. In particular, the Commission opened an investigation in 2002 to examine the advantages granted to *Électricité de France* (EDF) for not having paid corporate tax[23]. These advantages resulted from the restructuring of EDF's balance sheet in 1997, which exempted certain assets

[22] They are Guidelines on State aid for rescuing and restructuring firms in difficulty adopted by the Commission in 1994. Before the *British Energy plc* case, they were modified in 1999. Refer to the Official Journal 94/C 368/05, "*Community Guidelines on State aid for Rescuing and Restructuring Firms in difficulty*".

[23] Commission Decision (C(2003) 4637), "The State aid granted by France to EDF and the electricity and gas industries".

of the company from taxation. France, as the sole shareholder of EDF, claimed that this reclassification of taxable assets and the resulting tax exemptions should be considered as a capital injection into the company. It should therefore be assessed as private investment in accordance with the market economy investor principle and not as State aid in the form of tax relief.

However, the Commission rejected this argument, stating that States cannot rely on the private investor argument when acting within their public prerogative. In particular, since tax regulation falls within the exclusive competence of the State, the private investor test cannot be applied because there are no comparable private investors in this field. Consequently, the Commission considered that the balance sheet restructuring, which conferred a selective advantage on EDF, constituted State aid incompatible with the common market.

EDF and France appealed against the Commission's decision[24], arguing that the capital injection should be regarded as a private investment, which led to a ruling by the General Court. The Court ruled that only commercial activities of the State can be compared to private investors and therefore the private investor test cannot be applied to regulatory measures. However, the decisive factor in distinguishing commercial activities from regulatory measures was the nature and purpose of the measure, not its form. Consequently, the Court annulled the Commission's decision on the basis of its erroneous formal approach, which categorically excluded the application of the private investor test without considering the nature of the measure.

Following the annulment of its decision, the Commission appealed to the European Court of Justice[25]. The Court clarified the application of the private investor test, emphasizing the need for a Member State to provide verifiable evidence that it acted as a prudent private investor. It was then up to the Commission to assess the nature and objective of the measure, rather than its form, in order to determine whether the State was acting in its public capacity or as a shareholder. Ultimately, the Commission's appeal was dismissed, confirming the applicability of the private investor test even in the case of tax schemes used by the State.

The Commission then reconsidered its decision on the grounds for annulment and applied the private investor test to the State's tax measure[26]. Although France provided evidence of the measure's private investment motives, the Commission could not verify that France acted as a private investor. Consequently, the tax measure was considered to be incompatible State aid. Although EDF appealed against this decision, the appeal was dismissed on the grounds that the Commission had correctly applied the private investor test[27].

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[24] General Court, December 15th, 2009, T-156/04 *Électricité de France* (EDF), ECLI:EU:T:2009:505.

[25] European Court of Justice, June 5th, 2012, C-124/10 P, *Électricité de France* (EDF), ECLI:EU:C:2012:318;

[26] Commission Decision (C(2015) 4959), "Reclassification as capital of the tax-exempt accounting provisions for the renewal of the high-voltage transmission network (RAG) implemented by France in favour of EDF".

[27] General Court, January 16th, 2018, T-747/15, *Électricité de France (EDF)*, ECLI:EU:T:2018:6.

The Commission's insistence on not applying the private investor test at the initial stage of the procedure reflected the traditional approach, which aimed to maintain legal clarity by strictly separating the roles of the State as a public authority and as a commercial actor. However, as the new approach requires the application of the private investor test also to fiscal measures taken by States, the Commission's workload may increase.

The EDF cases clearly established that the form of the State measure is no longer decisive for the application of the private investor test. As a consequence, the application of the private investor test is likely to increase in future nuclear State aid cases, thereby enhancing the effectiveness of State aid control.

4.4. T-156/04: *Hinkley Point C*

Hinkley Point is a complex of three nuclear power plants in the United Kingdom and represents a significant commitment to the country's nuclear power sector. Located in Somerset County, southwest England, Hinkley Point C is designed to be the largest of the three and one of the largest nuclear power plants in the United Kingdom. It is expected to potentially play a significant role in meeting the country's energy needs and in its transition to more sustainable energy sources. However, since some economic measures related to the power plants raised some questions, the Hinkley Point case constitutes one of the most relevant and controversial cases in the State Aid to the nuclear sector debate[28].

Indeed, several aspects related to the application of EU State aid and environmental rules to nuclear energy projects covered by the Euratom Treaty were first addressed in the judgment of the General Court in Case T-356/15 "*Austria v. Commission*" (referred to as the *Hinkley Point judgment*) of July 12th, 2018[29], and then also during the related appeal (Case C-594/18 P) dismisses on September 22th, 2020[30].

Although the Hinkley Point decision is no breakthrough in the field of State aid, the case makes an important contribution to the further development of Union law. In fact, it not only addresses a long-standing issue concerning the balance between environmental protection and the promotion of trade and competition within the internal market, without, however, providing definitive answers to all related questions, but also it provides further clarification of the interrelationship between the Euratom Treaty and other fundamental Treaties of the Union[31]. This case also has the particularity that the Commission decision on the compatibility of certain measures with the State aid rules, which in this case was favorable,

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[28] DINLEYICI, *The Relationship Between State Aid and Nuclear Energy and A Legal Analysis of Nuclear Energy State Aid Cases in Terms of European Union State Aid Rules*, in 79(3) *İstanbul Hukuk Mecmuası* 1029-1065, (2021).

[29] General Court, July 12th, 2018, T-356/15, *Republic of Austria v. European Commission*, ECLI:EU:T:2018:439.

[30] European Court of Justice, September 22th, 2020, C-594/18 P, *Republic of Austria v European Commission*, ECLI:EU:C: 2020:742.

[31] SIKORA, *Applicability of the EU State Aid and Environmental Rules in the Nuclear Energy Sector: Annotation on the Judgment of the Court of Justice (Grand Chamber) of 22 September 2020 in Case C-594/18 P Republic of Austria v Commission*, in 19(4) *EUR. ST. AID L.Q.* 515-520, 516 (2020).

has been contested by a Member State other than the one directly concerned[32]. Such interest underscores the importance and relevance of the case to the established Community jurisprudence on the subject.

Indeed, initially, the United Kingdom provided the Commission with notification concerning specific measures pertaining to the Hinkley Point C nuclear power plant, which was to be constructed by EDF Energy plc ("EDF") and NNB Generation Company Limited ("NNBG"), a subsidiary of EDF. These measures consisted of a Contract for Difference ("CFD"), a State credit guarantee, and a Secretary of State Agreement[33]. Thus, the Commission opened a State aid investigation and went on to examine these measures in terms of whether they involved State Aid for NNBG.

The Commission notes that the CFD protects NNBG from any price volatility in the market as it receives always at a pre-defined price when selling at prices that are below the level set. This, ensuring a steady stream of revenues for NNBG for the first 35 years of the operation that other operators without a CFD would not receive, was considered as entailing a selective advantage to NNBG. Moreover, although EDF and the UK contended that the right to compensation was a general right of private investors when their property rights are breached with respect to the Secretary of State Agreement, the Commission explicitly stated that the contract would entail an advantage, as would relieve the NNBG investor from spending time and fees by resorting to general compensation mechanisms used by other investors. Similar considerations were done regarding the credit guarantee.

The investigation led to the conclusion that the three UK measures in favor of NNBG constituted State Aid.

As nuclear energy is not included in the "*Guidelines on State aid for environmental protection and energy 2014-2020 (EEAG)*", the compatibility assessment of nuclear State aid cases is usually made directly under article 107(3)(c) of TFUE. As a compatibility condition, a measure must pursue objectives of common interest. In this regard, the Commission accepted the promotion of nuclear energy as an objective of common interest taking into consideration the objectives of the Euratom Treaty. Moreover, the Commission investigated the existence of market failures relevant to the nuclear energy sector. The

[32] In this context, this case has been depicted by the Advocate General Hogan: «as the legal side of a dispute between Member States that are in favor of nuclear power and those that are not. Both sides claim that they pursue their course with a view to protecting the environment». Refer to Opinion of Advocate General A.G. HOGAN, submitted on May 7th, 2020, C-594/18 P, Austria v Commission, ECLI: EU:C:2020:352.

[33] The "*Contract for Difference*" (CFD) is a mechanism designed to stabilize electricity prices for sales by NNBG during the operational phase of Hinkley Point C. Under this arrangement, NNBG sells electricity on the market, but its revenues are stabilized by the CFD. The CFD compares a predetermined "*strike price*" (based on NNBG's projected costs and profit) with a "*reference price*" (the weighted average of wholesale prices set by the UK for all CFD-supported operators). In the event that the reference price is less than the strike price, NNBG is entitled to receive a payment equal to the difference, with the amount being subject to a maximum output cap. Conversely, in the event that the reference price exceeds the strike price, NNBG is obliged to pay the difference to its State-owned contracting partner, Low Carbon Contracts Company Ltd. The contract also provides compensation to NNBG under certain conditions, such as legislative changes, early shutdown due to political reasons, or issues with nuclear liability insurance. In such cases, provisions are made for transfer to the UK government and compensation to investors. The mechanism enabled NNBG to achieve a stable revenue stream and to mitigate market risks. The second measure was the "*State credit guarantee*", which entailed the UK guaranteeing the timely payment of bonds issued by NNBG. Finally, the last measure, the "*Secretary of State Agreement*", provided investors with a guarantee that they would be compensated in the event that a nuclear power plant were to close on political grounds and if the CFD counterparty defaulted on compensation payments.

Commission pointed out the high entry costs and long recovery times that make nuclear power plant operators vulnerable to market risks which thus force them to cover the costs with various financial instruments, accepting the need for CFD-type risk insurance instruments given the limited number of long-term hedging instruments. Finally, the Commission concluded that any potential distortion of competition was limited and offset by their positive effects. Therefore, the notified UK triple aid scheme, aiming at financing the construction and operation of a Hinkley Point C nuclear power station, were found to be compatible with the internal market under Article 107(3)(c) TFUE.

After the Commission's affirmative decision, as already stated before, another Member State, the Republic of Austria, contested the decision. The discussion divided the EU in two: Luxemburg supported Austria, while other Member States, such as France, Hungary, Poland, and Slovakia intervened in favor of the United Kingdom. Due to the extensive controversy around the case, the Court had to touch upon nearly all aspects of state aid law which, therefore, has made this judgment one of the longest in State aid history. However, there were some important points in the judgment which have put the Hinkley case in a very special position within state aid case law.

Firstly, the applicability of State Aid rules to the nuclear energy sector was defined and deemed applicable taking into consideration the objectives of Euratom. On the other hand, considering the anti-nuclear sentiments of some Member States, Austria maintained that promoting nuclear energy cannot be accepted as an objective of common interest, and therefore it is not possible to assess compatibility with article 107(3)(c). The Court offered a significant clarification of the term "common interest", emphasizing that the objective of common interest does not necessarily have to align with the interests of all or a majority of Member States. In a reference to its prior case law, the Court stated that actions that pursue the public interest and are not motivated by the private interests of the aid recipient can be regarded as an objective of common interest. In this manner, the Court broadened the meaning of the common interest objective. Nevertheless, this novel interpretation is not required for nuclear energy, given that Euratom occupies a distinct position within the EU framework. The promotion of nuclear energy is already regarded as an objective of common interest.

Austria also argued that the Commission's explanations with respect to market failures which made these measures compatible were erroneous. Moreover, during the appeal, Austria challenged the Commission's view of accepting these measures as involving investment aid instead of operating aid. However, the Court refused these claims and upheld the Commission's decision, stating that the compatibility assessment under article 107(3)(c) does not necessarily require finding a market failure nor does it necessarily exclude operating aid. This is because, as the Court explained, these requirements are specified only in the guidelines, while article 107(3)(c) does not necessarily require the existence of market failure or the configuration of an investment aid in order to consider a nuclear State aid compatible. The Court has here clearly set an important milestone in assessing the issue regarding the interrelations and overlapping between the Guidelines and what stated in the TFUE.

In conclusion, the Hinkley judgment is a multifaceted judicial pronouncement. Considering the resulting decision and the clarification regarding the term "*common interest*" and the assessment of the internal links within the EU State aid legal framework, in particular between the Guidelines and the State aid related TFUE articles, it could be expected that this case will be a precedent for other States planning to use State Aid to further their nuclear development policies. While the State measures for Hinkley, at first glance, seemed like operating aid, the Commission decided to look deep inside and then accepted these measures as if they were investment aid[34]. The Commission's effect-based stance is a very important advancement within state aid case law, and it is likely to encourage other States to use different State Aid mechanisms similar to the Contract for Difference in order to minimize risks for private investors.

4.5. Commission Decision 2017/2112: *Hungarian Paks II Nuclear Power Plant*

Paks II is a Hungarian nuclear power project that aims to expand and upgrade the existing nuclear infrastructure of the only Hungarian nuclear energy plant in Paks. The project involves the construction of two new nuclear reactors (units 5 and 6) to increase electric generation capacity and ensure long-term energy security and independence.

In the current case, following the EDF one, the European Commission made a pivotal decision concerning the "*private investor test*", elucidating its application in nuclear energy state aid cases.

The measure consists of the development of two new nuclear reactors, the construction of which is fully financed by the Hungarian state on behalf of the private company limited by shares "*MVM Paks II Atomerőmű Fejlesztő Zrt.*" (literally, *MVM Paks II Nuclear Power Plant Development*) which will own and operate the new reactors[35].

In response, the Commission initiated a State aid investigation into the financing of this nuclear power project. Hungary contended that its financing measures did not constitute State aid, asserting its role as a private investor seeking profitability from the investment. In order to assess the reality of this affirmation, the private investor test was performed. The private investor test, also known as the "market economy investor principle" (MEIP), assesses whether a private investor would have made the same investment under equivalent conditions as the State. Fundamentally, the project's "internal rate of return" (IRR) must exceed the "weighted average cost of capital" (WACC) for a private investor to be convenient to invest. If the IRR is higher than the WACC, then it can be accepted that a private investor would have invested

[34] To clarify, "*operating aid*" is intended to cover the operating costs of companies, often to offset losses or to keep underperforming companies afloat, which may affect competition. In contrast, "*investment aid*" supports investments to improve production capacity or to modernize companies, thereby promoting innovation and long-term development. Both types of aid must be notified to and approved by the European Commission, but operating aid is more subject to scrutiny because of its potential distortionary effects on competition.

[35] Commission Decision (C(2017) 1486), "on the measure / aid scheme / State aid SA.38454 - 2015/C (*ex* 2015/N) which Hungary is planning to implement for supporting the development of two new nuclear reactors at Paks II nuclear power station".

in the project. Hungary asserted that the IRR was higher than the WACC and thus negating State aid implications.

However, the Commission decided to calculate its own estimation with respect to the IRR and WACC in order to make sure that a private investor would have invested under the same conditions. In doing so, the Commission concluded that the expected internal return of the project was not higher than the capital cost of the project and therefore a private investor would not have invested under these conditions. As the measure of State did not pass the private investor test, this meant that the measure gave an advantage to Paks II. Having established the advantage element and the other required characteristics of State aid, the economic measure to finance the construction of the new two nuclear units was deemed as involving state aid. As usual, the Commission than assessed the compatibility of the measure according to article 107(3) and found this measure being compatible as the objectives of the measure outweighed the potential distortions of the competition.

The EDF judgment had previously expanded the application of the private investor test, and the Paks II decision further clarified its application, particularly within the nuclear energy sector, for more accurate evaluations. Additionally, this case underscored the potential for States to participate in new nuclear power plant construction as private investors under market conditions. Consequently, it is foreseeable that States intending to construct nuclear plants will increasingly invoke the private investor test to circumvent Commission State aid scrutiny[36].

The EDF and Paks II cases, by refining and advancing the private investor test, may encourage States to engage more frequently in nuclear energy sector projects as private investors, leveraging the test to demonstrate the absence of advantageous treatment in their investments.

In conclusion, taking into account all the above cases, it could be said that the issue of the application of State aid rules to the nuclear sector is largely settled and that nuclear State aid will continue to be controlled under the State aid rules, taking also into account the objectives of the Euratom Treaty. It is to be expected that the number of nuclear State aid cases will continue to increase as energy markets become more competitive. However, it is clear that the inherent risks of the nuclear sector and the associated market failures due to imperfect market conditions are highly appreciated by the Commission and the Courts, and that nuclear cases are treated more leniently in line with these conditions. This sends a very clear message that the lenient approach of the Commission and the Courts towards nuclear State aid cases will continue as long as market failures and the Euratom Treaty exist and, in this respect, the absence of nuclear guidelines, while seeming to be a disadvantage, will ensure the necessary flexibility of the Commission in its State aid assessments in nuclear State aid cases.

[36] As observed by DINLEYICI, *The Relationship Between State Aid and Nuclear Energy and A Legal Analysis of Nuclear Energy State Aid Cases in Terms of European Union State Aid Rules*, 1058.

5. *General Conclusions*

This thesis presents an investigation into the primary concerns pertaining to the State aid regime in its general form and with particular focus on the renewable energy sector. It examines the pertinent regulations, the Commission's practices, and European case law.

The framework that emerges is of particular interest from both a legal and meta-legal perspective. From a legal standpoint, it is especially relevant in light of the ongoing debate surrounding the concept of "State aid". From a meta-legal perspective, it sheds light on the ambiguous policy approach of the European Commission and the Court of Justice of the European Union in interpreting the complex and dynamic discipline of State aid.

Both legal and political profiles are intricately intertwined and inextricably linked. Indeed, many of the issues that appear to pertain solely to the former, such as the control attribution to the Member State for economic assistance or the type of resources nature utilized for such assistance, cannot be resolved without considering the underlying conflict between the European Commission and individual Member States regarding their respective authority to define the content and objectives of industrial policies within the Union.

Especially in the current context of the climate crisis, the Commission's tendency to give a very broad interpretation to the concept of State aid does not implies a radical opposition to scope-oriented interventions in support of business activities, standing in strict defense of the purity of competitive economic mechanisms. Indeed, it is most probable that, the Commission's actions appear to be more oriented towards being informed about, discussing, and harmonizing the economic industrial policies of Member States than towards preventing or limiting them. This aspect is the primary reason why some scholars[37] believe that the resources used to promote the use of renewable energy sources are usually considered State resources, even when their allocation has no impact on the State budget, as in the discussed judgment of the Court of Justice of March 28th, 2019 (case C-405/16 P, Federal Republic of Germany).

The Court of Justice scrutinizes the Commission's expansive tendency. Nevertheless, the motivational opacity of numerous judgments demonstrates the difficulties European judges face with regard to the ambiguous and ambivalent structure of the current European institutional governance, which precludes the possibility of defining a stable balance between the Commission's inclination towards Europeanization and the similarly natural willingness of Member States to defend their independency in determining their internal industrial policy.

The case law analysis proposed in this chapter reveals that the conceptual opacity related to the aid legal framework is largely attributable to the discrepancy between the formal rules of governance defined

[37] SCHEPISI, *La valutazione della compatibilità di un aiuto di Stato. Alcune riflessioni sulla discrezionalità e sui limiti della Commissione*, in *Gli aiuti di stato: profili generali e problematiche energetiche: Convegno annuale di AIDEN 2019: Milano, 1 luglio 2019*, 2020, 71;

in the Treaties and the actual relations between European institutions and Member States. While the Commission has no interest in clearly defining its operative boundaries within a regulation of which it wants to ensure the primacy of its own interpretative model, the Court, while sharing the same scope, does circumscribe the excesses, plausibly on the assumption that the implementation of the design of European integration also passes through this route.

The attribution of responsibility for support measures to a single Member State or the nature of the resources employed are not the only factors contributing to the ambiguity of the discipline. Other crucial aspects of the legal institution, such as the relationship between the qualification phase of a measure as aid and the subsequent assessment of compatibility with the market, also play a role. In this regard, the energy sector, with reference to the capacity market jurisprudence, clearly reveals the Commission's tendency to postpone the examination of the qualifying characteristics of State aid to the compatibility assessment phase. However, this should actually be considered in the preliminary phase. This tendency, as observed in both the British and Italian cases, generates ambiguity and lack of uniformity, undermining legal certainty and hindering the implementation of measures by Member States.

In light of the aforementioned observations, it appears that it is objectively challenging to provide a definitive interpretation of the remaining uncertainties surrounding State aid regulations, particularly those pertaining to the concept of aid. It remains to be seen how long the governance framework on industrial policy will remain in its current form, without formal redefinition, in order to acknowledge the role that the Commission effectively claims, or conversely, to exclude that role. In the meantime, it is likely that the tensions that have so far been responsible for preventing a conceptual clarification of the institution will persist.

In this context, the recognition of the Commission's responsibility for damages to companies or regions resulting from erroneous application of the compelling regulations might serve to partially rebalance these tensions. Such recognition could potentially act as a disincentive for the Commission to mitigate its expansive inclination regarding the configurability of State aid.

Moreover, the actual implementation of the European Green Deal could have a significant impact in this regard. This instrument could facilitate a significant expansion of the European Commission's authority in industrial policy, which has already become evident in the energy sector. In fact, the EU's energy and climate governance policy has established a precedent for the integration of climate and energy policy in other sectors. It has required Member States to adopt integrated energy and climate plans on a periodic basis. These plans must contain detailed and binding prescriptions for the decarbonization of energy production and consumption. Additionally, they must be executed under the authority of the European Commission. The Commission has been granted significant power in both defining and controlling their implementation.

Indeed, the Commission's Communication “on the European Green Deal” delineates the implementation of a novel market disciplinary model with regard to a multitude of the principal economic

sectors. This model, while not denying the fundamental principle of an open and competitive economy, aligning with the provisions of the TFEU regarding market competition, revalues the European industrial policy. This revaluation entails a more extensive public control and support of business activities, decisively guiding them towards the environmental and social sustainability objectives outlined in the communication.

This perspective, although still evolving and to a markedly different extent depending on the sectors, appears to be the framework that the Commission has sought to establish previously with the extensive interpretation of the notion of State aid. However, it is crucial to highlight a significant distinction. The European industrial strategy outlined by the Commission in the Green Deal will require «massive public investments and greater efforts to direct private capital towards climate and environmental interventions». Thus, where public aid was in principle an exception (although, in reality, widely practiced), it is possible to hypothesize that it may become in the near future, while always respecting the rules of nondiscrimination and competitive equality, an almost ordinary instrument for guiding economic operators towards sustainability choices.

Such a scenario is fully in line with the measures adopted by the European institutions during the pandemic crisis to support the affected economic activities, which fully legitimized the industrial economic measures and increasingly gave them a European identity and uniformity.

Thus, the Commission may no longer need to ambiguously expand the definition of State aid, as new institutional governance arrangements are likely to harmonize economic measures at the European level.

In conclusion, it is to be hoped that the new European industrial policy will also provide sufficient space for the claims of equality and the active promotion of territorial and personal development, which up to now have not been sufficiently recognized and protected by the institutions of the Union, and whose support now seems more necessary than ever in order to give the process of European unification the consensus base and thus the thrust it needs.

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