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"Real Estate and ESG: the Student Housing case"

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Introduction

1 Student Housing Market Analysis

1.1 Real Estate Market Overview
1.2 Student Housing
1.3 Operators
1.4 Investors and relevant transactions
1.5 Italy vs Europe

2 Student Housing Trends

2.1 The concept of ESG
    2.1a Definition
    2.1b Goals
    2.1c Strategies
    2.1d Financial Instruments (Green Bond, Social Bond, Sustainable Bond)
    2.1e Internation and national framework (UN and EU activities)
2.2 Application of ESG criteria in the real estate market
2.3 Sustainability Certifications and others
    2.3a PropCo Side: BREEAM, LEED, CRREM
    2.3b OpCo Side: GRESB, WELL, Sustainability Report, GRI and SASB
2.4 ESG applied to Student Housing
    2.4a Rating System: BREEAM and LEED
2.5 Covid impact

3 Quantitative Analysis

3.1 Investment Decision
3.2 Management and services offered
3.3 ESG impact
3.4 Financial Analysis

Conclusions

Introduction

Over the last few years, the Student Housing (RSU) sector has become an important and fast-growing market segment across Europe. Nevertheless, in some countries, the gap between the potential demand for student beds and the supply provided has increased compared to European standards.

According to the data collected, the poor supply of beds can be overcome by the creation of new structures, therefore new investments are needed, more specifically, capital is needed to finance new buildings. The capital is managed by the Asset Managers who, in order to raise the capital, must follow certain ESG principles. To bridge the obvious gap between the supply and demand of beds, it is necessary to invest in RSU that confirm the demands of modern investors. Therefore, it has become increasingly important to understand how to monitor and evaluate the ESG elements in the RSU sector both from a structural and management point of view.

In order to evaluate and ensure that the property and the services provided in student accommodations meet sustainability standards, certifications have been introduced such as BREEAM and LEED, which specifically assess the environmental impact, and WELL which, instead, focuses on the social dimension. However, the fact that there is no single criterion for their evaluation nor officially recognized makes it necessary to define Key Performance Indicators (KPIs) that allow to evaluate the integration of ESG criteria, and the impacts generated.

This approach brings Europe closer to the United Nations (UN) Sustainable Development Goals (SDGs) which represent the core of the 2030 Agenda for Sustainable Development. The SDGs address objectives that are strongly related to the quality of life of students, including good health and well-being, quality education, clean and accessible energy, sustainable cities and communities, and the fight against climate change.

ESG analysis is usually carried out starting from the study and analysis of the main certification standards (CSs) regarding the environmental assessment of buildings. BREEAM and LEED certifications provide indications on a more sustainable management of the property from a structural point of view, while GRESB and WELL from a management point of view.

The first part of the thesis is aimed at an analysis of the Student Housing sector in Italy and Europe with a particular focus on operators and investors. The second part deals with ESG factors, its application to the Real Estate market, specifically to university residences, and how the acquisition of sustainability certifications has a positive impact on the structure, especially from an economic point of view. The last chapter tells of the case study taken into consideration, a regenerated educational living facility where complementary services to the university course will be provided, useful for entering the world of work.

1. Student Housing Market Analysis

1.1 Real Estate Market Overview

The Real Estate Market can be defined as all the terms and conditions concerning the transfer of a property ownership rights to make it effective and to conclude the contracts.

Real estate is the modern term for land and any permanently attached to the land. Fixtures include buildings, fences, and items attached to buildings, such as pipes, heating, and lamps. Unattached property is considered personal property, for example, furniture and curtains are personal property. Generally, the terms land, real estate and real estate can be used interchangeably, but there are some differences.

Land is the main category of real estate. It can be distinguished from construction and non-building in town planning. Land that is not construction is used for agricultural activities or parks. Land area is the basic element that determines development potential. Zoning regulations specify constructable land through appropriate indices or parameters based on basic elements. Therefore, land refers to the surface of the earth, including trees, minerals, and water. Land has three physical characteristics: it does not move, the location of any piece of land can never be changed; it is indestructible and unique, and no two pieces of land can be the same.

The Real Estate is the land plus any permanent man-made additions, such as houses, and other buildings and the Real Property is the interests, benefits, and rights inherent in the ownership of real estate.

The contribution of the modern real estate industry to the growth and development of the economy and society is recognized given the large contribution of the real estate and construction sector to its operation. Construction generates built assets while the real estate industry produces the services necessary for the growth of the sector. In fact, the real estate industry allows the stimulation of supply and demand by creating an efficient use of properties by making:

- more transparent and open market;
- promoting the inflow of capital and technologies;
- favoring specialization and financialization of the sector.

Compared with other European countries, Italy’s main feature is direct ownership of assets rather than building leases. In addition, in the past ten years, Italy has begun the process of financing the real estate industry after the Anglo-Saxon countries ("financialization") with the introduction of new kind of vehicle such as Real estate funds, securitization, and Real estate investments trusts (2007), with the growth of innovative segmentations (shopping malls and entertainment), with investment or refurbishment activities and with the transit passage from greenfield to brownfield.

Real estate funds are professionally managed investment tools that can concentrate investor funds into real estate opportunities, whether it is a single project or as part of an investment portfolio. The fund's sponsor—usually a team of highly qualified and experienced real estate industry experts—is responsible for purchasing and managing projects or investment portfolios. As the projects in it are completed, they are sold for profit and distributed to investors along with the initial investment. Real estate funds are an excellent alternative to traditional real estate investment and can provide more diversification for those who want to invest actively and passively.

A very important event occurred in 1960, which emphasized this shift in the real estate market, when US President Dwight D. Eisenhower signed *Real Estate Investment Trusts (REITs)*, a piece of legislation that introduced new investment vehicles. This allows the entire population to invest in real estate. With this new tool, individuals can invest in a large-scale diversified portfolio of real estate assets. Because of the high capital required, which has never been available before, it is only reserved for a small part of the wealthy s population.

The Financialization of Real Estate Market means the integration between the stock market and the Real Estate Market. The asset is evaluated not only considering the architectural featuring but also considering its capacity to generate cash flow. The property can be securitized in certain securities called asset backed securities (ABS) which represent the economic-financial value of the property, or its ability to generate income. This process implies a change in the valuation criteria of the properties, from a patrimonial logic to an income-financial logic, that is, it will be evaluated based on its ability to generate cash flows.

This process dampens the main weakness of the market:

- the lower standardization in which every asset is unique;
- the limited number of transactions;
- the lower level of liquidity intended as the difficulty to convert the investment in cash availability quickly;
- the lower transparency.

The number of Vendor and Buyer are less than the other market, that involve in less liquidity, less transparency and default of standardization in the market. Another important feature of real estate assets is low liquidity, which means that realizing real estate is not easy. The low liquidity is because it is difficult to find buyers who can afford this type of transaction and all other costs associated with the purchase. In addition, the low transparency, that is, the existence of information asymmetry, is due to the existence of many entities in the market and the fact that tax legislation does not impose the reliability of rent and sales prices.

The increasing use of these processes in real estate has favoured the spread of new investment instruments such as real estate investment funds and securitized securities which, on the one hand, have increased liquidity and capital inflows, others have increased the connection between the real economy and the

financial market. The characteristics of the real estate market make real estate investment attractive as it represents one of the preferential assets for savers in the phases of greater economic uncertainty and instability in the financial markets. Investors' interest in the real estate market is motivated not only by capital gains but also by profits from rental yields and asset enhancement.

In the years following the burst of the dot-com bubble, the price trend has benefited from the huge level of liquidity in the market looking for investment “safer” than stocks due to very low interest rates. The efficient use of real estate can have a major impact on business productivity and the economic growth can also have a significant impact on the demand for real estate. Subsequently there has been a decline in the demand which led to an increase in the average time to sell a property and a decrease market in values.

Moreover, the Real Estate Market is really fragmented, that market is made up of a variety of different market according to use: asset for residential activity, industrial activity, retail activity, offices activity, receptive activity and logistics activity.

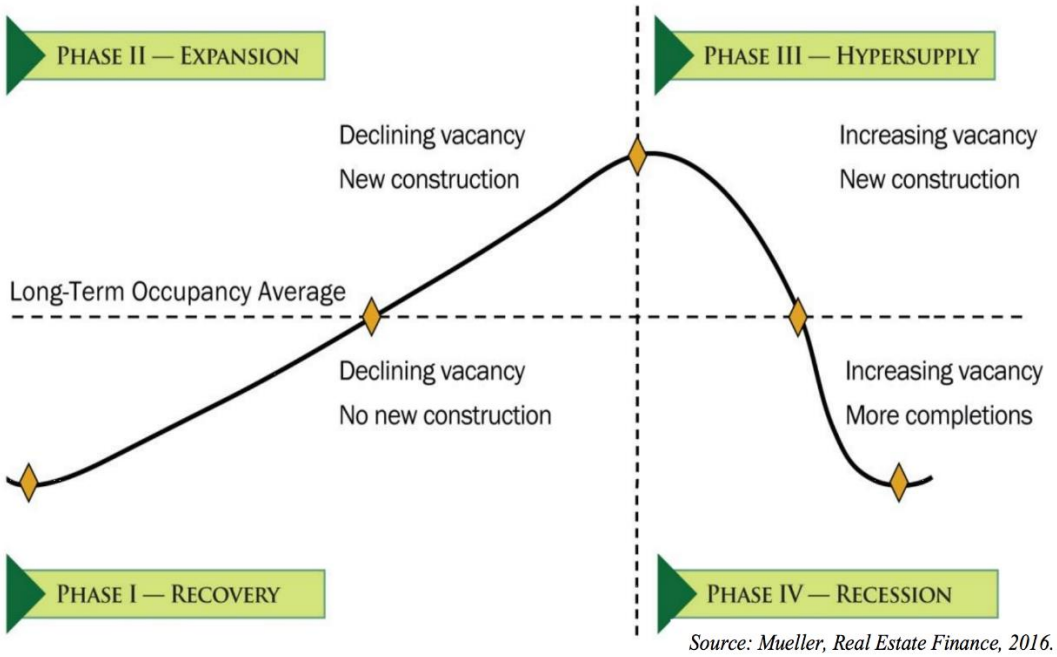
The Real Estate Market’s Life Cycle

The Real Estate Market moves in continuing economic cycle that depends on endogenous forces and exogenous forces. The endogenous forces are related to the dynamics of the actions taken by the subjects of real estate assets that include the gap between the time of commission, the design of a new building, construction and delivery, the low transparency of the market, the delay between supply and demand and the importance of the location.

The second one represents forces not directly dependent or controllable by operators in the real estate market such as the general macro-economic trends in which the asset is located such as inflation, interest and unemployment rates, capital flows in financial markets developments, regulatory environment, the role of the public administration.

The phases of the real estate cycle are four: recovery phase, the expansion phase, the over-supply phase, and the recession phase. Understanding the real estate cycle can help you predict upcoming trends and make informed decisions about your investments, whether you are a home buyer, renter, home seller, landlord, real estate agent, or real estate investor.

Market Cycle Quadrants



Source: Mueller, Real Estate Finance, 2016.

- *Recovery*: While the recovery phase is often listed as the first phase, the real estate cycle is circular, meaning that the recovery phase occurs after the recession phase. In the recovery phase, the real estate market begins at a low point from the recession phase—occupancy and rental rates are low, and new construction slows—and gradually rises in strength. If there is any rental growth, it occurs below the rate of inflation. For individual homeowners or renters, the recovery phase can be challenging to differentiate from the recession phase because the market will look much the same; experts look at trends like gradual occupancy increases or growing demand to identify when the recovery stage has begun. The recovery phase is a popular time for real estate investment and speculation since prices of properties are low (especially for distressed properties that need renovations), so the potential eventual return on investment from operation or resale is high.
- *Expansion*: In the expansion phase, the real estate market is completely recovered from the recession phase and is very strong. When the real estate market expands, vacancy is low, rent rates are high (and rising), property values are high, and new construction is typical to see. The expansion phase is a standard time for real estate investors to buy new rental properties or renovate old buildings since the demand is high and new tenants are usually easy to find.
- *Over supply*: In the hyper supply phase (or oversupply phase), the supply will finally catch up and exceed high demand as previously started construction projects continue to wrap up. Vacancies will rise and rent growth will slow. During this phase, some real estate investors will buy properties from companies that are nervous about the impending recession and eager to sell at a more attractive price. These investors will then wait until the expansion phase to sell (often called the buy and hold approach). Another common investment strategy is to invest in a tenant building that's at capacity

and has long-term leases in place since it will continue to bring in a steady cash flow during the coming recession.

- *Recession*: In the recession phase, supply has over-exceeded demand, and demand plummets—causing high vacancy rates and negative rent growth (or rent growth below the rate of inflation). Some opportunistic investors will look for accessible investment opportunities during this phase since properties will be at rock-bottom pricing (especially foreclosures). They then wait until the real estate cycle circles back, and the downturn is over—as the market begins to recover and eventually expand.

The real estate cycles vary according to the different type of investment, but we should take care about the city in which the asset is located. Moreover, we find faster and bigger variations in large cities rather than in small towns due to the presence, in large cities, of many investors with huger possibility of investment than in small areas.

The Real Estate Market Segmentation

Market segmentation is a widely recognised economic and marketing principle. It is defined as a sub-set of a market, which consists of people or organisations with characteristics that cause them to demand similar products and services. Real Estate market segmentation allows real estate companies, investors, and brokers to target specific groups of buyers who would get the biggest benefit from a type of a property. The purpose of the market segmentation in real estate is to identify and target specific groups of buyers to offer them real estate that was tailored for their needs. We could divide the market according to:

- Location: defines the position of the asset that could be situated in the city centre or in the suburbs.
- Destination of use: Each property is classified based on belonging to a specific cadastral category. Properties can be distinguished in ordinary intended use (indicated with classes A, B, C in the cadastral table) typical for residential use, commercial use and office use and extraordinary intended use (indicated with classes D, E, F) in charge for industrial use and for hotel business sector.
- Availability: vacant or occupied.
- State of property: new, used, restructured or to be restructured.
- Type of demand and supply: demand is characterized by individual owners, businesses and housing cooperatives while the supply is defined by private owners and construction companies.

The real estate market can be divided into five segments: the residential building, the industrial building, the commercial building, building for office and hotel business market.

1.2 Student Housing (RSU)

Student Housing means a residence for occupancy by groups of people not defined as a family, where such building is specifically designed for university or college students. Generally, a structure such as Student Housing, offers the student the possibility of additional comforts compared to the choice of a private apartment, above all the presence, on site, of services that are essential to the life of a student.

Students who decide to stay in facilities such as the Student Halls enjoy the opportunity to share common places such as study rooms, relax rooms and in some cases, even the possibility of using the cinema. These structures also have computer rooms, laundry, presence of green space and some even equipped with parking. Room cleaning and linen change services are also provided, mainly for a fee, and the presence of the gym inside. Most of the campuses also include utilities (electricity, water, gas and internet) in the monthly fee. All campuses are now equipped with a surveillance service for the building and surrounding areas as well as continuous assistance from the staff. Some RSU enjoy additional services such as car sharing and bike sharing, useful for moving more easily although most of the residences try to position themselves as close as possible to the city or commercial activities.

What are the main requirements for developing a successful Student Housing project?

- Macro positioning: big cities, university towns, cities with higher education institutions
- Micro location:
    a. The space is close to education and the city center.
    b. Nearby: local shopping facilities, local recreation areas, sports fields.
    c. Public transport connections within walking distance.
- Customize the concept and design of the building according to the location and target group: individual style, appealing design, sustainable and quality furnishings.
- Architecture and interior design have an impact on the well-being, health and performance of students: sustainable and thoughtful integration of objects and room elements (natural light and ventilation).
- Regarding the national characteristics of the floor plan: for example, the average area of a single room in Germany is between 20 and 24 square meters, and there are still many cluster apartments in the UK, in Spain are common double rooms.
- Public area: The leisure and sports facilities in the surrounding area should be recorded and analyzed during the planning process, so that the additional facilities in the student dormitory can supplement the existing facilities, instead of planning beyond needs.

COVID-19 has greatly affected the sector negatively, causing various losses to investors and market operators. They have adapted to new rules of conduct by modelling their residences according to the new needs of students:

- Fast and stable internet connection.
- Ensure that there is enough space in the study and common room, as the options for studying on campus are limited.
- Focus on single room: transform the shared room into a single room.
- Increase the frequency of room cleaning and disinfection measures.
- Introduce general infection control and safety measures.

Investing in the Student Housing sector shows several advantages and disadvantages:

PROS:

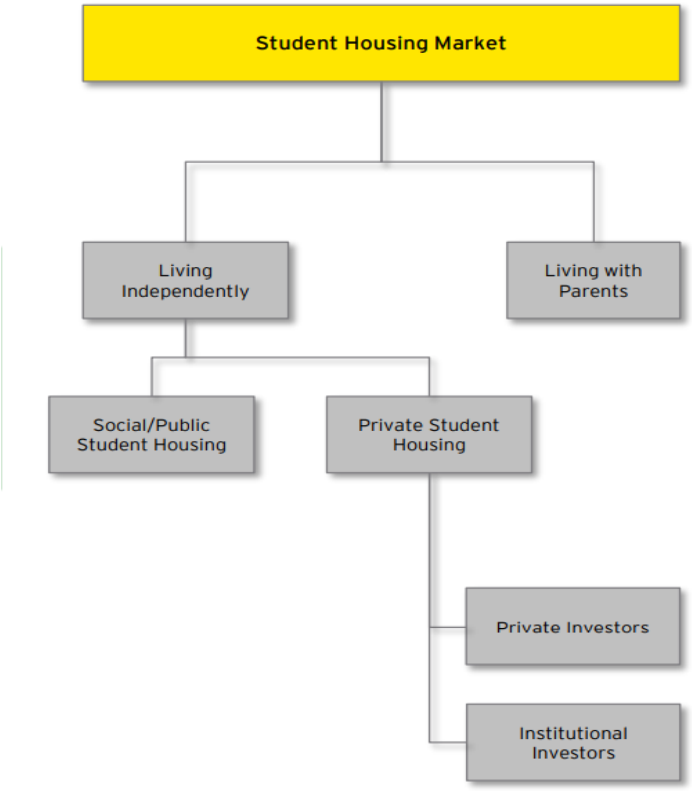
- The European market is basically in short supply
- Tend to share social and campus life like Anglo-Saxon student culture
- Can achieve a high degree of standardization
- Counter-cyclical sector
- Predictable income stream due to semester or annual lease terms
- Diversified income model
- Increased ETP supply in Europe
- Steady growth of international students
- Increase high school graduation and university entrance qualifications
- Due to increased competition, mergers and acquisitions are expected to increase

CONS:

- High tenant turnover rate, according to the concept, vacancies during semester vacation or summer vacation
- Very diverse range of investors: private equity and public sector
- Operator risk
- Increasing competition
- Inflation of construction and property costs
- Very heterogeneous investor (private equity and public sector)

Students can decide between different types of student accommodation according to their needs and possibilities:

- *Private rented houses and rooms*: these are the most common and popular choices among students that share houses with several housemates.
- *University managed houses and rooms*: properties held by university similar to regular houses but with standardised look and facilities.
- *University Hall of Residence*: Usually located on-campus and may even include meals in in-house canteens.
- *Private Halls*: These are purpose-built student living accommodation, similar to university halls of residence, but owned by private companies and they are often the most expensive option.
- *Family stays*: They live in vacant rooms offered by local families for short terms that usually do not exceed a year.



The growth of international student enrolment continues to drive the demand for quality purpose-built student accommodation (PBSA). The number of students studying outside of their home country has increased by 23% over the last five years.

International students are an important source of demand. In the next 10 years, the number of global students will increase substantially, from 98 million to 165 million, of which non-local students account for 2.5%. Specifically, Italy is the fourth largest country in Europe with 1.7 million students, of which 620,000 are looking for living space, and less than 10% of the living space needs are met in a dedicated structure. RSU's existing stock is limited, and the quality of these stocks is often not suitable for use. The quality of

accommodation and basic services is not as good as the current requirements of students, which has increased the interest of investors.

Throughout Europe, the duration of lease contracts and the length of stay vary according to the dynamics of each micro market. In some countries, students will study in one building for up to 3 or 4 years. In other countries, especially those that serve Erasmus students, leases will be more mixed to accommodate shorter stays. According to the latest Erasmus data, approximately 303,880 students participated in Erasmus exchange programs throughout Europe in 2015. In short, there are more than 300,000 students who need beds for a long time. The following table shows the main participating countries of the Erasmus project.

TOP ERASMUS RECEIVING COUNTRIES	
Spain	44,596
Germany	33,346
UK	31,067
France	29,068
Italy	22,785
Poland	14,616
Netherlands	12,771
Portugal	12,662

TOP ERASMUS SENDING COUNTRIES	
France	40,910
Germany	40,089
Spain	39,445
Italy	34,343
Poland	16,518
Turkey	16,089
UK	15,645

1.3 Operators

Student Housing is a market segment that attracts many important investors and operators. Several operators, managers and/or developers are present on most of the European territory. It is necessary define the difference between Operating company (OpCo) and Property company (PropCo), in which the property company maintains ownership of all real estate and related debt, while the opco conducts day-to-day operations and management, offering the opco advantages related to its credit rating and financing capabilities.

Therefore, the classic Opco/Propco structure involves an operating business transferring ownership of its real estate assets to a special purpose property holding vehicle. The model was largely pioneered by private equity and investment banks as a way of raising cheaper debt in acquisition financing structures and is often used by hotel groups. Moreover, by essentially transferring the real estate assets of the operating business into a newly established special property holding structure with leaseback leases in place, owners can create separate cash flows that can be secured on that property to achieve significantly more attractive commercial mortgage terms than to more expensive leveraged loans as well as tax benefits. Despite this, not all real estate realities, in particular student housing, have this division but the management coincides with the ownership of the property.

Name	Location	Properties	Number of beds	Young Professionals	Tourists	Students	Investor	Operator
Fabrica SGR - Fondo Aristotele	Sesto S. Giovanni, Rome, Chieti and Bari	4	3900	✓		✓	✓	✓
Fabrica SGR - Fondo ERASMO	Venice, Padua, Turin and Bologna	4	990			✓	✓	✓
Hines	Milan	2	1300			✓	✓	
Camplus	Bologna, Catania, Milan, Palermo, Rome and Turin	39	7000	✓		✓	✓	✓
Stonehill	Bologna and Padua	4	2000	✓	✓	✓	✓	
Ricerca 12 (21 WOL)	Milano	1		✓	✓	✓	✓	✓
Campus X	Rome, Florence, Bari, Chieti and Turin	6	3800	✓		✓	✓	
The Student Hotel	Bologna and Florence	3	750	✓	✓	✓	✓	✓

As can be seen from the table above, in the world of Student Housing, different realities are both investors and operators and therefore the ownership will coincide with the management (Fabrica SGR – Fondo Aristotele, Fabrica SGR – Fondo Erasmo, Camplus, 21 WOL and The Student Hotel).

The Student Hotel (THS) is a Dutch company founded in 2004 to operate in the Student Housing market. TSH is an operator and property company, then it has the property and management of the building, and its European offer can count on the facilities in Amsterdam, Rotterdam, Groningen, Eindhoven, Paris, Barcelona, Maastricht, Vienna, Berlin. In Italy, TSH, in addition to the Florence "Lavagnini" and Bologna facilities, is building a structure in Rome, which is being acquired, and another in Florence, the TSH "Belfiore". THS aims for a model that can be sustainable at 360 °, for the user, both for the efficiency of the buildings, aspiring to a good/very good level of BREEAM certification (Building Research Establishment Environmental Assessment Method). In the TSH model, functions and services are the strong point of the business with the presence of the restaurant, the TSH Classroom, the Short Stay, or rather a portion of rooms dedicated to stays of up to three months. As additional services we find the laundry, play areas, training area and various meeting spaces normally located on the ground floor. The main part is dedicated to students and a part is dedicated to tourism with the hotel formula. Students occupy most of the rooms, while in the

summer, in cities such as Florence and Rome, the prevalence is given to tourists, taking advantage of the summer break of university courses, thus making the management model quite flexible. The monthly cost of the room is around 800 euros, including all collateral services. It therefore includes gym membership, availability of bicycles, study room, wi-fi connection, cleaning service, bills.

Campus X is company founded in 2007 with the purpose of creating affordable student housing, they own 6 campus, 2,600 rooms, 3,500 beds and more than 2,750 students per year in 5 different cities (Roma, Firenze, Torino, Bari e Chieti). They have also developed an organizational model by which they are able to manage and coordinate their campuses with the help of a resident manager. Campus X offers the presence of roofgarden, party zone, playroom, lounge, cinema, music room, fitness area, pool, restaurant, shared kitchen, market, parking, reception, study room, laundry, auditorium and wifi.

Camplus is an Italian operator and property company which is now established in 7 Italian cities, works with 14 different colleges and hosts 1.800 students in different cities like Bologna, Milano, Roma, Torino, Palermo, Catania and Pamplona (Spain). Camplus offers three flexible accommodation options to cater to diverse hospitality needs: Living-Learning University Colleges, Apartments and Guest houses. Living-Learning Colleges and apartments are ideal for university students. Camplus College are designed to guarantee the best housing, study and community conditions: they offer students high-level residential services and numerous training opportunities parallel to their studies (tutoring, language courses, career orientation, internationalization activities and community). The average price of the room is around 1.000 euros including several services: restaurant, shared kitchen, reception, library, study rooms, gym, recreation room, room cleaning, laundry, parking and maintenance.

Gastameco srl is founded in the year 2013, owns and operates students' accommodation facilities. It has two Campuses, one is WE Bologna and WE Gastameco. The company has provided all the facilities like Luggage room, paid parking, shared kitchen, restaurant, study room and cleaning room. Gastameco has 455 beds in 3 different cities.

1.4 Investors and relevant transactions

In Italy, investments in Student Housing remain underdeveloped compared to other major commercial markets. The country lacks about 100,000 beds to reach the European average and over 4 billion euros are needed to mitigate the Italy-Europe gap. Many private investors such as Fabrica SGR are starting to invest in this specific asset due to the lack of sufficient supply. The Dutch giant 'The Student Hotel' also entered the Italian market with two student residences in Bologna and Florence and the American group Hines with the two structures in Milan, in via Giovenale and Ripamonti.

Fabrica Immobiliare SGR is one of the first operator/developer to have invested in the Italian student housing. Fabrica SGR manages 15 real estate funds, mainly for leading Italian institutional investors, accounting for more than 90% of assets under management. They started with Fondo Aristotele and then created Fondo Erasmo that is solely focused on student housing while Fondo Aristiotele is partially focused on this customer. Fabrica was the first operator in Italy to invest in the segment through real estate funds. Today, the SGR has 10 facilities in its portfolio, located in the main Italian university cities, for a total of approximately 5,500 beds.

Fondo Erasmo has been in operation since early December 2012, dedicated to the temporary housing sector for students, managed by Fabrica Immobiliare SGR and subscribed for 60% by the FIA Fund (Fondo Investimenti per l'Abitare managed by CDP Investimenti SGR of the Cassa Depositi e Prestiti Group) and 40% by the Aristotele Fund (fully subscribed by INPS). Recently, the Erasmo Fund inaugurated the new Santa Marta student residence in Venice in December 2019. The initiative, worth around 30 million euros, envisages the creation of 650 new beds, doubling the supply of housing for university students in the city, significantly contributing to bridging the current gap that separates supply and demand for housing solutions. with controlled fee. Camplus Venezia Santa Marta was created with the intention of encouraging the offer of rent-controlled accommodation to students of the Venetian capital: the Residence reserves 82 beds for the assignees of the Esu call and another 250 at discounted rates established by the Concerted Housing Agreement of the Municipality of Venice.

Fondo Erasmo has created the new student residence in via Delù (Padova), available from the academic year 2019/2020, which provides a total of 200 beds at controlled rates distributed in 204 new accommodations, including 4 studios, 90 single rooms, and 55 double rooms. The initiative, worth approximately 13 million euros, is part of the student housing plan which leverages funds made available by Cassa Depositi e Prestiti and INPS to develop, through the Erasmo real estate fund, an investment of 120 million euros to create 3,000 new beds at special rates in the main Italian university cities.

Fondo Aristotele is managed by Fabrica Immobiliare SGR and has been operating since 2005. It invested more than 85% of the resources provided by Inpdap and launched a national investment plan divided into 14 businesses, mainly real estate development. For residential use) and scientific research. Especially in the field of university dormitories, the Aristotle Fund is investing in approximately 3,000 new beds. The University of Rome Tor Vergata and Fabrica Immobiliare built a student dormitory building in the

University of Rome Tor Vergata in 2011 and delivered the first batch of 1,500 beds. The total investment is approximately 70 million euros and is supported by Inpdap indirectly or through the Aristotle Real Estate Fund, which is the agency's choice of public investment vehicle in accordance with Law No. 498/92.

On 6 June 2011 INPDAP, Fabrica Immobiliare SGR and Siram Sì, the new student residence complex "CampusX Terra di Puglia" was inaugurated in Bari, 600 new beds in via Amendola available to students and young people with long-term housing needs. short period. The Bari campus is in fact, after the one inaugurated in Rome Tor Vergata, the second residence for university students built through the Aristotle Fund thanks to an investment, totalling 36 million euros, increasing the current offer of beds by 50% for students in the city. There are 320 rooms, furnished and equipped with private bathrooms, they are rented at market rates starting from 280 euros per bed including expenses for electricity, water and internet connection. The structure will be managed by Siram Sì, a professional operator already selected for the management of the Rome Tor Vergata campus and creator of the “CampusX Italia” brand, which characterizes a new way of understanding residential care for young people.

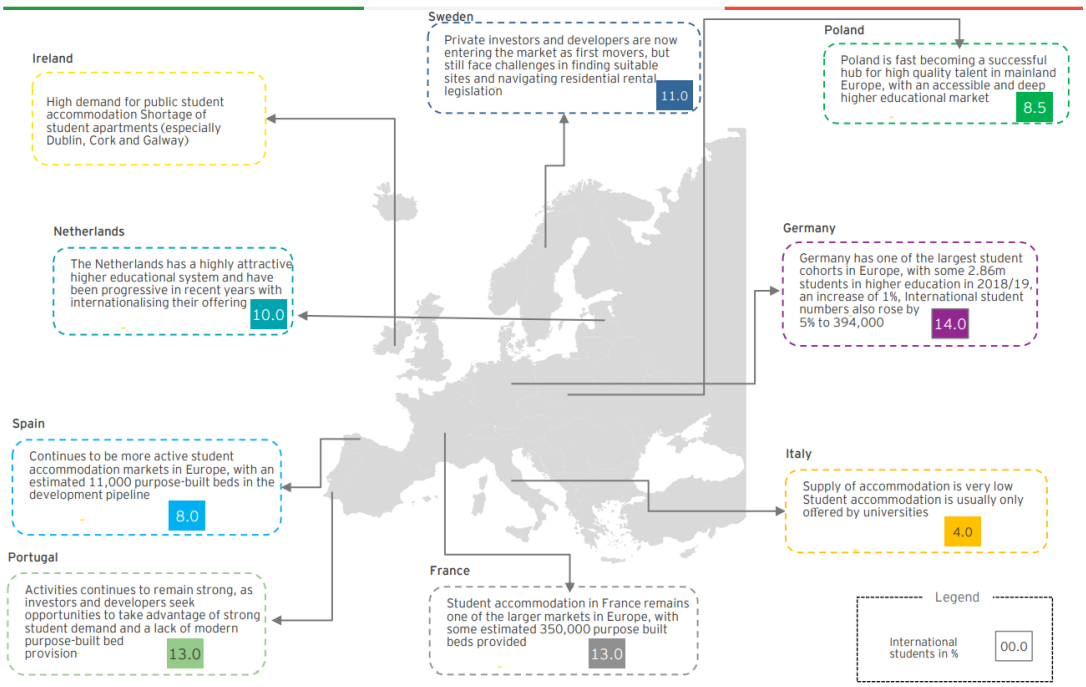
Hines is an international developer with 1.426 properties redeveloped or acquired. Hines is an independent real estate group founded in 1957. It is present in 214 cities and 24 countries with $ 120.6 billion in assets under management. Its portfolio currently includes 512 properties for over 20.8 million square meters. The company is currently engaged in 128 development projects around the world. Hines, in the 2000s, was the protagonist of the important construction of the Porta Nuova project, confirming itself as one of the main players present since 1999 in the Italian real estate. Hines currently has two student dormitory development projects underway in Milan, for a total of about 1,300 beds, located in via Giovenale and via Ripamonti and the opening is scheduled for 2021. Hines' goal is to offer a high-quality product, not luxury, but equipped with numerous shared services and spaces and rooms of different sizes that are best suited to the different needs of students. Going into the details of the two projects, the residence in via Giovenale has about 600 beds, while the one in via Ripamonti has about 700 and represents an important redevelopment project of the former Agricultural Consortium. The projects include a mix of rooms ranging from doubles to "studios", or larger units, with internal kitchens, for greater privacy. The doubles, which make up about 30% of the total beds, will be offered at controlled rates. The rate is all inclusive, so it includes utilities and access to all the amenities and services located within the student residence.

Stonehill is a pan-European developer of actively managed rented accommodation for all ages (student accommodation, young professionals, and senior citizens). Stonehill is also involved in the hospitality sector. About 90% of our students choose to live on campus, providing numerous opportunities for incoming students to get to know each other, form study groups, and find the support needed to make a successful transition to college life. Students can select from a wide range of living options at Stonehill: from traditional corridor style halls to suites and townhouse, to single gender residence halls. Residence halls are staffed by live-in professional Residence Directors (RDs) and para-professional Resident Assistants (RAs).

RAs are selected and trained to assist with nearly every situation and are close at hand if you are having difficulties, need information, have an idea for a hall activity, or just want to talk. Each building contains extensive amenity space, providing sitting rooms, study areas, libraries, bars, cinema rooms, music practice rooms and much more. The buildings are actively managed 24 X 7. Stonehill takes projects through the full development cycle, from site identification, building design, planning, construction, capital structuring and exit. Its preference is to undertake new construction to achieve optimal efficiency in terms of space layout, room configuration, energy consumption, and communal areas. Stonehill has several residences around Europe such as England, Austria, Germany, Hungary and Italy in Bologna.

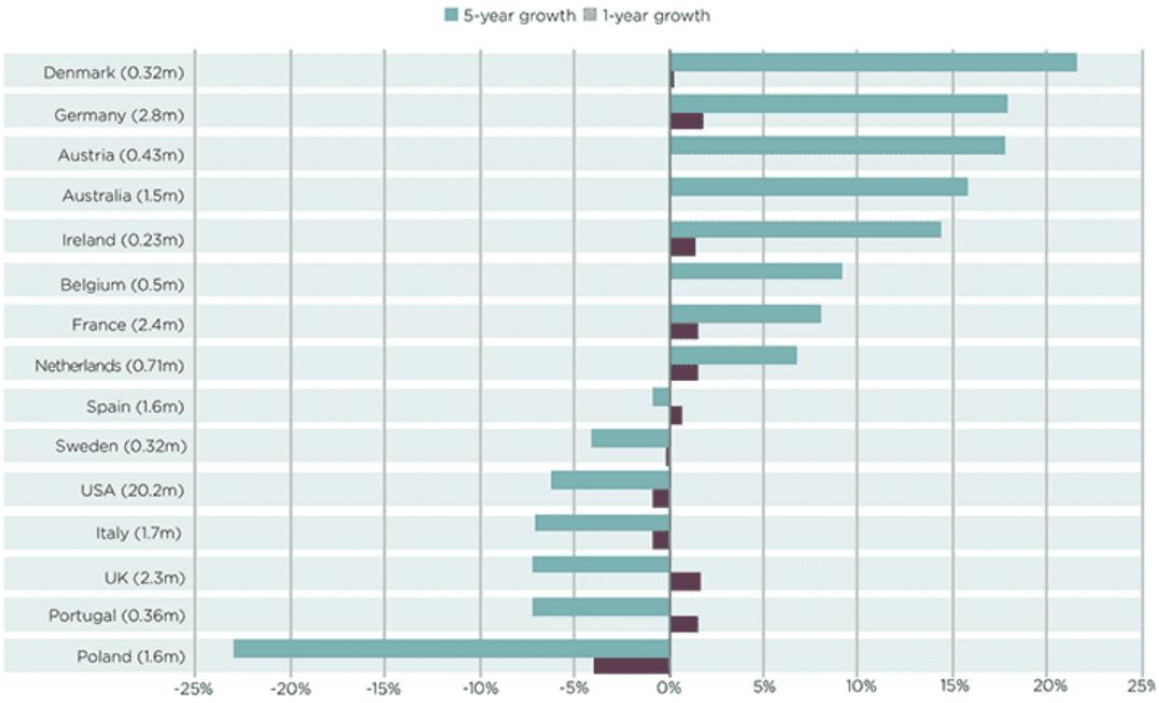
1.5 Italy vs Europe

Student Housing is an already consolidated market segment in Europe, while in Italy it still has significant development potential. The European market, while recording different dynamics from country to country, is characterized by an overall insufficient offer of student beds: the prevalence of the structures is still managed directly by universities or religious bodies. The very strong student demand for beds has caused a great deal of investor interest, in fact, from 2012 to 2018, investment volumes in student residences have grown steadily, both in Europe and in the UK. Netherlands, Germany and Spain have launched internationalization of their university system with the aim of reach the levels of the United States and the United Kingdom.



In most European markets, the number of students has been rising. The number of students in Denmark has grown the fastest in the past five years, with a 22% increase from a relatively low base. Germany's international students have grown significantly, and by 2020 they have surpassed the government's target of

350,000 international students. In contrast, the number of students in the UK, Europe's largest international student market, has declined slightly over the past five years, while the number of international students has increased by 2%.



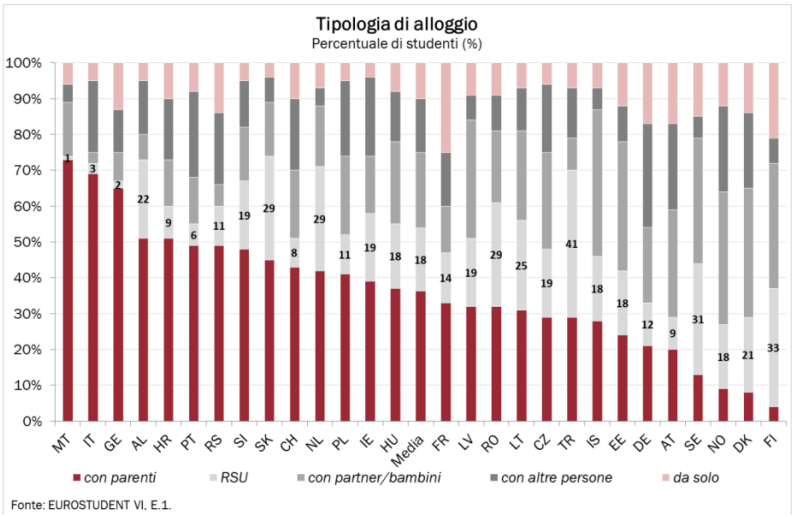
The supply of RSU at the national level across Europe is still very low. It is the highest in the UK and can accommodate 27% of students, and the lowest in Southern Europe. In Italy, the fourth largest student market in Europe, the national supply rate is less than 5%. By analyzing the data, we have identified some cities in Europe that are in short supply. Also Spanish cities have extremely low level of supply and high rents. Barcelona's supply is slightly less than 5%, and Madrid's is 5.7%. The lowest offering is Rome, which has 220,500 students but only 6,500 student beds available (almost 3%) with the majority owned and operated by public bodies.

Public operators can be divided in three groups:

- *DSU*: residences associated with the regional bodies for the Right to Study (66%)
- *CCUM*: residences at university colleges of merit (7%)
- *ACRU*: residences of the Italian association of Colleges and University Residences (10%)

The growing importance of the student housing sector in the European real estate market observed in recent years is accompanied by a constant increase in the number of university students and international mobility of academic paths. The European university population stands at over 19.5 million and is concentrated for 71.8% in the seven most populous countries on the continent.

As can be seen from the graph below, students no longer live with their parents. Leaders of this form of housing are countries such as Sweden, Norway and Finland, where less than 20% of students still live with their families. In contrast, with shares exceeding 50%, Malta, Italy, Georgia, Albania and Croatia instead have the family as their main accommodation.



AL Albania
AT Austria
CH Switzerland
CZ Czech Republic
DE Germany
DK Denmark
EE Estonia
FI Finland
FR France
GE Georgia
HR Croatia
HU Hungary
IE Ireland
IS Iceland
IT Italy
LT Lithuania
LV Latvia
MT Malta
NL Netherlands
NO Norway
PL Poland
PT Portugal
RO Romania
RS Serbia
SE Sweden
SI Slovenia
SK Slovakia
TR Turkey

In Italy, Student Housing is one of the alternative segments with the greatest growth prospects, given the demand and poor supply currently present on the national scene. The demand for higher education signals constant growth and today only 3% of students in Italy live in university residences. The Italian investment market in the Student Housing segment is attracting more and more investors who are also interested in value added operations involving urban regeneration and major refurbishment of existing buildings. The real growth factor of this asset class is the gap that exists between supply and demand, there is a potential demand of 490,000 beds, considering that the institutional offer in Italy only covers about 50,000 beds.

2 Student Housing Trends

2.2 The concept of ESG (Definition, Goals, Strategies, Financial instruments and International and National Framework)

2.1a Definition

ESG stands for Environmental, Social and Governance. ESG criteria are a set of standards for a company's operations that socially conscious investors use to screen potential investments. These, are three fundamental factors to verify, measure and support the commitment of a company or organization towards the environment and the society. In particular, ESG represents a series of criteria for measuring the environmental, social and governance impacts that an organization generates, criteria that materialize into a set of operating standards that must inspire the company's operations.

ESG criterias were first mentioned in the United Nations *Principles for Responsible Investment (PRI)* 2006 report. At the time, 63 investment firms made up of asset owners, asset managers and service providers signed with $ 6.5 trillion in assets under management (AUM) incorporating ESG issues. As of June 2019, there are 2450 signatories representing over $ 80 trillion in AUM. The emphasis on ESG is growing more and more as major institutional investors are making it clear that they expect their companies to make a strong commitment to comply.

The criteria underlying the letter "E" standing for Environmental are in charge to assess how a company behaves towards the environment in which it is located and how the impacts of its activities on the environment are taken into account and/or compensated. The criteria linked to the letter "S" relate to the social impact and examine the impact and relationship with employees, suppliers, customers and the local community with which it operates or with which it is related to. Finally, the "G", which stands for Governance concerns the issues of corporate management inspired by good practices and ethical principles, such as the logic related to the remuneration of managers, gender gap, respect for the shareholder rights, transparency of decisions and respect for minorities. ESG criteria are important because they allow to accurately measure the environmental, social and governance performance of a company based on standardized and shared parameters.

2.1b ESG Goals

According to the *European Green Deal*, by 2050 all Member States must move towards a circular economy, having achieved net emissions of zero. The United States has bold plans to decarbonise the economy and aim for a net zero emissions target by 2050. Countries create laws and regulations because the impacts of

non-ESG behaviours are already creating negative effects on the functioning of companies, such as carbon taxes, and the financial and banking sectors have integrated ESG rules into their funding policies.
On April 21, 2021, two new initiatives by the finance sector were announced: The Net-Zero Banking Alliance and its participation to the Glasgow Financial Alliance for Net Zero.
The Net zero Banking Alliance brings together 43 banks from 23 countries with $28.5 trillion in assets to deliver the sector's ambition to align its commitments with the Paris Agreement.
Member banks are committing to:

- Transition the operational greenhouse gases emissions to align with the pathways to net-zero by 2050.
- Set 2030 targets and 2050 target, with intermediary targets to be set every 5 years from 2030 onward.
- Engage with their client's own transition and decarburazion, promoting real economy transition.

To measure the level of integration of ESG criteria, ratings and ESG standards have been developed which, through the collection of data, provide an ESG score to the activities carried out. ESG scores are increasingly required by investors as tools that provide greater understanding of how companies deal with ESG matters and as tools used to guide investment strategies.
The sustainability rating or ESG rating provides a synthetic assessment that ensures the compliance of a company, an enterprise, or an association with regards to social, environmental and governance topics. The sustainability rating is processed by the various agencies specialized in the collection and analysis of data on aspects involving the environment, social impact, and governance. The ESG rating is also an important indicator for investors because it allows them to have a deeper understanding of the company and its sustainability. Interest in ESG parameters and criteria is becoming increasingly popular amongst companies, who also consider these parameters to obtain a positive opinion from an external public. Thus, the investors have become very sensitive to these issues (ESG) and therefore in order to continue to raise money from shareholders - companies must also be ESG compliant. Otherwise, they lose investors and consumers. To define a responsible and sustainable investment, this must create value for both the investor and the company which, through a medium-long term strategy, integrates financial analysis with ESG. The attention to ESG parameters involves new strategic choices for companies and a new, still evolving, approach where the factors that characterize this interest for ESG parameters are: threats associated with climate change, reduction of waste and better management of resources and presence of products and services capable of guaranteeing and communicating social commitment and environmental impact reduction policies.

2.1c Strategies

Seven categories of strategies have been identified as part of the application of ESG criteria:

- *Sustainability themed investment:* This strategy translates into the selection of assets that are specifically related to sustainability in single- or multi-themed funds. Observing the dynamics in themes, allows us to measure the investors' appetite for a particular area of sustainability. In past reviews no group of themes predominated but over the past two years investors have shifted their focus primarily in favour of climate change and water-themed funds.

- *Best-in-Class investment selection*: this strategy allows investors to pick those companies that have the best ESG score in a particular industrial sector. A Best-in-Class (BIC) portfolio typically includes companies that meet both an ESG and a financial evaluation. Other approaches that fall under a similar classification are Best-in-universe12 (BiU) and Best-effort13. One of the main shortcomings of BiU is that in this category we cannot compare all sectors and asset classes as we can with BiC.

- *Exclusion of holdings, countries, sectors from investment universe*: this is the oldest SRI strategy, inasmuch as it was used at the beginning of the 18th century already, when religious groups, from Quakers to Methodists, started by aligning their investment choices with their moral codes. At the time, industries where human health was at risk, were the focus, while later the 'exclusion trend' started to include the avoidance of "sin stocks", such as companies involved in the production or sale of weapons, alcohol, tobacco and pornography. This approach systematically excludes companies, sectors, or countries from the permissible investment universe if involved in certain activities based on specific criteria. Common criteria include weapons, pornography, tobacco and animal testing. Exclusions can be applied at individual fund or mandate level, but increasingly also at asset manager or asset owner level, across the entire product range of assets.

- *Norms-based screening*: allows investors to select the companies in their portfolios in line with their level of compliance with international standards and norms. The Norms referred to focus on areas such as environmental protection, human rights, labour standards and anti-corruption principles, and are set out in international initiatives and guidelines such as the OECD Guidelines for Multinational Enterprises, the ILO Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy, the UN Global Compact and, most recently, the Guiding Principles on Business and Human Rights: Implementing the United Nations. This strategy can be used as standalone or in combination with other strategies, typically engagement and/or exclusion.

- *ESG Integration factors in financial analysis:* This strategy is considered as a general proxy for the SRI industry as a whole, a factor which can potentially increase information asymmetry for investors as it oversimplifies an industry which has grown in maturity and sophistication over the course of the last 10 years. In fact, the expectations on ESG integration have probably grown at the same pace as the industry in asset terms as SRI thinking has spread, and perhaps faster in intellectual terms as all new concepts - impact, the need to combine all of E, S and G for a just transition, and many single issues - must be included. Due to the significant lack of clarity in the parameters governing the integration of ESG factors, it remained very difficult to assess the extent to which strategies that fall under the same denomination can in fact be comparable. A method needs to be established going forward on the way the strategy is being applied and what it means for different investment houses.

- *Engagement and voting on sustainability matters:* is still the second most popular strategy after exclusions. This strategy registers a total AuM of 4.8 trillion at the end of 2017, which gives a positive indication as to the understanding and interest in active management by investors. In the last review we highlighted the important link of this strategy with fiduciary duty, as it revolves around the relation between stewards of assets (shareholders) and their accountability towards beneficiaries.

- *Impact investing:* key requirements are Intentionality that is the intention of an investor to generate a positive and measurable social and environmental impact; Additionality stands for the fulfilment of a positive impact beyond the provision of private capital; and Measurement stands for be able to account for in a transparent way on the financial, social and environmental performance of investment.

The techniques used to invest funds with an ESG lens are still developing and maturing. The most basic strategies exclude companies, while more sophisticated strategies integrate ESG metrics and goals alongside financial information. An overview of selected ESG Investing approaches includes four different types of strategy:

- *Negative/Exclusionary Screening*: the most used, oldest, and data-driven approach to ESG investing, simplest but least effective way for investors to signal to companies what behaviours should be changed.
- *ESG Integration*: ESG scores.
- *Corporate Engagement and Shareholder Action*: Use of equity ownership to engage companies directly on corporate behaviour, strategy, and commitments.
- *Positive/ Best-in-Class Screening*: Relies on ESG data to identify industry leading ESG players.

2.1d Financial Instruments (Green Bond, Social Bond, Sustainability Bond)

Focusing our attention exclusively on financial returns and the fundamentals of a particular sector or company has now become insufficient to take investment decisions. Investors became socially conscious operators, requiring an Economic Rate of Return and not only an Internal Rate of Return. This investor's approach led inevitably the asset management industry to pay more and more attention to ESG factor and to incorporate them in all investment decisions. The substantial difference between the two rates is that while the IRR measures only components of economic return (internal rate of return on economic cash flows), the ERR is a cost-benefit analysis, also considering both social and environmental positive and negative externalities. ERR provides an advantageous metric that compares economic costs and benefits of a program, through a cost-benefit analysis. All necessary economic costs are included in the cost-benefit analysis as well as income that should be generated through social environmental improvements such as clean water on health outcomes. Generally, ERR of a project is required to exceed a threshold rate of 10% to be considered for an investment.

Finance has begun to show great attention to the evaluation of ESG criteria, first for the management of different forms of investment that are inspired by criteria of social and environmental responsibility. The importance of considering ESG elements is determined by a series of factors, first of all a "sustainable" society faces fewer risks related to environmental emergencies, compliance regulations and at the same time these are companies that express a greater commitment in terms of scientific research, innovation and production capacity and as regards the relationship with its customers and partners in terms of transparency and trust.

Sustainable investments are becoming increasingly popular in the financial markets, as investors are increasingly required to focus on non-financial outcomes as well. This means integrating environmental, social and governance factors into the investment management process.

"Social impact investment is the provision of finance to addressing social needs with the explicit expectation of a measurable social, as well as financial, return. A core characteristic and challenge are the measurement and management of social and environmental outcomes alongside financial returns."

Investors are increasingly interested in ethical and moral values that have led the financial world to face new needs, thus developing new financial instruments that allow them to pursue ESG goals. In recent years, new initiatives and investment tools have been introduced that can attract investor interest in ESG investments: green bond, sustainable bond and social bond.

The green bond market has grown which is making a positive contribution to environmental welfare, in fact, the market was extended with new impact investing products in the form of social and sustainability bonds to support prosperity. The growth in green, social and sustainability bonds started with the Paris climate

accord and the publication of the UN Sustainable Development Goal (UN SDGs). These financial products provide an innovative financing tool for issuers, and they boost market transparency by requiring issuers to communicate their ESG policies. Moreover, the use of proceeds of green, social and sustainability bonds contribute to society by enhancing environmental and social welfare.

Green, social and sustainability bonds share financial characteristics similar to those of traditional bonds, in terms of structure, risk and returns. They can be corporate or government-related, vary in credit quality ranging from investment grade to non-investment grade, differ in maturities and present various types of yields and interest rates. They have the same security of conventional bonds and the yields and expected returns are therefore comparable to those of the same issuer's plain vanilla bonds. The crucial difference between green, social and sustainability bonds and plain vanilla ones lies on the allocation of proceeds.

Green Bonds are financial instruments whose proceeds must be to finance partially or fully new and/or existing climate or environment-related projects such as investments in renewable energy and low carbon building or energy efficiency.

Social Bonds are used to finance partially or fully new and/or existing social welfare investments for an identified target population (affordable housing and community development).

Sustainability Bonds are a mixture of both green and social bonds. They are expected to provide environmental and social benefits for the identified target population. Can be used to finance, partially or fully, new and/or existing projects related to education and sustainability research, modernization of education and public health facilities.

At the moment there is no global standard for certifying a certain bond as green but there are guidelines developed by the International Capital Market Association (ICMA). There are four ICMA principles:

- The issuer of a security must clearly identify the destination of the proceeds
- It must follow some particular procedures in the evaluation and selection of projects, which must fit into a list of categories
- The issuer of the bond must ensure maximum transparency in communicating the management of the proceeds
- Reports must be made available to keep investors updated on the progress of the funded projects

Issuing a Green, Social or Sustainability Bond can create several benefits for the issuer:

- External Awareness-Public Relations
- Internal Awareness- Promote Sustainable Operations
- Aligns Funding with Overall Sustainability Strategy and Goals
- Promoting ESG Policy Making
- Investor Diversification and Alignment with the Growing Mainstream Investor Focus in this Sector
- Compress New Issue Concessions
- No/Limited Additional Bond Documentation Required.

About the Risks related:

- “Green Washing”
- Pricing Advantage Difficult to Harness or Quantify
- Additional Cost and Effort Required for second-party Opinion, Assurance or Verification World
- Commitments to Allocation and Impact Reporting can be Complex and involve Multi-party Coordination

The GSS bond market continues to develop with record issuance, currently has over $ 1.4 trillion in outstanding bonds. By April 2020, the total global market volume had increased to USD 829 bln from USD 3.1 bln in 2012. An increasing number of issuers with different industry and geographical affiliations are entering the market, currently amounting to over 700.

The “Greenium”, or green premium, refers to the pricing advantage offered to issuers by green bonds over conventional issuance. Over time we have seen that Green, Social and Sustainability (GSS) bonds can achieve a pricing benefit due to higher degree of oversubscription.

Despite the rapid development of the green bond market, the differences in the key characteristics of these financial instruments from conventional bonds are poorly understood. Most research confirms “discounts” on green bond yields when compared to similar types of bonds. The yields of these bonds are lower because they have lower risks, as the yield increases, the risk of the transaction increases. They also invest in projects that are more resilient to future weather events and are more liquid than other financial products as they can be instantly converted into cash without a capital loss. In general, the increased market demand for green bonds affects the growth of prices for this type of asset, which is expressed in lower levels of profitability.

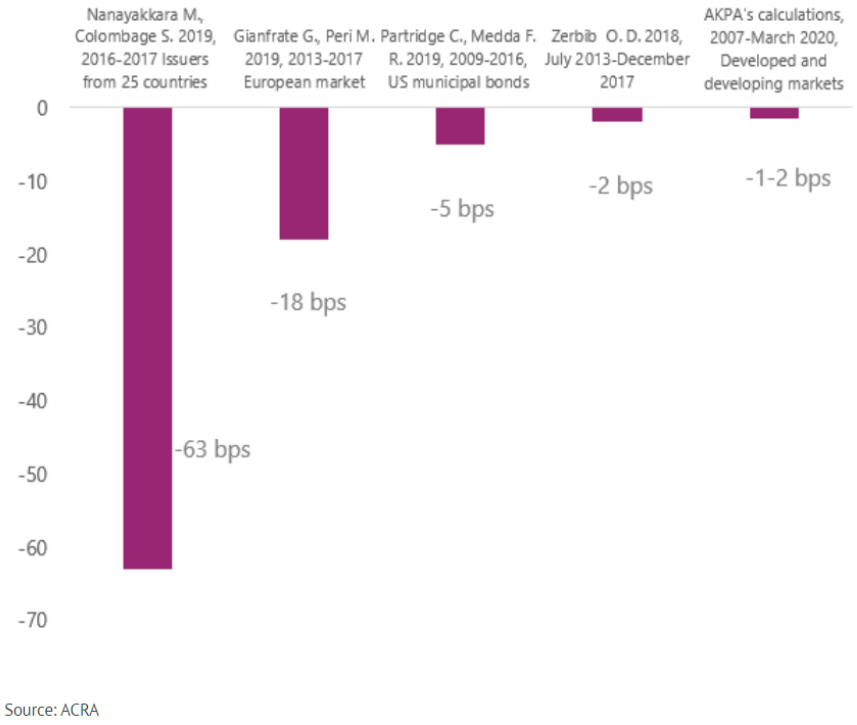


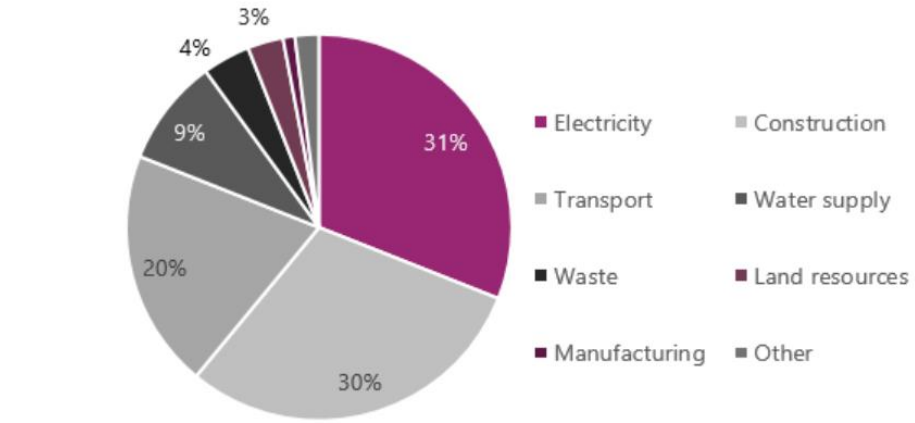
Fig. 1 Discounts on green bond yields compared to classic bonds

ACRA assessed 3,477 issues from January 2007 to March 2020, including data on classic and green bonds**.** ACRA's model found a small but statistically significant discount of 1-2 bps on green bond yields compared to similar classic bonds. Investors are willing to settle for lower returns on green bonds may indicate a few things: growing investor interest in this type of asset, awareness of the severity of environmental degradation, insufficient representation of environmental projects, insufficient volume of infrastructure investments needed to transition to a low-carbon economy, and the excess of demand over supply in this segment (oversubscription).

GSS bonds are very liquid investments and therefore less profitable. Generally, investment funds and other institutional investors who purchase green securities hold them until maturity, which negatively affects the volume of trading in these securities, their liquidity, and their price. Green bonds have a higher degree of liquidity than classic bonds. The difference between ask and bid prices for green bonds is 47,9% less than for other comparable bonds, which indicates that these bonds are more actively traded and have higher liquidity. This is a positive factor for potential investors.

As the market matures, discount on green bond yields could fizzle out. Currently, the market is experiencing a supply shortage and increased demand for green bonds. However, the expansion of this market segment will inevitably lead to a balance between supply and demand. This can offset the discount effect, which is expressed in lower green bond yields. The increased supply of green bonds in coming years will be primarily in those sectors with a lack of "green" investment.

In the industrial sector, growth will be stimulated by stricter regulatory requirements for enterprises, as well as a new course of development focused on environmentally sustainable economies in developed and developing countries. In the financial sphere, growth will be due to a significant increase in the volume of credit financing for projects in the field of ecology and sustainable development, which are steadily becoming more relevant.



Source: CBI

Fig. 2 Green bonds issues by industry in 2019

2.1e International and national reference framework

UN Activities (PRI, SDGs)

The 2030 Agenda for Sustainable Development is an action program for people, the planet and prosperity signed in September 2015 by the governments of the 193 UN member countries. It incorporates *17 Sustainable Development Goals (SDGs)* into a large action program for a total of 169 targets. The official launch of the Sustainable Development Goals coincided with the beginning of 2016, leading the world on the way to go over the next 15 years: the countries, in fact, are committed to achieving them by 2030.

Fig.3 Sustainable Development Goals (SDGs)

Sustainability is not a purely environmental issue. Four years after the signing of the 2030 Agenda, there is increasing awareness in civil society, in the business world, in the national government, in administrations and in public opinion, regarding the need to adopt an integrated approach and concrete measures to address an important socio-economic paradigm shift. All countries are called upon to undertake to define their own sustainable development strategy that allows them to achieve the objectives set, communicating the results achieved within a process coordinated by UN. In fact, each country is assessed annually at the ONU through the activity of the High-level Political Forum (HLPF), which has the task of evaluating the progress, results and challenges for all countries, and by national and international public opinions.

Agenda 2030 launches a challenge of complexity: since the three dimensions of development (economic, environmental and social) are closely interrelated, each Goal cannot be considered independently but must be pursued on the basis of a systemic approach, which takes into account the reciprocal interrelationships and does not have negative repercussions on other spheres of development. Only the integrated growth of all three components will allow the achievement of sustainable development.

The SDGs are universal, they refer to the presence of problems that all nations have in common. For this reason, all countries are called to contribute to the challenge to bring the world on a sustainable path, without distinction between developed, emerging and developing countries. This means that each country must undertake to define its own sustainable development strategy that allows it to reach the SDGs and to report its results to the UN.

The PRI provides research and education, and facilitates collaboration, to help investors align their responsible investment practices with the broader sustainable objectives of society, as currently best defined by the SDGs.

The Principles for Responsible Investment (or PRI) were launched by the United Nations in 2006 with the aim of encouraging the spread of sustainable and responsible investment among institutional investors; adherence to the PRI (voluntary) involves compliance and application of the following principles:

- Incorporate environmental, social and governance (ESG) parameters in the financial analysis and decision-making processes regarding investments
- Be active shareholders and incorporate ESG parameters into shareholder policies and practices
- Require reporting on ESG parameters by the investment companies
- Promote the acceptance and implementation of the Principles in the financial industry
- Collaborate to improve the application of the Principles
- Periodically report on the activities and progress made in applying the Principles.

Today, the Principles have been signed by more than 1200 signatories including institutional investors, asset management companies and service providers.

In 1988 the United Nations created the *Intergovernmental Panel on Climate Change (IPCC)* to provide policymakers with regular scientific assessments on climate change, its implications and potential future risks. The IPCC examines and evaluates the latest scientific, technical and socio-economic information produced around the world, and important for understanding climate change.

The IPCC has three working groups (WG) and a Task Force:

- Working Group I (WG I) on the scientific aspects of the climate system and climate change
- Working Group II (WG II) to assess the vulnerability of natural and socio-economic systems, the impacts of climate change and adaptation options
- Working Group III (WG III) to evaluate the options for mitigating climate change (by limiting, contrasting and reducing greenhouse gas emissions into the atmosphere)
- the Task Force on National Greenhouse Gas Inventories, responsible for the IPCC program on National Greenhouse Gas Inventories
- the Task Group on Data and Scenario Support for Impact and Climate Analysis (TGICA) deals with the dissemination and use of climate data and scenarios to make research activities and information sharing between the three IPCC working groups possible.

Through its assessments, the IPCC determines the state of knowledge on climate change. Reports are drawn up and reviewed in stages, thus ensuring objectivity and transparency. The IPCC does not conduct its own research. IPCC reports are neutral, relevant to policy but not normative. Assessment reports are a key input in international negotiations to tackle climate change. The IPCC is an intergovernmental body open to all member countries of the United Nations and currently 195 countries are part of it.

EU Activities

The European Green Deal is a new growth strategy that aims to transform the EU into a fair and prosperous society, with a modern, resource-efficient and competitive economy where there are no net emissions of greenhouse gases in 2050, where the environment and the health of Europeans are protected, and where economic growth is achieved by the most efficient and sustainable use of natural resources. It aims to transform climate and environmental challenges into opportunities, protecting the health and well-being of citizens from environmental risks and impacts.

The Taxonomy Regulation is European Regulation 2020/852 and is an important factor for increasing sustainable investment and therefore, implementing the European Green Deal as part of the EU's response to the climate and environmental challenges. It provides uniform criteria for companies and investors to determine which economic activities can be considered environmentally sustainable, and thus aims to increase transparency and consistency in the classification of such activities and limit the risk of greenwashing and fragmentation in relevant markets. Generally, greenwashing stands for facade ecologism or facade environmentalism, it indicates the communication strategy of certain companies, organizations or political institutions aimed at building a deceptively positive self-image in terms of environmental impact. It was invented in the 1980s to describe the outrageous claims of companies to trick people into believing that a product is green, when in fact they have a less sustainable impact than consumers are led to believe. However, investors remain free to invest as they wish and the Taxonomy Regulation does not imply any obligation on investors to invest only in those economic activities that meet specific criteria.

In March 2018, the European Commission published the *Sustainable Finance Action Plan*, outlining the strategy and measures to be taken to establish a financial system capable of promoting development that is genuinely sustainable from an economic, social and environmental point of view, by contributing to the implementation of the Paris Agreement on climate change and the United Nations 2030 Agenda for Sustainable Development. The action plan recommends ten actions to be taken at European level to:

a. facilitate the channelling of financial investment towards a more sustainable economy
b. consider sustainability in risk management procedures
c. enhance transparency and long-term investment.

The Action Plan also refers to:

- improving the quality of non-financial reporting by companies
- the need for institutional investors and asset managers to enhance sustainability factors in their investment decision-making and to tighten disclosure obligations
- the integration of sustainability into awarded ratings and market research, as well as the analysis of existing practices of credit rating agencies concerning the use of ESG factors
- the integration of sustainability into the prudential requirements of credit institutions

- the creation of EU labels for green financial products based on the EU classification scheme, allowing investors to easily identify investments that meet environmental or low-carbon criteria.

The SFDR, stands for *Sustainable Finance Disclosure Regulation*, is an important part of the EU Sustainable Finance Action Plan, which is designed to mobilise finance for sustainable growth. It is mainly meant to enhance ESG transparency of financial products and those who issue them. It entered into force on 10 March 2021 with the aim of making the sustainability profile of the funds more comparable and easier to understand for investors. The new rules classify products into specific types and include metrics to assess the environmental, social and governance (ESG) impacts of the investment process for each fund.

The European green deal of 11 December 2019 underlined the need to better direct financial and capital flows to green investments. The European green deal investment plan of 14 January 2020 announced that the Commission would establish an *EU green bond standard*. The European green bond standard (EUGBS) is a voluntary standard to help scale up and raise the environmental ambitions of the green bond market. Establishing this standard was an action in the Commission's 2018 action plan on financing sustainable growth and is part of the European green deal. It is based on the recommendations of the Technical Expert Group on Sustainable Finance. Regulation will set a gold standard for how companies and public authorities can use green bonds to raise funds on capital markets to finance such ambitious large-scale investments, while meeting tough sustainability requirements and protecting investors. There are four key requirements under the proposed framework:

- *Taxonomy-alignment*: The funds raised by the bond should be allocated fully to projects that are aligned with the EU taxonomy
- *Transparency*: Full transparency on how the bond proceeds is allocated through detailed reporting requirements
- *External review*: All European green bonds must be checked by an external reviewer to ensure compliance with the Regulation and taxonomy alignment of the funded projects
- *Supervision by the European Securities Markets Authority (ESMA) of reviewers*: External reviewers providing services to issuers of European green bonds must be registered with and supervised by the ESMA. This will ensure the quality of their services and the reliability of their reviews to protect investors and ensure market integrity

The action plan, *financing sustainable growth*, published in March lists a series of actions which should be implemented by 2019. The Technical Expert Group (TEG) on sustainable finance was set up in July 2018 to assist the Commission in the implementation of the action plan and the proposed regulation on climate benchmarks. The Commission put forward in May 2018 a proposal for a regulation creating two type of low carbon benchmarks and requiring environmental, social and governance (ESG) disclosure requirements for

benchmarks. On 18 June 2019, the TEG published its report on climate benchmarks and benchmarks' ESG disclosures. The main objectives of the new climate benchmarks are to:

- allow a significant level of comparability of climate benchmarks methodologies while leaving benchmarks' administrators with an important level of flexibility in designing their methodology
- provide investors with an appropriate tool that is aligned with their investment strategy
- increase transparency on investors' impact, specifically regarding climate change and the energy transition
- disincentivize greenwashing

2.3 Application of ESG criteria in the real estate market

The ESG analysis of the real estate component (Propco) will be carried out through the study and analysis of the main certification standards (CSs) of environmental assessments of buildings, in particular BREEAM, LEED and CREEM providing recommendations on how to effectively use their potential for contribute to the development of sustainable student housing. The main difference between BREEAM and LEED, the major sustainability schemes, is the process of certification. BREEAM has trained assessors who assess the evidence against the credit criteria and report it to the BRE, who validate the assessment and issue the certificate. While LEED does not require training, there is a credit available if an accredited professional (AP) is used. The role of the AP is to help gather the evidence and advise the client. The evidence is then submitted to the US-GBC which does the assessment and issues the certificate. Both schemes share common components. Early involvement of the assessor or AP at the design stage is beneficial to the project and the final rating. Both schemes drive the market to improve building design.

We can also highlight the most important strengths and weaknesses of both certifications:

- BREEAM

  Strengths:

  a. Allows comparison and benchmarking of different buildings
  b. Independently audited
  c. Adjusted to UK legislation and UK culture

  Weaknesses:

  a. Very exact requirements
  b. Complex weighting system
  c. Market profile
  d. Cost of compliance

- LEED

Strengths:

a. Strong marketing gets the message through
b. Lots of information available
c. No need for an assessor and training

Weaknesses:

a. Based on US systems
b. Intense documentation required
c. No independent audit of the assessment
d. Mixing building function and form is difficult to assess

OpCo, stands for Operating Company, conducts day-to-day operations and management. OpCo assumes the role of the tenant, making rental payments on the real estate assets to the PropCo that mantains the ownership of the asset. In other words, OpCo sell products, enter into contracts, hire employees and deal with customers, PropCo owns the building, holds the business assets such as real estate.

The application of the ESG criteria is essential that it is integrated above all in the operational-management part of the building. Good application has a positive impact on people (social and governance) and on the territory (environmental). The reduction of CO2 emissions, energy efficiency, efficiency in the use of natural resources (e.g., water), the adoption of policies to combat air and water pollution and the waste of natural resources and deforestation of the environment have a positive effect on people's health and soil well-being. The Social factor includes qualitative policies for the work environment, for trade union relations, for the control of the supply chain, as well as attentive to the diversity of sex, skills and age, working standards, safety conditions in the workplace, respect for human rights and an all-round assumption of social responsibility. Governance concerns the ethics and transparency of corporate governance, the diversity policies in the composition of the BoDs, the presence of sustainability plans and objectives linked to the remuneration of the board, as well as control procedures, policies and more generally the conduct of top management and the company in terms of ethics and compliance.

All these policies go to protect the person in terms of risk management, cost reduction, access to capital, customer relations, human resource management and innovation capacity.

2.4 Sustainability Certifications and others (BREEAM, LEED, CRREM, WELL, GRESB)

2.3a PropCo Side: BREEAM, LEED and CRREM

BREEAM

BRE (Building Research Establishment), a private British body for research, training and verification of the built environment, active since 1972, based in Watford, started to work on the first voluntary sustainability assessment and certification protocol in 1988. The first version of the BREEAM protocol, aimed at assessing the sustainability of office buildings, was launched in 1990.

Since 2006, BRE has been supported by BRE Global which manages the BREEAM brand.

BREEAM is one of the main internationally recognized standards for assessing environmental, social and economic sustainability of infrastructures and buildings. It is aimed at a continuous improvement of performance, imposing a wide range of rigorous requirements that must exist in order for the building to obtain the BREEAM certification. Each structure under investigation will be assigned a rating that reflects the performance achieved by the project measured against the standard and its benchmarks. BREEAM ratings range from Acceptable to Pass, Good, Very Good, Excellent and are reflected in a series of stars awarded to the property. BREEAM measures the sustainability of the structure by monitoring certain categories of elements such as: energy, health and well-being, innovation, land use, materials, management, pollution, transport, waste and water. For each category there are sub-categories to which specific objectives and reference benchmarks correspond.

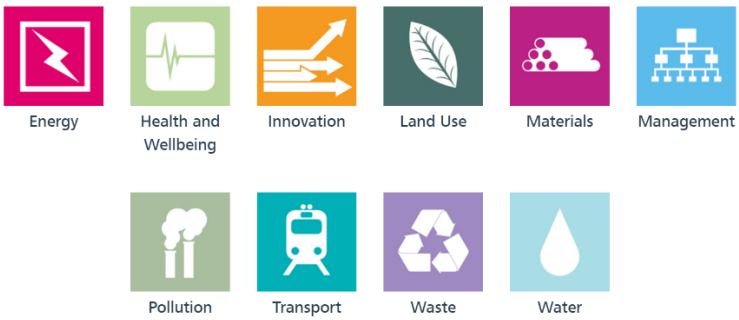


Fig. 3 BREEAM KPIs

KPIs BREEAM:

- Management: dedicated to the evaluation of the sustainability of the process (integration, commissioning), in the construction practices, in the impacts on the site related to the construction activities and to the evaluation of the level of stakeholder involvement in the process and life cycle cost analyzes (LCC) and the planning of the building's operation.

- Health and wellbeing: dedicated to evaluating the sustainability of design choices aimed at improving visual comfort, indoor air quality, thermal comfort, water quality, acoustic performance, safety of access to the building, the quality of the view towards the exterior, the wholesomeness of the finishing materials.
- Energy: dedicated to the assessment of the energy efficiency of the building and its components, of the energy consumption monitoring system, to the evaluation of the choice of technologies with low climate-altering emissions.
- Transport: dedicated to evaluating the sustainability of design choices aimed at improving accessibility to public transport systems, limiting the movement of occupants thanks to the presence of the main services in the areas adjacent to the building, encouraging the use of transport methods with a lower environmental impact compared to traditional ones, encourage the activity of teleworking (for residential buildings).
- Water: dedicated to assessing the sustainability of water consumption and the efficiency of the installed water equipment, the monitoring systems for consumption, losses and their prevention.
- Materials: dedicated to assessing the sustainability of design choices aimed at reducing the environmental impact of the entire life cycle of the building, encouraging responsible sourcing of raw materials, maximizing the useful life of all building elements.
- Waste: dedicated to the assessment of sustainability in the management of construction and operating waste, of design choices aimed at maximizing the use of recycled materials and minimizing the number of replacements of interior finishes by end users, for aesthetic reasons only.
- Land use and ecology: dedicated to the evaluation of the sustainability of the choice of the project site, of the ecological value analyzes of the site and consequent actions of protection and increase of the ecological value, of the strategies to increase biodiversity.
- Pollution: dedicated to assessing the sustainability of design choices aimed at minimizing the impact of refrigerants on the environment, NOx emissions, surface washout due to rainwater, light, and noise pollution.

- Innovation in design allows you to obtain up to 10 points for performance exceeding the requirements of certain BREEAM cards or following design choices deemed innovative by the BRE Global body.

LEED

LEED standards (Leadership in Energy and Environmental Design standards) is a certification program devised in 1994 by the U.S. Green Building Council (USGBC; founded 1993) to encourage sustainable practices design and development by means of tools and criteria for performance measurement. It is "a voluntary, consensus-based, market-driven building rating system based on existing proven technology."
The LEED certification is applied to any type of building, it promotes a sustainability-oriented approach through, for example, energy / water saving, CO2 reduction, responsible use and selection of materials and resources, the choice of soil and the ecological quality of the interior. Similarly, to BREEAM, the system is based on the assignment of credits according to the requirement reached, the sum of which reflects the 4 levels of certification: certified, silver, gold, platinum:

1. Certified: 40–49 points.
2. Silver: 50–59 points.
3. Gold: 60–79 points.
4. Platinum: 80+ points.

KPIs LEED:

- Sustainable Sites: (1 prerequisite, 8 credits - max 26 points): the environmental aspects related to the site where the building will be built and its relationship with the context are addressed.

- Water Efficiency: (1 Prerequisite, 3 Credits - max 10 points): environmental issues related to the use, management, and disposal of water in buildings are considered by monitoring the efficiency of water flows and promoting the reduction of water consumption and reuse of rainwater.
- Energy and Atmosphere: (3 Prerequisites, 6 Credits - max 35 points): the improvement of the energy performance of buildings, the use of energy from renewable or alternative sources and the control of the energy performance of the building are promoted.
- Materials and Resources: (1 Prerequisite, 7 Credits - max 14 points): environmental issues related to the selection of materials, the reduction of the use of virgin materials, the disposal of waste and the reduction of the environmental impact due to transport are taken into consideration.
- Indoor Air Quality: (2 Prerequisites, 8 Credits - max 15 points): issues related to the quality of the indoor environment are considered, concerning healthiness, safety and comfort, energy consumption, the effectiveness of the air change and control of air contamination.
- Innovation in Design: (2 credits - max 6 points): the design aspects that stand out for the characteristics of innovation and application of sustainability practices in the construction of buildings are identified.
- Regional Priority: (1 Credit - max 4 points): the goal is to encourage the design groups to focus attention on completely unique and unique environmental characteristics of the location where the project is located.

CRREM

The risk assessment tool associated with carbon emissions is CREEM: a project that aims to support industry in addressing this risk and promoting investments in energy efficiency. Many assets, which will not meet the new energy efficiency standards, will become "locked" properties because the energy upgrade will not be financially sustainable. The goal of CREEM is to accelerate the decarbonization process and the resilience to climate change of the real estate sector by providing appropriate pathways for carbon reduction. The software developed detects the intensity of carbon emissions and energy consumption. In addition to detecting the associated risks, it also helps to define improvement strategies. The tool has also been aligned with GRESB.

KPIs CRREM:

● Stranding diagram: Interactive diagram that enables users to view the point of stranding, performance and excess emissions against the selected decarbonisation target (“pathway”). The asset carbon intensity performance per year is analysed. Further the Carbon Value at Risk (CVaR) is also provided below the graph as figure.

● Energy reduction pathway: Shows the energy intensity per year of the individual asset against the country and property type-specific energy target. Year of exceedance is given.

● Excess emission: Provides an overview of the excess emissions per floor area for the climate reduction targets as well as providing the user-defined targets if provided.

● Costs of energy and carbon emissions: Shows the annual energy costs distinguishing between the type of emission.

● Total net energy per floor area: Shows the produced energy as a percentage of consumed energy and the share of renewables on energy consumption.

● Carbon costs of excess emissions: Shows emissions above or below the decarbonisation target and the corresponding annual costs. Carbon Value at Risk is provided as a percentage for the given discount rate.

● Costs of retrofitting to comply with decarbonisation pathway: Provides costs of retrofitting per target (1.5°C/2°C) over the time horizon up to year 2040 for the individual retrofit scenarios entered in the input sheet.

● Individual retrofit scenarios & payback: Shows the energy intensity with retrofit measures and provides a payback diagram illustrating the break-even point.

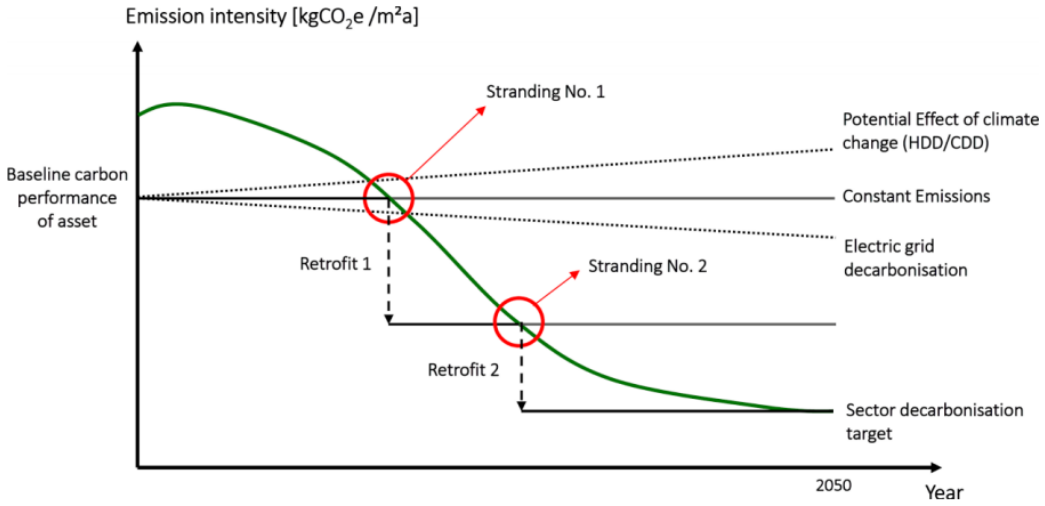


Fig. 4 Stranding diagram

2.3b OpCo Side: GRESB, WELL and Sustainability Report with GRI and SASB standards

GRESB

GRESB is an organization that issues standards for the evaluation of ESG performance, helping real estate investors to estimate the sustainability performance of real estate assets. To date, it is the most recognized industry benchmark, and participants in the assessment receive comparative business intelligence including information on the actions they can take to improve their ESG performance and have access to a platform aimed at engaging investors with each other.

The GRESB evaluations do not differ from the evaluations provided by the PRI, an association founded in 2006, which aims to promote the six principles for sustainable and responsible investment. The signatory who decides to join the PRI actively undertakes to:

- Integrate ESG issues in the analysis and decision-making processes regarding investments; - Be active shareholders and incorporate ESG issues into our active share ownership policies and practices
- Ask for adequate communication on ESG issues from the entities in which it is invested
- Promote the acceptance and application of the Principles in the financial sector
- Collaborate to improve their effectiveness in applying the principles

Communicating activities and progress 6 in applying the principles. The principles were developed by an international group of institutional investors that reflect the growing relevance of environmental, social and government issues for investment practices.

WELL

The WELL certification, launched in 2014, is the first system to define the parameters with which buildings can improve our lives, focusing on people's comfort.
The environment in which we live deeply affects our lifestyle, it is essential to design and build buildings that guarantee healthy and comfortable spaces, but at the same time know how to manage and plan maintenance in a systematic way. In the construction market, a new certification standard is emerging, WELL Building Standard ™, which fits perfectly into this context, offering an alternative vision to the certifications that we already find on the market. It aims to improve the interactions between humans and the built environment, to obtain healthier and more comfortable buildings, also increasing productivity.

The protocol is divided into 10 categories called “Concept”:

- *Air*: It promotes a verification of the air quality inside the building through specific on-site tests. In addition, it requires that high air quality be guaranteed through the use of non-toxic materials, the use of particulate filters and the constant monitoring and maintenance of systems dedicated to air exchange.

- *Water*: It checks the quality of the water intended for consumption by the occupants through on-site tests that evaluate the elements dissolved in the water (metals, disinfectants, etc.), the presence of contaminants and the presence of legionella.
  It also requires water to be easily accessible to all occupants to encourage its use.

- *Nutrition*: It prevents occupants from adopting unhealthy eating habits by promoting "food awareness". It acts on the quality of the food offered inside the building, trying to make fruit and vegetables always easy to find. Higher scores are given in case of on-site crops, canteens with healthy menus and attentive to allergens and suitable places to eat meals.

- *Light*: It supports the adoption of strategies to improve the visual comfort of the occupants by trying to maximize the use of natural light by controlling glare, providing an adequate level of light to all work environments as well as a circadian study of the same.

- *Movement*: It favors a more active life through both internal and external layout strategies such as: the presence of visible and easily accessible stairs, the presence of indoor gyms and / or outdoor spaces for sports activities. Finally, it encourages the organization of sports activities for all employees.

- *Thermal Comfort*: It promotes an environment with thermal comfort suitable for all occupants, therefore it prefers heating systems with radiant panels, monitoring of internal temperatures and humidity.

- *Sound*: It promotes maximum acoustic comfort within environments using sound absorption or masking systems between neighbouring spaces.

- *Materials*: Rewards the use of sustainable and recyclable materials, local and with low environmental emissions. In addition to proper waste management, both in the construction phase and in the operational phase, and the use of "Green Cleaning" products for cleaning.

- *Mind*: It encourages the link between nature and the human being and people's awareness of their state of health and well-being through adequate spaces for both internal and external rest, a strong connection with nature and the opportunity to participate to meditative and relaxation activities.

- *Community*: It promotes the maximum accessibility of the building and supports for the life of the occupants: incentives for families and supports for the health of the occupants.

All Concepts are based both on performance indicators, providing specific, objective and measurable thresholds, and on prescriptive indicators, which require specific technologies, design strategies or policies to be implemented. They include innovative methods for assessing the comfort in the building and its surroundings. The internal quality of the environments is analyzed through on-site tests: the quality of the air and water, the quantity of internal light and the disturbances created by noise are evaluated. The performance of the building is also analyzed directly by the occupants through annual surveys that reflect how well-being is perceived. Finally, a significant part of the protocol consists of the policies of the companies that use the building. In summary, WELL requires everyone to change their mentality to create healthier spaces, to bring the building closer to nature and to bring mankind to a healthier and more active life.

Sustainability Report

"The voluntary integration of the social and ecological concerns of companies in their commercial operations and in their relations with interested parties" (The European Union in the Commission's Green Paper 2001).

The sustainability report is a document aimed at reporting to stakeholders the economic, social and environmental results generated by the company in carrying out its activities. Transparency and responsibility are the terms that best explain why the company should choose to report its socio-environmental performance.

The sustainability report is part of this context, as a useful tool to report the economic, social and environmental results generated by the company in carrying out its activities, and to communicate them to a wide audience represented by all stakeholders (employees, suppliers, customers, local community, media, investors, financiers, etc.).
The document is held annually and is published within the deadlines set for the publication of the financial statements. It is generally drawn up according to reporting guidelines and standards, the most widespread of which are those prepared by the Global Reporting Initiative (GRI) and Sustainability Accounting Standards Board (SASB).
In July 2020 SASB and GRI announced a collaborative work plan to show how companies can use both sets of standards together. SASB and the Global Reporting Initiative (GRI) provide complementary standards for sustainability information, designed to meet different purposes, and based on different approaches to materiality. SASB standards focus on ESG issues that are expected to have a financially significant impact on the company, with the aim of meeting the needs of most investors and other financial capital providers. The GRI Standards focus on a company's economic, environmental and social

impacts in relation to sustainable development, which affects a wide range of stakeholders, including investors.

Sustainability report should have the following minimum contents:

• letter to stakeholders from the top management
• methodological note, which presents the principles for drafting the report, the reporting perimeter, the engagement process and the materiality analysis
• organization profile (mission and vision, values, activities, products / services offered, production organization, geographical presence and size)
•governance and strategy: information on the governance structure of the organization and clarification of the sustainability strategy

•reporting of the materiality aspects, which can be articulated in different ways: stakeholders (customers, suppliers, employees, local community, environment) or by type of impact (economic, social, environmental impacts).

GRI standards

Global reporting initiative is an organization created with the aim of helping companies understand, measure and communicate the impact that any activity can have on the different dimensions of sustainability (economic, environmental and social).
The GRI reporting standards are characterized by being both process (they identify the process to be implemented for non-financial reporting) and content (they propose a wide set of indicators to be reported). As they are applicable to any type of organization, they require adaptation to the specific reality being reported.

In summary, the key elements of the reporting process proposed by the GRI are:

•the principle of materiality: the company must identify and report the aspects of its business that have a significant impact on stakeholders (material aspects)
•involvement: the selection of material aspects is developed through the involvement of key stakeholders, both internal and external.

The reporting process developed according to the GRI standards develops through six phases.

1. Mapping of stakeholders: the identification of key stakeholders for the organization makes it possible to evaluate the recipients of the sustainability report and, no less important, to evaluate which of the stakeholders may be involved in the assessment of the materiality aspects to be reported.

2. Internal materiality analysis: this analysis involves top management and management in the assessment of sustainability aspects.

3. External materiality analysis: the third phase involves the structured involvement of key stakeholders, to obtain an assessment of the relevance of the sustainability aspects. Engagement can be developed through interviews, focus groups, administration of structured questionnaires. The assessment of sustainability aspects starts from the list prepared by the GRI standards, which can be integrated with further specific aspects for the sector and business of reference.

The materiality matrix is the outcome of the corporate reflection process which provides for the structured involvement of stakeholders, aimed at identifying the most relevant aspects, which will be reported in the sustainability report.

4. Definition of the indicator dashboard: once the material aspects to be reported in the financial statements have been identified, the "indicator dashboard" is built, starting from the set proposed by the GRI standards.

5. Data collection: is a particularly delicate work phase, as it transversally involves all company functions and areas, each of which will have to contribute, for its own area of expertise, to the processing of data and information that will flow into the sustainability report.

6. Data and text processing: the data and information are presented and described in the financial statements in a manner accessible to the public, in a complete and exhaustive document. The full document is generally accompanied by summary extracts aimed at specific targets (for example customers, institutions, etc.) or containing the main non-financial indicators.

SASB standards

The Sustainability Accounting Standards Board (SASB) is an ESG guidance framework that sets standards for the disclosure of financially material sustainability information by companies to their investors.

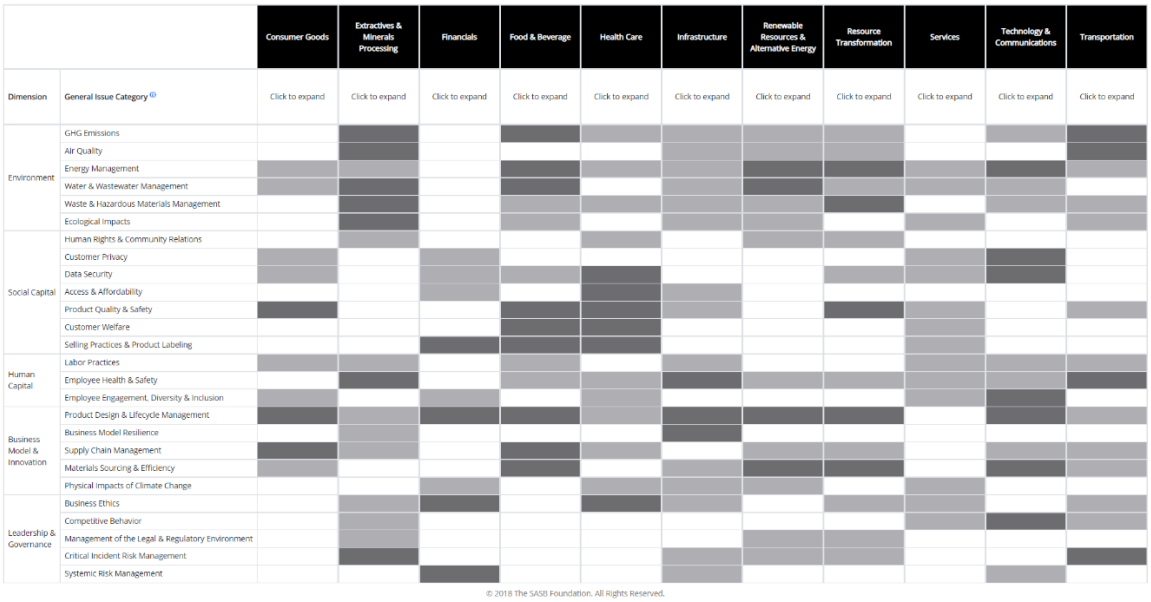
SASB asks companies to highlight specific disclosures and supply guidance on best practice for communicating those Environmental, Social, and Governance topics through standardized formatting. SASB's requirements are focused on what information should be disclosed, but only supplies recommendations on where to disclose or how to share the ESG-related information.

SASB identifies financially material issues, which are the issues that are reasonably likely to impact the financial condition or operating performance of a company and therefore are most important to investors.

SASB has developed a complete set of 77 Industry Standards.

In November 2018, SASB published these Standards, providing a complete set of globally applicable industry-specific Standards which identify the minimal set of financially material sustainability topics and their associated metrics for the typical company in an industry.

These Standards are explained graphically through our Materiality Map that identifies sustainability issues that are likely to affect the financial condition or operating performance of companies within an industry.



In the left-hand column, SASB identifies 26 sustainability-related business issues, or General Issue Categories, which encompass a range of Disclosure Topics and their associated Accounting Metrics that vary by industry.

2.5 ESG applied to Student Housing

The demand for student housing is consistently surpassing supply across Europe, there is a rapid increase in the proportion of the student population demanding better quality accommodation that corresponds to a sustainable lifestyle. In 2018, the total number of international students worldwide reached 6.3 million, up from 4.1 million in 2014, and expectations of student accommodation have increased. Therefore, European

universities must take into account the need for modern and sustainable student accommodation if they are to remain globally competitive.

Italy is one of the larger educational markets in Europe, with 90 universities across several attractive real estate markets. The Italian student accommodation market is highly fragmented with traditional dorm style accommodation owned by public bodies and religious orders. Activity in Italy is increasing among private operators and developers such as Camplus or Campus X.
Camplus is one of Italy's largest operators which offers full-service purpose-built accommodation. Other operators are:

- The Student Hotel
- Campus X
- Aparto
- Gastameco

In Italy, there are 2.3 million of students, out of these 25% live away from home (595.000), and 65.000 number of potential beds (26% private and 74% university/regional organisations).
In fact, Italy is in the top 10 destination countries of internationally mobile students, is in 5th place with regard Erasmus and it has lower cost of living and lower tuition fees than other destinations. Additionally, Italy welcomes around 100.000 international students for year. 97% of students of the Northern part of Italy attend graduate programs in the region where they are resident, while those of the Center remained in their areas in 87.4%. For students from the South and the Islands the situation different, given that 26.5% of them attend graduate programs in universities located in the Center and in the North of the Country.
More than 25% of the total student pool does not come from the same region as where the University is located; in addition, there are 100.000 international students that attended faculties and courses in Italy.

The availability of student housing in Europe is significantly lower than that of the UK (equal to 34%), in France is around 11%, Spain 6% and Italy only 3%. This represents a good opportunity for investors or operators interested in entering a market, particularly in dynamic cities like Milan, Rome, Firenze, Bologna, Torino and Venezia.

In Italy, mobility for study and work is still lower than the other major economies such as the USA and UK, and the propensity towards private ownership at the residential level is still very high. The lack of adequate supply to respond to requirements of the population represents an opportunity for all players involved. I suggest there is an opportunity for great improvements for the sector given the need to satisfy the

increasingly demanding requests of students, the large number of investors who are interested in the subject and above all because of the large gap that exists between demand and offer, especially in Italy.

2.4a Rating system: BREEAM and LEED certifications in the Student Housing

"Sustainability is an economic state where the demands placed upon the environment by people and commerce can be met without reducing the capacity of the environment to provide for future generations." (Hawken 1994)

The global society is facing a huge sustainability challenge and the building sector is a major contributor.
The sustainability challenge calls for an emergent transition towards a socially and ecologically sustainable society.
To align with sustainability, Housing sector conducted an assessment of relevant sustainable practices in the areas of managerial decision making, procurement, energy and water management, dining services and renovation.

Buildings are the largest consumers of energy worldwide and contribute negatively to global climate change which increases greenhouse gasses in the atmosphere, declining global resources and increased damage from their extraction and toxic pollution. Sector moved into specific operational goals for environmental issue areas of energy and water, procurement and design, waste, dining and grounds management. There is a greater focus on sustainability with the presence of governmental legislation and a few instruments, such as voluntary certification schemes (CSs).
Legislation regarding sustainability of buildings is focused on energy: the Energy Policy Act of 2005 and the Energy Independence and Security Act of 2007. Furthermore, there are many policies including energy and water efficiency, use of recycled content, waste recycling. Certification schemes (CSs) are environmental and management tools focus on the construction sector aiming at sustainability.
The most widespread are BREEAM and LEED that incorporate environmental methodologies and management tools.

LEED is the most widespread sustainability certification in Italy, with 210 LEED buildings. Several real estate companies apply certification to their properties both to comply with the new sustainability policies and for an economic return. The application of a sustainability certification (BREEAM-LEED) increases the economic value of the property to which it is applied, making it more attractive on the market. The value increase between 7% and 11% more than properties without environmental certification. The market rewards properties with LEED certification, recognizing sustainability as a decisive element to guide investment choices: the market consequently appreciates the value of the real estate asset with an increase between 7% and 11% depending on the quality of the certification. The effect of the certification is not limited only to the

different valuation of the assets, but affects the timing of their marketing, highlighting a significant improvement in the time required to place the property on the market, if certified. The combined effect of the two effects (increase in prices and faster placement on the market) determines an increase in the return on investment: therefore, a significant signal for investors for whom sustainability is not only an ethical choice, but an opportunity for superior economic and financial performance.

LEED is also a flexible and articulated system that provides differentiated formulations for new constructions, existing buildings, small homes, for urban areas while maintaining a coherent basic approach between the various areas.

- *LEED for Building Design and Construction*: this rating was created for achieving high performance in the design and construction of new buildings and major renovations. Buildings for offices, governments, the tertiary sector, industries and laboratories, residential buildings with at least four habitable floors are the types of buildings that can be certified according to this standard.
- *LEED for Building Operations and Maintenance*: LEED for Existing Buildings constitutes a reference point for users and operators in relation to the issues of design, improvement and maintenance of buildings. The measures adopted have the objective of maximizing efficiency and minimizing the impact on the environment. This system is aimed at the entire building in its complexity, including all matters relating to its maintenance, the recycling programs of the waste produced and the improvement interventions that can be carried out. The rating is applicable both to existing buildings lacking previous LEED certification and to buildings previously certified through LEED "New Construction", "Schools" or "Core & Shell".
- *LEED for Interior Design and Construction:* this rating is a point of reference for those who want to enhance and improve the internal arrangements of their commercial space through sustainable choices.
- *LEED for Neighborhood development:* This rating system integrates the principles of smart growth in the field of urban planning and sustainable building in the first green planning program at a territorial level. areas.
- *LEED CORE and SHELL*: this rating system helps designers, builders, contractors and owners of new buildings to implement a design aimed at sustainability in the design process of the structures. "Core & Shell" affects the building's basic elements such as the structure, envelope and HVAC system.
- *LEED SCHOOLS*: is a rating system that rewards the uniqueness of design and construction for school buildings, trying to respond to the specific needs of these spaces. Based on the footprint of LEED "New Construction", it offers answers to the design of school buildings such as, for example, planimetric and acoustic solutions, strategies for maintaining healthy air, practices for the sustainable development of the site. This rating addresses the singularity

of issues affecting school buildings and occupant health issues. LEED "Schools" provides a unique and comprehensive tool that aims to achieve green, high environmental performance, healthy for students and teachers and cost-effective school buildings.

BREEAM certification is structured in two distinct approaches and protocol families, one for new constructions and renovations (BREEAM New Construction, BREEAM Refurbishment & Fit-out) and one for existing buildings (BREEAM In-Use), and uses the following structure rating:

- In new buildings, the Certification is aimed at increasing energy efficiency, reducing emissions, reducing the environmental impact of buildings throughout their life cycle and improving the comfort conditions of the interior spaces, promoting the productivity and well-being of the occupants.
- For redevelopment projects, BREEAM provides for the possibility of defining the assessment in relation to the type of intervention that will be carried out, or the possibility of concentrating the certification on interventions relating to envelopes and structures, systems, internal architecture allowing to maintain a precise consistency between the certification process and the real purpose of the intervention work.

By interviewing market experts, tax as well as environmental benefits due to the application of a sustainability certification were also leaked. For example, in Milan, there is the “Carbon Tax”: emissions tax paid by owners (25 euros per ton excessive compared to the permitted consumption). There are many other incentives for the application of sustainability criteria, some defined by building regulations or by Italian laws such as D.Lgs n. 11/2008 where in the event that a higher number than the number of renewable sources are integrated provides you with the possibility of accessing a volumetric premium or under certain improvement characteristics of the building envelope you can deduct the thickness of the wall.

The application of sustainability certifications has been a topic that has been around for some years now, the companies concerned are now aware of how to behave, how to move in the market and who to contact. Initially it was difficult to align with the sustainability criteria due to the lack of knowledge of the subject and scarcity of eco-sustainable materials as well as a lack of adequate training of professionals, such as the suppliers themselves.
From an operational point of view, the biggest problem was certainly the management of construction sites, from the cleaning of vehicles to waste management, so much so that people from outside the company in charge of controlling the process were chosen.
The most difficult issue in terms of sustainability was certainly finding the right balance between what it costs to align with the criteria for acquiring the certification and what you gain from it afterwards.

Many companies have an internal rating system for alignment with ESG criteria, and one of these is the acquisition of a sustainability certification as for COIMA.

COIMA is a leading platform in the investment, development and management of real estate assets on behalf of institutional investors and during an interview with Dr. Stefano Corbella, sustainability officer at COIMA, it emerged how COIMA has developed its own rating system, COIMA Charter, with the declination of 3 areas of intervention:

- protection (resilience, environment)
- inclusion (in social terms)
- growth (economic regeneration of the territory, therefore the impact that the operation has on the soil).

COIMA provides for the application of its rating system to the product before its regeneration, COIMA Charter, measuring its performance with the KPIs selected by the company itself. One of the most common KPIs from an environmental point of view is certainly the application of a sustainability certification to the building (LEED, BREEAM) and an assessment is assigned depending on the target level achieved. Generally, the aspects of future operational emissions compared with the Paris targets are also taken into consideration. We will therefore have a sector decarbonization curve with the definition of the company's objective where the more time passes from the expected future performance compared to the Paris objectives, the more it has been possible to minimize the risk of transition. The contribution is then measured on a self-defined scale taking the Paris objectives as a reference.

2.6 Covid impact

COVID-19 has changed our lives. It shows us our ability to deal with major global crises, exposes systemic weaknesses and highlights structural flaws. One of these shortcomings is related to social infrastructure. The pandemic has highlighted that many communities around the world lack the necessary facilities to effectively combat threats such as COVID-19. These shortcomings are likely to lead to a sadly high infection rate and death rate. There must be insufficient real estate infrastructure even before COVID-19, but the pandemic has highlighted the need for increased investment.

Despite the pandemic, in the last academic year (2020/2021), the number of college freshmen increased by 2% compared to the previous period, and the total number of new registrations exceeded 316,000. Conversely, the number of new enrolments in telematics universities fell by 34%, and the number of international students also fell, but by a smaller margin (-1%). The 2020/2021 academic year presents a more diverse and broader panorama of universities across the country. Covid did not affect the number of students, but it led to a greater distribution of students in different Italian universities from north to south. Many students choose to study at the university closest to home. In order to prevent the consequences of the

future blockade, and due to the implementation of mixed teaching (partly online, partly present), students choose not to leave their city to save rent and travel expenses.

The pandemic highlights how residents truly appreciate the services and functions provided by the residences. All residences must renovate their service spaces to ensure the safety of residents, while striving to provide an excellent living experience in all situations. In addition to the standard expectations of providing hand sanitizer throughout the building and entrances, increasing the daily cleaning of public spaces, and using record sheets to monitor guests and employees, owners must also creatively provide residents with excellent services while ensuring their health and safety.

As the pandemic forces students to adapt to a new student lifestyle and restricts them to their own apartments, we can expect a wave of students seeking more spacious accommodation. Similarly, post-pandemic students will value the privacy provided by private beds and bathrooms, so students may choose to avoid sharing bedrooms. It is also necessary to share a bed and a bath to reduce the spread of bacteria.

A community that provides students with ample living space would be desirable-fully equipped kitchens, in-unit washing machines and dryers, and spacious bedrooms would be essential-and dormitory-style accommodation in cramped dormitories without full appliances Will be less popular.

Finally, the high-speed internet included in the rent will continue to be the main selling point, and students may avoid choosing student dormitories that do not provide high-speed internet options. Communities that do not have these functions may be forced to renovate or risk losing student housing numbers.

COVID-19 has changed our lifestyle and above all our needs and therefore even the Student Housing themselves have had to adapt to the new demands of the students.

Student Housing before the COVID-19 pandemic:

- The number of students worldwide has grown steadily in the past few years
- Especially the proportion of international students has increased significantly in the past ten years (the highest increase in international students from China and India)
- Consequences of increased international student mobility: increased demand for student dormitories and growing student housing market
- Between 2014 and 2019, global student housing investment increased by 135%
- The United States and the United Kingdom are the most popular countries for international students due to their large number of internationally renowned universities.

Student Housing during the COVID-19 pandemic:

- With the outbreak of the epidemic, higher education institutions had to close their campuses, leading to changes in online education

- On the one hand, in some cases, international students cannot return to their home country and stay in the dormitory; on the other hand, there are fewer international students in Europe in the 2020/21 academic year
- Student mobility has dropped significantly, visas have not been issued for the time being, and the number of student visas has been significantly reduced: countries with a high degree of dependence on international students will be more affected
- The student dormitory occupancy rate will drop slightly in 2020: the room occupancy rate across Europe has dropped by about 10%.
- The impact of the epidemic on the number of students cannot be accurately measured; however, unlike other forms of housing, the demand for student housing is countercyclical. Previous observations have shown that in times of crisis, the number of students has risen and the demand for student housing has risen: Due to the uncertain labor market situation, students choose alternative studies or study for longer periods of time to postpone enrollment into the work world.

In Italy, there was a sudden shift in the student housing market: rents fell for the first time because of the negative impact of Covid-19 on prices. The average cost of a single room across the country fell by 2.5% this year, with Milan experiencing the largest drop (-9%).

According to Immobiliare Insights, the research arm of the real estate website Immobiliare.it, the pandemic has led to the prevalence of online education and the increase in market supply has led to an unexpected drop in rents.

Demand has almost doubled this year, an increase of 96.3% compared to 2020, but still does not match the market supply, an increase of 60.6% compared to last year.

After all the lockdown measures changed drastically last year, the market was still adjusting, when many students were unable to reach their destinations and go to university remotely.

3 Quantitative Analysis

3.1 Investment Decision

We have considered a student residence under development, located in Rome in the San Giovanni area. Before describing the project specifically, I would like to focus on an in-depth analysis of the city, in which the student residence will have to operate.

ITALY **KEY ECONOMICS**	
Resident people Q4 2019	60.48 mln
GDP 2018	1 765 € bln
GDP per capita 2018	29 183 €
Unemployment rate Q4 2019	9.7 %
GDP var % (YoY) 2019	0,1%
Students	1.7mln

Source: EUROSTAT, EU Commission

ROME **KEY FIGURES** (metropolitan city)	
Surface	+5,300 Km2
Zone	36
Municipality	121
Population density (inha./km2)	+800

Source: Istat

ROME **KEY ECONOMICS**	
Resident people Q4 2019	4.3 mln
GDP per capita 2018	28 241 €
Students (overall number)	235k (14% of tot)
Students incoming from outside Rome (of which 70% from other regions)	12k
International students	71,25k

Source: Sole 24 ore, Istat

Rome is one of the Italian cities that hosts more students, both off-site and non-resident, during the year. The great demand for beds has meant that in recent years various operators have committed themselves to satisfying the demand, increasing the supply of university residences. Among the most recent we find Campus X of Tor Vergata, inaugurated in 2010, designed with great attention to eco-sustainability and energy saving and inspired by the Domus Romana, the campus promotes cohesion and sociality among the residents. This attention to environmental and social issues that is increasingly at the centre of the new Student Housing policies, in line with compliance with ESG policies.

Our property is located in San Giovanni (Re di Roma), in one of the areas of the city with the highest population density (+10,400 inha / km2). The area, easily accessible as it is adjacent to the San Giovanni e Re di Roma Metro, is in great demand by university students and young workers.

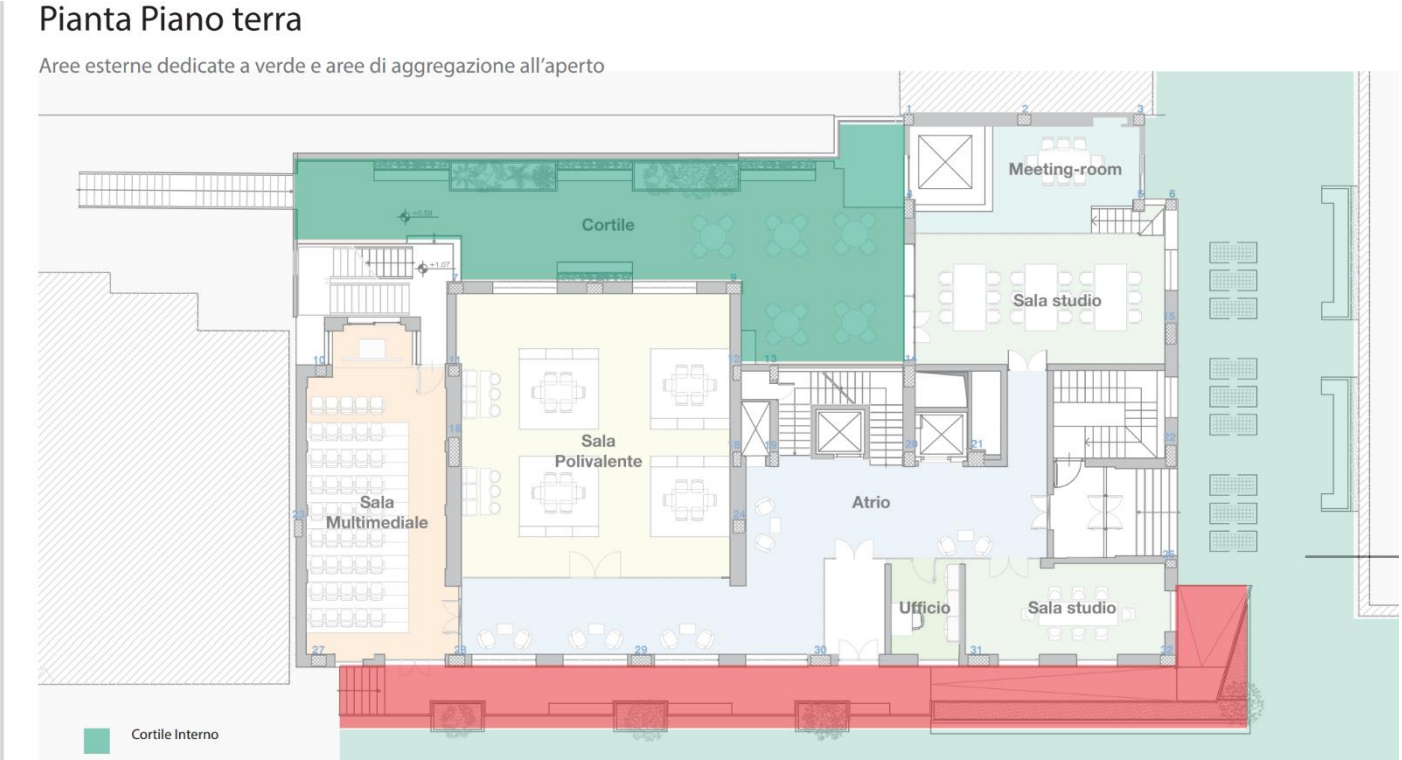
San Giovanni is a neighborhood with a high population density, well connected to the rest of the city (metro A). The presence of metro and buses allow easy access to the main universities of the city (La Sapienza, Roma Tre, Tor Vergata). Rome La Sapienza and Roma Tre are about 15/20 minutes from the property and can be reached by metro.

Very attractive area for students and young workers, located near the recreational areas of the city (strong demand for housing solutions in the area where the property is located). The proximity to the center makes the neighborhood very popular with young off-site workers.

The property benefits from an excellent location, quiet and with privacy, being located on an internal street. The property is divided into 7 floors above ground connected by 2 main staircases, one internal and one external. The property has a good structural layout and a beautiful facade (1950). The property has a large basement that can be used for the provision of common services to students.

The structure, in Via Faleria 21, was built in 1950, with a partial renovation in 1999, and was born as a school for private use. The operation is aimed at transforming the property into a social infrastructure at the service of university students and young workers.

The goal is to implement the concept of educational living in which the training services provided (tech & soft skills complementary to university training courses) are accompanied by quality housing services that are instrumental to networking.



As in any student housing, great attention will be paid to the common areas, the heart of the residence, where students can gather to carry out activities in groups or simply switch off and relax.

Via Faleria is a student residence designed to be a "human accelerator" both from the point of view of the contents (the courses that will be held there and the company-university synergies that will be created there) and from the point of view of the container; that is, a space that recreates the optimal conditions for this to happen. The aim is, therefore, to create environments that are optimal for the enhancement of those intelligences that students will be called to develop. We will do this through the conceptualization of space, design and color. This choice can assist and strengthen what users will study (content); moreover, it will make the studentate (container) transversal for the subjects that will be taught and, therefore, durable over time.

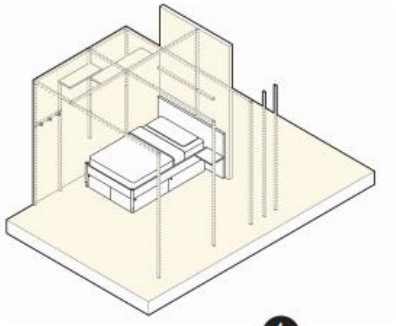
These accomodation aims at a strong integration of green areas within the structure, in the internal courtyard, in the common areas, outside the campus and also on the balconies of the students' rooms.

AREE COMUNI

CO-WORKING/MEETING ROOM

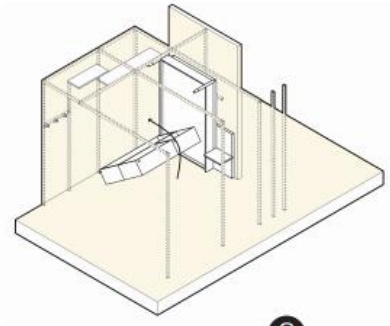
Falaria offers three different types of stay, in addition to the student residence service to which 94 rooms are dedicated, has 11 rooms for hotel use for user co-working and 105 rooms for hotel use only in the summer period.

The layout of each room includes a frame module of steel rails, the cabinet container opens from the wall transported by hooks from the rail in front, but we also find a foldaway bed with a wardrobe container below. In addition, it has an essential study area with an extendable corner desk that also acts as a dining area and a bookcase.



1

Lo schema della camera tipo prevede un modulo di telaio di binari in acciaio.



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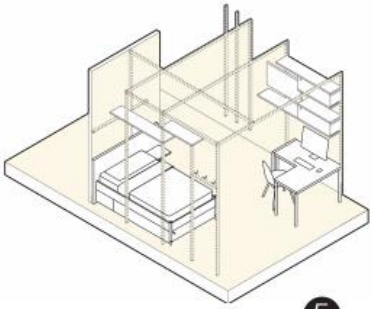
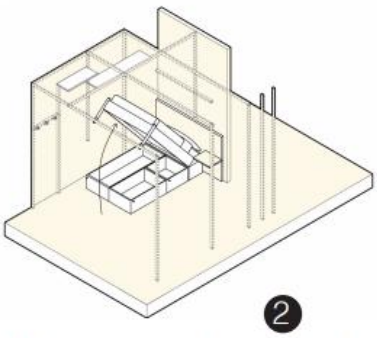
Il contenitore armadio si apre sulla parete di sinistra trasportato tramite gangi dal binario antestante.



5

La stanza gode di una zona studio essenziale con una scrivania ad angolo ed una libreria.



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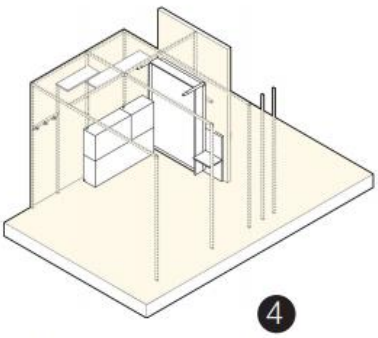
Il letto apribile a scomparsa si ribalta sulla parete anteriore, rivelando un contenitore armadio sottostante.



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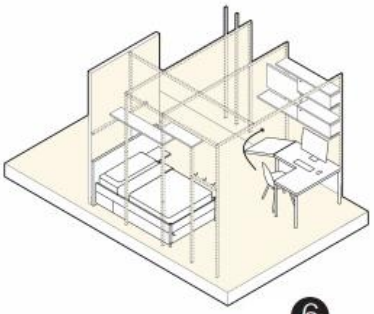
La stanza gaudagna uno spazio centrale arioso che si presta a una moltitudine di funzioni.



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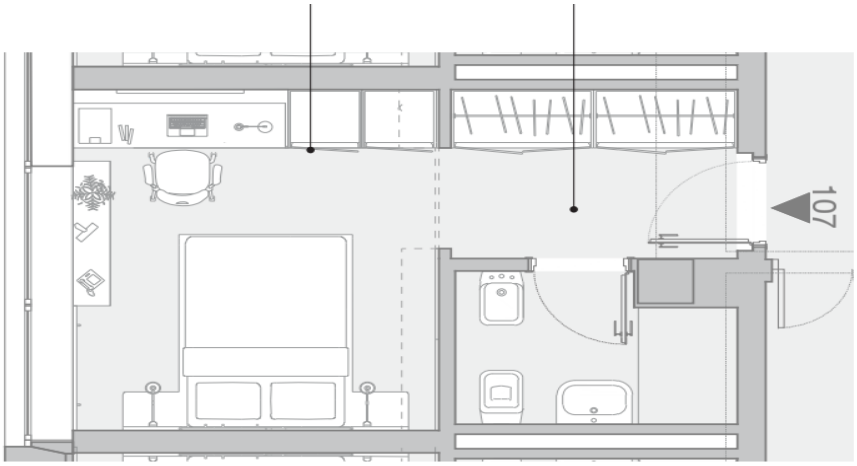
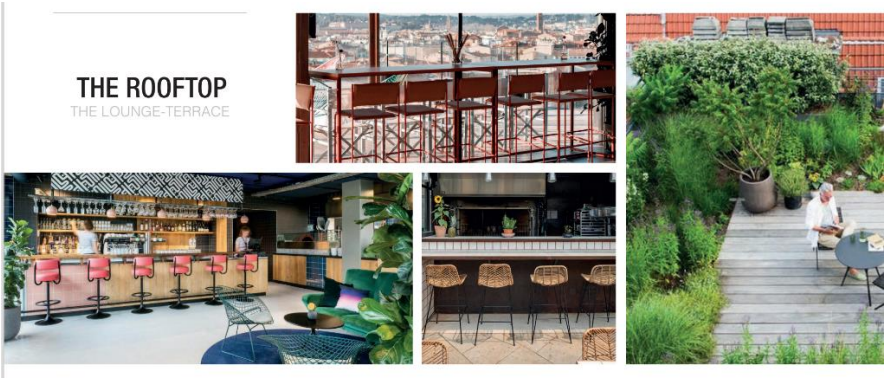
La srivania è allungabile su un lato ingrandendo la zona studio fungendo anche da zona pranzo.



The photo above represents a single room type of the structure, on average they have a floor area of 11 square meters with the presence of a private bathroom of about 3 square meters, for a total of 14 square meters, where the student can also enjoy a desk to study or to eat.

The concept behind the interior design of the new student housing in Via Faleria aims to create a unitary project that meets the needs of contemporary living and working while respecting the client's requests and functional and architectural needs. The choice of furnishings and finishes, for each individual environment, draws a dividing line between formal environments and those aimed at networking and leisure, always generating however a mixture of these functions, thus creating a mix of activities that underlie this. new student residence format. The choice of colors is aimed at ensuring complete visual comfort, favoring the activities carried out within them. There are softer and warmer colors inside the study and workspaces, unlike the more lively ones in the common areas and corridors, creating that chromatic vivacity necessary in a creative and developing environment.



Another characteristic factor of the structure will be the presence of wallpapers, information panels, screens or posters fundamental to achieve this type of design, underlining the different approach of this innovative format which, unlike the existing ones, must tend not to have a clear differentiation between spaces for

recreation and workspaces, but, on the contrary, it must provide for their mixing, favouring learning even in those spaces for recreation and socializing.

3.2 Management and services offered

Via Faleria Student Housing presents a split between ownership and management. The structure was purchased by the Azimut Libera Impresa Infrastructure Fund and managed by Edu Living.

Edu Living is a manager that offers services of:

- *co-living*: management of high-quality living spaces with single rooms and facilities for university students and rooms dedicated to providing short-term accommodation services (max 10% of the structure) for teachers, university staff, and co-workers of the structure. The management of the living spaces is supported by a strategic partnership with TH Resort
- *co-studying*: provision of training courses complementary to the university course for the enhancement of transversal skills. The teaching activity is supported by a strategic partnership with an international operator: GY Academy
- *co-working*: management of flexible shared workspaces for companies with partnership agreements (including exclusive ones) with big corporates, spaces that encourage "positive contamination" between students and the world of work, promoting employability.

Edu Living business model is based on strategic partnerships and framework agreements for outsourcing contracts (teachers, cleaning, etc) which allows effective management of revenues and costs, limiting the impact of fixed costs on the manager.

A diversified revenue structure with:

- 40% of the revenues from accommodation services to students with rental contracts of a minimum duration of 10 months [and option to contracts of 2Y],

- 25% of revenues from training services,
- 25% of revenues from short-term accommodation services e
- 10% from other services (gym, restaurant, etc.)

The cost structure includes fixed and variable components. The main cost items are:

- rent with a total incidence of 40% (9Y + 9Y),
- personnel with an overall impact of 30% on revenues (teachers, structure management, holding costs),
- utilities / cleaning / maintenance with an incidence of 15%
- 15% in other costs (marketing).
- Fixed costs have an incidence of approx. 65%.

The Ingenium Edu Living Project is based on a very lean and efficient business model, characterized by a scalable model, which can be replicated in various cities in Italy and Europe. Via Faleria an infrastructural project capable of generating positive multiplier effects on the real economy, given the multiple functionalities, not only as a university residence but also as an educational environment.

The project has the following objectives:

- cover an outstanding demand for training services, providing training courses complementary to university training necessary to easily access the labour market such as sector certifications, IT or development of required soft skills,
- bridging the university / labor market gap: integration into the world of work is difficult and slow due to the lack of specific skills required in the working world,
- increase the effectiveness of incubators, anticipating the birth of successful startups, also thanks to co-working spaces in which to encourage "contamination" between companies and students,
- foster the employability of students by developing their skills and entrepreneurial skills,
- encourage the sharing of skills & experiences during the university period.

Therefore, Edu Living project aims to cultivate skills in society by promoting cohesion and teamwork given the great importance given to common spaces.

In addition to high-quality living spaces, the residence also benefits from co-working areas, spaces that foster a sense of community and aggregation. From the educational point of view, the student can enjoy courses with a strong technological / IT content and courses that allow the development of soft skills through lessons with industry experts.

Via Faleria also offers spaces entirely dedicated to startups with the aim of rejuvenating the job market through young students with skills aligned with the market or through the birth of new companies. The presence of all these training activities and spaces used for the community is aimed at improving youth employment, which is increasing sharply. In Italy, the youth unemployment rate rose further from an already very high level of 28.7%, reaching 33.8% in January 2021. Promote the country's growth by reducing youth unemployment and boosting GDP growth.

What training does the Via Faleria residence offer for its students?

- fosters the development of the skills needed in the 21st century:
    a) how students apply basic skills to daily activities: literacy, numeracy, scientific literacy, ICT literacy, financial literacy, cultural literacy, literacy
    b) how students approach complex challenges: critical thinking, problem solving, creativity, collaboration, communication

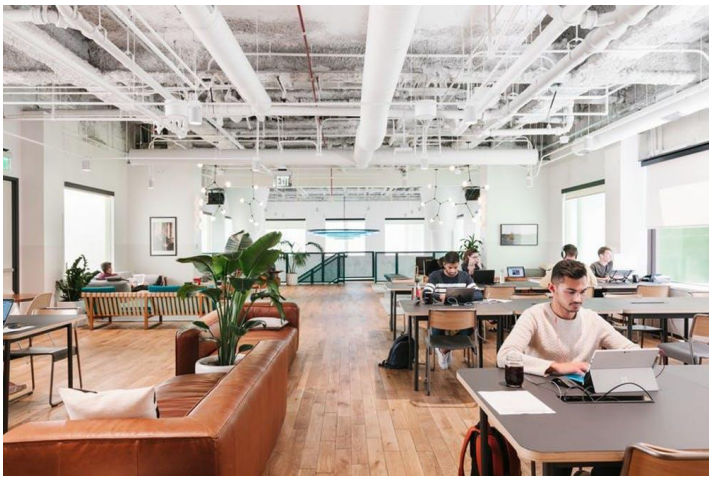
c) how students approach their changing environment: curiosity, initiative, adaptability, leadership, social and cultural awareness

- skills needed to interact with technology: fraud and security breach detection, production management automation, social media monitoring, financial trading automation
- human skill and soft skill: teamwork, analytical thinking, decision-making, active learning

The Ingenium Edu Living training offer includes training modules from the bachelor's in international business administration & Entrepreneurship (also available online):

- Comunication skills: International Business communication
- Behavioural skills: Business Management & Organizational Behaviour
- Entrepreneurship: Social Innovation & Entrepreneurship
- Resource management & decision-making: People Management
- Sustainability: Corporate Social Responsibility & Sustainable development
- Financial Modeling
- Artificial Intelligence: Digital Business Transformation

The structure will therefore be organized to satisfy the different activities that will be carried out within it. There will be entire spaces dedicated to co-working and co-studying that can become the first point of contact between training and the world of work, promoting:



- Lifelong learning for professionals of partner companies through access to the courses of the structure
- Contamination between students and professionals to favor the lifelong learning path,
- Ability to create ad hoc training courses for host companies
- Integration between selected host companies in modular and widespread spaces
- Promotion of self-employment initiatives
- Recruitment process by HOST companies directly in the structure
- Make student work hours available to companies on specific projects
- Hosting professionals on the go

3.3 ESG impact

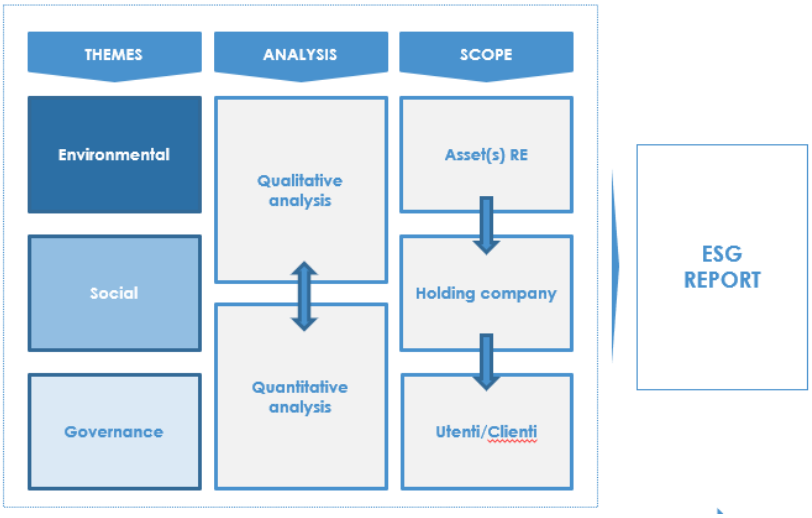
The issue of sustainability, as well argued in chapter 2, is increasingly central in the real estate market, most of the operators working in the sector are trying to align themselves with ESG criteria also through the acquisition of sustainability certifications.

The integration of environmental, social and governance criteria would bring great benefits to the structure both from an economic point of view by increasing the value of the building as well as reducing consumption and from the point of view of respectability in the market.

ESG issues are incorporated in all the activities that are carried out by the company:

- Active ownership: the management team will actively lead the improvement of the ESG profile of all the structures under management. This active approach is possible thanks to solid governance and continuous qualitative and quantitative monitoring of environmental and social aspects.
- Integration: ESG issues will be evaluated for each key decision of the management team, both for new investments and for new initiatives on existing investments
- Exclusion: the company carries out a careful pre-screening of the counterparties with which it has professional relationships (. suppliers, employees, banks, investors ...). Counterparties for which there is a risk of involvement in the tobacco, gambling, weapons, alcohol and adult entertainment sectors will be systematically excluded from the company's list of potential counterparties.

We have developed specific KPIs that will be measured and monitored continuously and then draft ESG Reporting in which investors will receive, at least on an annual basis, a report on the ESG aspects with details of the monitored KPIs and their performance over time.



Each activity provided, each material and product used in the construction of the structure or event that will host the residence will be monitored by specific KPIs specifically chosen.

- Training courses and business partnerships will be monitored by the presence of students in the courses, the results obtained, and the skills achieved.
- The organization of voluntary events and initiatives are most often themed, including the participation of students.
- Merit scholarships funded by investors or foundations are awarded based on active grants and scores of students with grants.
- The monitoring of the reward system for conscious consumption and waste management is guaranteed by the values of energy, water consumed and separate waste collection.

In the residence, therefore, there will be separate waste collection and a reward scheme for students who manage waste effectively (less consumption of plastic vs glass).

The containers for undifferentiated collection will have digital access (access via the App identifying the user), with incentives for students to follow environmental practices: those who produce less undifferentiated will be rewarded with additional services.

The manager will promote the conscious use of natural resources by monitoring students' water and electricity consumption and implementing a reward system that can be used on the integrated APP of the structure with incentives:

- discount on the annual fee for the most virtuous,
- Penalty on the fee for the worst performers

The residence, adhering to ESG policies, monitors the consumption of energy, water and waste, thus reducing part of the operating costs and enhancing the property itself from an economic point of view.

3.4 Financial Analysis

The student residence in Via Faleria presents a split between ownership (PropCo) and management (OpCo). The structure was purchased by the Azimut Libera Impresa Infrastructure Fund and its operational management will be by Edu Living.

Edu Living (OpCo), on behalf of the operating company, is responsible for daily operations and management. Assumes the role of a tenant and pays the rent of real estate assets to Azimut Libera Impresa (PropCo), which owns the ownership of the assets. In other words, OpCo sells products, signs contracts, hires employees, and deals with customers. PropCo owns buildings and holds commercial assets such as real estate.

INVESTMENT SUMMARY	
Street address	Roma, Via Faleria 21
Year of construction	1950 with partial refurbishment in 1999
Real Estate Investor	Fondo Infrastrutture Azimut Libera Impresa
Tenant	Edu Living
Intended Use	Educational Living
GA (Gross Area)	5755
GLA (Gross Leasable Area)	4719
Gross Yield base	4,40%
Net Yield	3,90%

GLA Covered (Gross Leasable Area): Gross leasable area, or GLA, is the area in a commercial property designed for the exclusive use of a tenant. GLA typically includes mezzanines, basements, or upper floors, but shared areas, such as public bathrooms or maintenance areas. Gross leasable area is usually measured from the center of the wall separating tenants. Internal walls (but not those shared with other tenants) are incorporated into GLA.

Gross Yield Base: The gross yield of an investment is its profit before taxes and expenses are deducted. Gross yield is expressed in percentage terms. It is calculated as the annual return on an investment prior to taxes and expenses, divided by the current price of the investment.

Net Yield: The return on a security after all expenses, it takes into account all the fees and expenses associated with owning a property.

Azimut Libera Impresa is an integrated platform of products and services dedicated to entrepreneurs / SMEs on the one hand and investors / savers on the other, with the aim of encouraging the injection of liquidity into the real economy in order to stimulate growth and make it sustainable over time. The development plan of Azimut Libera Impresa SGR provides for the progressive supervision of the main investment strategies in Alternative Asset Management.

The Azimut Libera Impresa funds are active in the main investment asset classes of Alternative Asset Management: Private Equity, Infrastructure and Real Estate and Private Debt. In our case in infrastructure and real estate, the investment plan for Via Faleria 21 follows:

Real Estate Investment	15.781.324,00 €
a) Asset Purchase Value	8.500.000,00 €
b) Hard Capex	5.662.800,00 €
c) Furniture and System	1.081.500,00 €
d) Soft Capex	537.024,00 €

Capex: Capital expenditures (CapEx) are funds used by companies to acquire, upgrade, and maintain physical assets (such as property, plant, buildings, technology, or equipment). Capital expenditures are usually used to undertake new projects or investments in the company. Capital expenditures for fixed assets include repairing roofs, purchasing equipment, or building new factories.

Hard Capex: Means construction costs. Anything related to the physical development of real estate is usually considered a hard cost. This includes the physical materials required to construct the project (for example, steel, concrete, interior furniture, etc.) as well as contractors who need their labor to complete the project. The hard capex usually accounts for about 70 percent of the total cost of construction.

Soft Capex: Anything that is not directly related to the production and development of any construction project is called soft cost. The costs indirectly related to construction fall into this category. Soft costs are variable. For example, advertising can be done through word-of-mouth at first, and then turn to digitization. Costs that may occur even after construction is completed, such as maintenance costs. Soft costs account for 30% of the entire construction cost.

These costs may be construction and design fees, inspection fees, land and real estate costs, loans, lease tools, project management, local and state taxes, surveys, feasibility study costs, etc. New construction laws have also led to rising costs in terms of soft costs, such as LEED certification for buildings.

The structure is used both as a student residence during the academic year and as a hotel in the 2 summer months (July and August).

General Assumption				
	#	price		occupacy
Student housing rooms	94	900,00 €	monthly	95%
Co-working rooms	11	85,00 €	daily	95%
Hotel services rooms (July and August)	105	70,00 €	daily	70%
Training courses		6.000,00 €		70%
Other revenues - Food&Beverage		15%	of revenues	
Space leasing to third parties		36.000,00 €		
Co working rent		54.000,00 €		
Effort rate		45%		
Personnel costs		30%	of revenues	
Utilities/cleaning/ maintenance		15%	of costs	
Marketing costs		8%	of costs	

Via Faleria has 105 single rooms:

a) 94 rooms at € 900 euros per month for the university residence service

	SH		BEDS	ROOMS%	M	RATE	OCC	Rev pot
ROOMS		94	94	100%	12		95%	803.700
SINGLE		94	94	100%	12	900		803.700
DOUBLE		0	-	0%	12	400		0
TRIPLE		0	-	0%	12	0		0
QUAD		0	-	0%	12	300		0

b) 11 rooms at € 85 euros per day in a hotel service for co-workers.

Co-working		0	0	GG/mese	0	0	Rev pot
ROOMS	11	11	100%	28		95%	248.710
SINGLE	11	11	100%	28	85		248.710
DOUBLE	0	-	100%	28	38		0
TRIPLE	0	-	0%	28	32		0
QUAD	0	-	0%	28	30		0

c) During the summer period (July and August) the 105 rooms are destinated for hotel service at € 70 euros for day.

HOST		BEDS	ROOMS%	GG/mese	RATE	OCC	Rev pot
ROOMS	105	105	100%	28		70%	288.120
SINGLE	105	105	100%	28	70		288.120
DOUBLE	0	-	0%	28	38		0
TRIPLE	0	-	0%	28	32		0
QUAD	0	-	0%	28	30		0

As reported above, it is expected to generate a potential profit of € 803,700 from the student residence service (a), assuming 95% occupancy of the facility, and € 248,710 from the 11 rooms dedicated to co-workers' users (b). In the two summer months dedicated to hotel service, it is expected to generate € 288,120, assuming 70% occupancy.

	1 Gen	2 Feb	3 Mar	4 Apr	5 Mag	6 Giu	7 Lug	8 Ago	9 Set	10 Ott	11 Nov	12 Dic	TOT
Occupacy SH	95%	95%	95%	95%	95%	95%	0%	0%	95%	95%	95%	95%	
	80.370	80.370	80.370	80.370	80.370	80.370	-	-	80.370	80.370	80.370	80.370	803.700
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
TOT income SH	80.370	80.370	80.370	80.370	80.370	80.370	-	-	80.370	80.370	80.370	80.370	803.700

	1 Gen	2 Feb	3 Mar	4 Apr	5 Mag	6 Giu	7 Lug	8 Ago	9 Set	10 Ott	11 Nov	12 Dic	TOT
Occupacy co-workers	95%	95%	95%	95%	95%	95%	0%	0%	95%	95%	95%	95%	
	24.871	24.871	24.871	24.871	24.871	24.871			24.871	24.871	24.871	24.871	248.710
TOT income Co-workers	24.871	24.871	24.871	24.871	24.871	24.871			24.871	24.871	24.871	24.871	248.710

	1 Gen	2 Feb	3 Mar	4 Apr	5 Mag	6 Giu	7 Lug	8 Ago	9 Set	10 Ott	11 Nov	12 Dic	TOT
Occupacy Host	0%	0%	0%	0%	0%	0%	70%	70%	0%	0%	0%	0%	
	-	-	-	-	-	-	144.060	144.060	-	-	-	-	288.120
	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-
TOT income Host	-	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	144.060	144.060	-	-	-	-	288.120

Summing up the potential profits obtained from the student hotel service and the hotel service, Faleria realizes an income of € 1,218,663.64.

The 10% VAT is a subsidy that can be applied to construction works, such as building renovation, renovation, restoration and conservative rehabilitation. It can also be applied to the purchase of goods, excluding raw materials and even semi-finished materials.

The VAT to be paid is equal: 121,866.36 that is the 10% of the revenues.

INCOME	1.340.530,00 €
of wich VAT	121.866,36 €
REVENUES	1.218.663,64 €
EDU Living	394.800,00 €
Other SERVICES	182.799,55 €
Total REVENUES	**1.796.263,18 €**

Effort Rate	45%
RENT/YR	808.318,43 €

The structure Via Faleria offers several additional services:

1) Enrolment in training courses within the structure complementary to insertion into the world of work is equal to € 6,000.00 per year.

2) By "other services" we mean the gym and restaurant service which we assume equal to 10% of the revenues.

Assuming 70% student participation, the training courses offered generate € 441,000 annually.

*EDU Living Services Revenues = 70% (occupancy) * 6000,00 euro (annual fee for training courses) * 94 (number of potential students)*

Assuming that 15% of students use the food service, gym or other services available in the residence, the annual profit of the residence increases by 182,799.55. Thus, the total revenues are equal to € 1,796,263.18.

Total Revenues = Accommodation Services + Edu Living Services + Other Services

	Edu Living					
	1.796.263,18 €	50%	60%	**70%**	80%	90%
Other Services	5%	1.561.596,82 €	1.617.996,82 €	1.674.396,82 €	1.730.796,82 €	1.787.196,82 €
	10%	1.622.530,00 €	1.678.930,00 €	1.735.330,00 €	1.791.730,00 €	1.848.130,00 €
	15%	1.683.463,18 €	1.739.863,18 €	**1.796.263,18 €**	1.852.663,18 €	1.909.063,18 €
	20%	1.744.396,36 €	1.800.796,36 €	1.857.196,36 €	1.913.596,36 €	1.969.996,36 €
	25%	1.805.329,55 €	1.861.729,55 €	1.918.129,55 €	1.974.529,55 €	2.030.929,55 €

The value of the total revenues varies as the rate of participation in the additional services provided by the structure varies. Our analysis is based on general assumptions, in which the participation rate in training courses equals 70% while the restaurant, gym or other service represents 15% of total profits.

Nonetheless, as we can see from the graph above, total revenues increase / decrease as the rate of participation in courses or ancillary services increases / decreases.

The Effort Rate is the percentage of the household's total income used to repay the agreed credit instalment.

Effort rate = (Financial charges / Total Net Income of Household) x 100

Our effort rate is 45%, therefore the rent that the residence manager is willing to pay is equal to € 808,318.43 for year.

	Effort Rate					
	808.318,43 €	43%	44%	**45%**	46%	47%
Total Revenues	1.596.263,18 €	686.393,17 €	702.355,80 €	718.318,43 €	734.281,06 €	750.243,69 €
	1.696.263,18 €	729.393,17 €	746.355,80 €	763.318,43 €	780.281,06 €	797.243,69 €
	1.796.263,18 €	772.393,17 €	790.355,80 €	**808.318,43 €**	826.281,06 €	844.243,69 €
	1.896.263,18 €	815.393,17 €	834.355,80 €	853.318,43 €	872.281,06 €	891.243,69 €
	1.996.263,18 €	858.393,17 €	878.355,80 €	898.318,43 €	918.281,06 €	938.243,69 €

Changes in effort rate and/or total residential income can change the fees that managers can pay to owners. As can be seen from the above table, an increase in the effort rate and/or profit generated by the services provided by the structure will result in an increase in the expenses that the operator can pay, on the contrary, the reduction in the value of these expenses will result in a decrease in the expenses.

FORECAST EBITDA		
Rooms (Price in € excl.IVA)	Total rooms: 105 single rooms	
a) Students accomodation	a) 94 rooms RSU, occupacy 95%, P/ month: € 900	
b) Hotel for users co-working	b) 11 rooms hotel, occupacy 95%, P/Day: € 85	
c) Hotel only summer period (July-August)	c) 105 rooms, occupacy 70%, P/Day: € 70	
Revenues OpCo Edu Living:		2.008.129,55 €
a) Rooms RSU-10 months		803.700,00 €
b) Rooms hotel for co-workers		248.710,00 €
c) Rooms hotel summer period-2 months		288.120,00 €
d) Training courses (70% students partecipation)		394.800,00 €
e) Other revenues - Food&Beverage (15% of revenues)		182.799,55 €
g) Space leasing to third parties		36.000,00 €
g) Co working rent		54.000,00 €
Costs OpCo Edu Living:		1.872.627,09 €
Rent		808.318,43 €
Personnel costs (teachers, structure management)		602.438,87 €
Utilities/cleaning/ maintenance		301.219,43 €
Marketing costs		160.650,36 €
EBITDA		**135.502,46 €**

In summary, according to our forecast, the Faleria university residence generates revenues equal to € 2,008,129.55 through the accommodation service and the services provided by the structure. The facility faces various fixed and variable costs including management fees, personnel costs, utilities, cleaning, maintenance costs and marketing costs. EBITDA is expected to be 135.502.46.

EBITDA: stands for Earnings Before Interest, Taxes, Depreciation, and Amortization and is a metric used to evaluate a company's operating performance. The EBITDA indicator is a variant of operating income (EBIT) and does not include non-operating expenses and certain non-cash expenses. The purpose of these deductions is to remove factors that business owners can decide for themselves, such as debt financing, capital structure, depreciation methods, and taxes.

The situation can change according to the success of the residence, therefore according to the demand for beds and according to the participation in the services.

Our analysis stops at the calculation of the EBITDA which represents the overall gross result of the company. It is a project that has not yet started, and we cannot hypothesize other values for the purpose of calculating Net Income. Our goal is to evaluate the sustainability of the investment and management operations. In a new world like ours, investors are no longer just real estate but infrastructure, interested in

investments that have a positive impact on the country's growth and productivity potential by improving the standard, quality of life and health of citizens. The profitability target that an investment should generate to be acceptable to the investor is around 5%. Faleria's investment is approximately 15 million and will generate an annual rent of € 808,318.43 that Edu Living will have to support. The investment is sustainable from the point of view of both the investor and the manager: the rent is very close to the 5% requested, and the EBITDA is positive, showing that the revenues are sufficient to cover the costs related to the core business, including the rent

Conclusions

Student Housing is already an integrated market segment in Europe, but in Italy, it still has great potential for development. Although the European market has recorded different dynamics in different countries, it is characterized by an overall insufficient supply of student beds: the prevalence of this structure is still directly managed by universities or religious groups. The strong demand for beds by students has aroused great interest from investors. In fact, from 2012 to 2018, the amount of investment in student apartments in Europe and the UK has increased steadily. The Netherlands, Germany, and Spain have initiated the internationalization of their university systems, aiming to reach the level of the United States and the United Kingdom. A process of development of the sector is necessary with the realization of new structures which will be able to satisfy the demands of the market. The construction of new university residences must be accompanied by the provision of extra-university activities within it that can have a positive impact on the student. It would be very useful for students if complementary training services to the university were provided within the structure where they are staying, useful for entering the world of work and the enhancement of transversal skills. Slow entry into the world of work due to the lack of specific skills required in the world of work can bridge the gap between the university/labour market, increase the efficiency of incubators, predict the birth of successful startups, and owe space to work together to promote collaboration between companies and students. The “pollution” of the time, through the development of students’ skills and entrepreneurial skills to improve students’ employability, and encourage the sharing of skills and experience during university.

A process of development of the sector is necessary with the realization of new structures which will be able to satisfy the demands of the market. The university residence market, therefore, needs new investments, new capital to be made available to market operators. The new world of Real Estate is increasingly characterized by the presence of infrastructural and not just real estate investors, careful in choosing the assets on which to invest. Social infrastructures (retirement homes, schools, sports facilities and student residences) are facilities that provide essential services for the community resulting in a better society. In order to attract a greater number of investors it is necessary to guarantee a Dual Return, which provides in

addition to a financial return, ensuring at least the coverage of the initial investment, an Impact Return, aimed at improving the conservation of resources with positive impact on the community. The investment must include the production of long-term services aimed at creating a positive impact from an environmental point of view by reducing CO2 emissions and consumption (gas, electricity and water). Infrastructure investments generally have a low volatility and a long-term time horizon, as well as a good diversification from the point of view of the services provided to overcome inequalities.

It is advantageous for investors that the asset enjoys a high liquidity such as to be easily traded on the market. In recent years, in terms of ESG, there has been a 29% increase in social investments in 2020. To incentivize the increase in infrastructure investments it is necessary to attract private investors guaranteeing a financial return capable of covering the investment made and a positive impact on the community.

Investors are becoming more and more interested in ethics and ethical values. These values have caused the financial community to face new demands to develop new financial tools that enable them to pursue ESG goals.

Over the years, environmental, social, and governance (ESG) logic has become increasingly important: the financial world seems to have adopted the basic principles of the environmental sustainability movement. Companies that are more committed to solving these problems face fewer risks and better results.

ESG is becoming more and more important for investors' investment choices, especially in the real estate market. The real estate market must combine a comfortable and healthy environment with better energy consumption performance, but the most important thing is to have certain properties that allow new construction or reconstruction projects to balance all economic aspects. The market flow around sustainability certification (BREEM, LEED) is also related to the financial market and affects the income of real estate through higher rents and sales prices, thereby strengthening the structure. The acquisition of a sustainability certification enhances the property, and in addition to making it more attractive on the market, it allows the owner and / or manager of the structure to increase any rents and economic benefits. The LEED or BREEAM certified structure enjoys subsidized interest rates granted by banks in place of loans which allows for higher sums to be requested to make improvements which in turn increase the value of the property.

The mentality of our society is changing. It has changed under the pressure of new consumption and lifestyle, but it has changed firstly because it has become more and more necessary to have a new understanding of issues such as sustainability, innovation, quality, and design. These issues have now become an issue. Kind of business strategy. Widely debated environmental issues are imposing sustainability-oriented choices. This is also the key to resolving the economic crisis, especially in Italy, where the green economy has increasingly become a factor of strong competitiveness. Through various interviews, documents and articles with industry experts, it is clear that it is in the company's interest to comply with ESG principles. It has been difficult to assess and monitor the application and integration of

sustainability issues to properties. As reported in the paper, there are many certifications (BREEAM, LEED) that demonstrate the correct application by continuously monitoring the implementation of specific KPIs.

KPIs include both financial and non-financial metrics that reflect current and future business performance. They are essential to assess and check that any activity carried out within the structure is compliant with ESG policies.

The importance of considering ESG elements is determined by a series of factors. First, "sustainable" companies face fewer environmental emergencies and have fewer risks related to compliance and regulations. At the same time, these companies have greater investment in scientific research, innovation and production. Ability in transparency and trust, and relationships with customers and partners.

Sustainable investment is becoming more and more popular in financial markets because investors also need to pay more and more attention to non-financial results. This means incorporating environmental, social and governance factors into the investment management process.

Therefore, the integration of ESG standards into investment proved that due to the application of specific equipment (solar panels, photovoltaics, heat pumps, heat insulation, etc.), the increase in assets and the reduction in consumption are economically profitable. From a commercial point of view, increase its prestige, thereby making it more attractive to investors.

Therefore, the integration of ESG standards has a positive impact on the economics of the structure, as it allows:

1) Effective costs (more efficient use of resources), from the materials and products used to the selected equipment, can reduce consumption and better manage stakeholders.

2) Attract investors: In the world of infrastructure investors, the only way to raise funds is to prove that you comply with ESG policies.

References

1. Gaetano Casertano, Finanza Immobiliare, Wolters Kluwer, 2018.
2. Eurosif, Shareholder Stewardship: Eurpean ESG Engagement Practices 2013, Etica SGR S.p.A.
3. Micheal Shriberg, Sustainability management in campus housing, A case study at the University of Michigan, International Journal of Sustainability in Higher Education, 2000.
4. Alla Kudryashova, Atanas Genkov, Tianxiang Mo, Certification Schemes for Sustainable Buildings: Assessment of BREEAM, LEED and LBC from a Strategic Sustainable Development Perspective, Blekinge Institute of Technology Karlskrona, Sweden, 2015.
5. Georg Inderst, Social Infrastructure Finance, and Institutional Investors, 2020.
6. Shady Attia, Pierre Alphonsine, Mohamed Amer, Guirec Ruellan, Environmental and Sustainability Indicators, Towards a European rating system for sustainable student housing: Key performance indicators (KPIs) and a multi-criteria assessment approach, 2020.
7. Jens Hirsch, Maximilian Spanner, Julia Wein, Juan Josè Lafuente, Peter Geiger – Institute for Real Estate Economics; Martin Haran, Stanley McGreal, Peador Davis, Jim Berry, Michael McCord, Daniel Lo, Philip Griffths – University of Ulster; Rik Recourt, Erik Landry – GRESB BV; Paloma Taltavull, Raul Perez, Francisco Juarez, Ana Maria Martinez – University of Alicante; Dirk Brounen – University van Tilburg, CRREM, Risk Assessment Reference Guide, Carbon Risk Real Estate Monitor, 2020.
8. IIO Institute for Real Estate Economics, CRREM project coordinator, CRREM Tool: Guidance for application of the CRREM Risk Assessment Tool outside the EU, 2020.
9. Nicholas Dodd, Mauro Cordella, Marzia Traverso, Shane Donatello, JRC Technical Reports, Level(s) – A common EU framework of core sustainability indicators for office and residential buildings, 2017.
10. BREEAM International Non-Domestic Refurbishment 2015, Technical Manual, BRE Global Ltd, 2015.
11. LEED Green Building Rating System Version 2.0, Leadership in Energy and Environmental Design, 2020.
12. Gazzetta ufficiale dell'Unione Europea, Regolamenti – Regolamento (EU) 2019/2088 del Parlamento Europeo e del Consiglio del 27 novembre 2019 relativo all'informativa sulla sotenibilità nel settore dei servizi finanziari.
13. Veerle Colaert, Chair, Securities and Markets Stakeholder Group, Final Report on draft Regulatory Technical Standards, 2021.
14. Cushman&Wakefield, Italian Real Estate Overview 2020
15. Cushman&Wakefield, European Student Accomodation Guide 2019
16. Pwc, Real Estate Market Overviw 2019
17. EY, Student housing sector in Italy 2020
18. Farhad Tagizadeh-Hesary, Naoyuki Yoshino, Han Phoumin, Analyzing the characteristics of Green Bond Markets to Facilitate Green Finance in the Post-COVID 19 world, 2021.

Abstract

The first chapter of my thesis focuses on the analysis of the Student Housing sector, describing the market in Italy and Europe. Student Housing means a residence for occupancy by groups of people not defined as a family, where such building is specifically designed for university or college students. Generally, a structure such as Student Housing, offers the student the possibility of additional comforts compared to the choice of a private apartment, above all the presence, on site, of services that are essential to the life of a student. Students who decide to stay in facilities such as the Student Halls enjoy the opportunity to share common places such as study rooms, relax rooms and in some cases, even the possibility of using the cinema. These structures also have computer rooms, laundry, presence of green space and some even equipped with parking. Room cleaning and linen change services are also provided, mainly for a fee, and the presence of the gym inside. Most of the campuses also include utilities (electricity, water, gas and internet) in the monthly fee. All campuses are now equipped with a surveillance service for the building and surrounding areas as well as continuous assistance from the staff. Some RSU enjoy additional services such as car sharing and bike sharing, useful for moving more easily although most of the residences try to position themselves as close as possible to the city or commercial activities.

What are the main requirements for developing a successful Student Housing project?

Macro positioning (big cities, university towns, cities with higher education institutions), micro location(the space is close to education and the city center, close to local shopping facilities, local recreation areas, sports fields, public transport connections within walking distance), customize the concept and design of the building according to the location and target group: individual style, appealing design, sustainable and quality furnishings, architecture and interior design have an impact on the well-being, health and performance of students: sustainable and thoughtful integration of objects and room elements (natural light and ventilation), regarding the national characteristics of the floor plan, public area(the leisure and sports facilities in the surrounding area should be recorded and analyzed during the planning process, so that the additional facilities in the student dormitory can supplement the existing facilities, instead of planning beyond needs).

Student Housing is a market segment that attracts many important investors and operators. Several operators, managers and/or developers are present on most of the European territory. It is necessary define the difference between Operating company (OpCo) and Property company (PropCo), in which the property company maintains ownership of all real estate and related debt, while the opco conducts day-to-day operations and management, offering the opco advantages related to its credit rating and financing capabilities. Therefore, the classic Opco/Propco structure involves an operating business transferring

ownership of its real estate assets to a special purpose property holding vehicle. The model was largely pioneered by Private Equity and investment banks as a way of raising cheaper debt in acquisition financing structures and is often used by hotel groups. Moreover, by essentially transferring the real estate assets of the operating business into a newly established special property holding structure with leaseback leases in place, owners can create separate cash flows that can be secured on that property to achieve significantly more attractive commercial mortgage terms than to more expensive leveraged loans as well as tax benefits. Despite this, not all real estate realities, in particular student housing, have this division but the management coincides with the ownership of the property.

In Italy, investments in Student Housing remain underdeveloped compared to other major commercial markets. The country lacks about 100000 beds to reach the European average and over 4 billion euros are needed to mitigate the Italy-Europe gap. Many private investors such as Fabrica SGR are starting to invest in this specific asset due to the lack of sufficient supply. The Dutch giant 'The Student Hotel' also entered the Italian market with two student residences in Bologna and Florence and the American group Hines with the two structures in Milan, in via Giovenale and Ripamonti. Student Housing is an already consolidated market segment in Europe, while In Italy it still has significant development potential. The European market, while recording different dynamics from country to country, is characterized by an overall insufficient offer of student beds: the prevalence of the structures is still managed directly by universities or religious bodies. The very strong student demand for beds has caused a great deal of investor interest, in fact, from 2012 to 2018, investment volumes in student residences have grown steadily, both in Europe and in the UK. Netherlands, Germany and Spain have launched internationalization of their university system with the aim of reach the levels of the United States and the United Kingdom. In most European markets, the number of students has been rising. The number of students in Denmark has grown the fastest in the past five years, with a 22% increase from a relatively low base. Germany’s international students have grown significantly, and by 2020 they have surpassed the government’s target of 350000 international students. In contrast, the number of students in the UK, Europe's largest international student market, has declined slightly over the past five years, while the number of international students has increased by 2%. The supply of RSU at the national level across Europe is still very low. It is the highest in the UK and can accommodate 27% of students, and the lowest in Southern Europe. In Italy, the fourth largest student market in Europe, the national supply rate is less than 5%. By analyzing the data, we have identified some cities in Europe that are in short supply. Also Spanish cities have extremely low level of supply and high rents. Barcelona's supply is slightly less than 5%, and Madrid's is 5.7%. The lowest offering is Rome, which has 220500 students but only 6500 student beds available (almost 3%) with the majority owned and operated by public bodies. The growing importance of the student housing sector in the European real estate market observed In recent years is accompanied by a constant increase in the number of university students and international mobility of academic paths. The European university population stands at over 19.5 million and is concentrated for 71.8% in the seven most populous countries on the continent. As can be seen from the graph below, students no longer live with their parents. Leaders of this form of housing are countries such as Sweden, Norway and

Finland, where less than 20% of students still live with their families. In contrast, with shares exceeding 50%, Malta, Italy, Georgia, Albania and Croatia instead have the family as their main accommodation. In Italy, Student Housing is one of the alternative segments with the greatest growth prospects, given the demand and poor supply currently present on the national scene. The demand for higher education signals constant growth and today only 3% of students In Italy live in university residences. The Italian investment market in the Student Housing segment is attracting more and more investors who are also interested in value added operations involving urban regeneration and major refurbishment of existing buildings. The real growth factor of this asset class is the gap that exists between supply and demand, there is a potential demand of 490000 beds, considering that the institutional offer In Italy only covers about 50000 beds.

In the second chapter I decided to focus on the ESG analysis of student housing projects (hereinafter "RSU") in Italy, also through the definition and implementation of Key Performance Indicators that allow to evaluate the integration of sustainability and impact criteria environmental, social and governance. It is aimed at defining ESG KPIs for both the real estate component and the operational component of the USW in order to acquire a certification of sustainability (BREEAM, LEED). ESG stands for Environmental, Social and governance. ESG criteria are a set of standards for a company's operations that socially conscious investors use to screen potential investments. These, are three fundamental factors to verify, measure and support the commitment of a company or organization towards the environment and the society. In particular, ESG represents a series of criteria for measuring the environmental, Social and governance impacts that an organization generates, criteria that materialize into a set of operating standards that must inspire the company's operations. ESG criterias were first mentioned in the United Nations Principles for Responsible Investment (PRI) 2006 report. At the time, 63 investment firms made up of asset owners, asset managers and service providers signed with $ 6.5 trillion in assets under management (AUM) incorporating ESG issues. As of June 2019, there are 2450 signatories representing over $ 80 trillion in AUM. The emphasis on ESG is growing more and more as major institutional investors are making it clear that they expect their companies to make a strong commitment to comply. The criteria underlying the letter "E" standing for Environmental are in charge to assess how a company behaves towards the environment in which it is located and how the impacts of its activities on the environment are taken into account and/or compensated. The criteria linked to the letter "S" relate to the social impact and examine the impact and relationship with employees, suppliers, customers and the local community with which it operates or with which it is related to. Finally, the "G", which stands for Governance concerns the issues of corporate management inspired by good practices and ethical principles, such as the logic related to the remuneration of managers, gender gap, respect for the shareholder rights, transparency of decisions and respect for minorities. ESG criteria are important because they allow to accurately measure the environmental, Social and governance performance of a company based on standardized and shared parameters. According to the European Green Deal, by 2050 all Member States must move towards a circular economy, having achieved net emissions of zero. The United States has bold plans to decarbonise the economy and aim for a net zero emissions target by 2050. Countries create laws and regulations because the impacts of non-ESG behaviours are already creating negative effects on the

functioning of companies, such as carbon taxes, and the financial and banking sectors have integrated ESG rules into their funding policies. On April 21, 2021, two new initiatives by the finance sector were announced: The Net-Zero Banking Alliance and its participation to the Glasgow Financial Alliance for Net Zero. The Net zero Banking Alliance brings together 43 banks from 23 countries with $28.5 trillion in assets to deliver the sector's ambition to align its commitments with the Paris Agreement. Member banks are committing to: transition the operational greenhouse gases emissions to align with the pathways to net-zero by 2050, set 2030 targets and 2050 target, with intermediary targets to be set every 5 years from 2030 onward, engage with their client's own transition and decarburazion, promoting real economy transition. To measure the level of integration of ESG criteria, ratings and ESG standards have been developed which, through the collection of data, provide an ESG score to the activities carried out. ESG scores are increasingly required by investors as tools that provide greater understanding of how companies deal with ESG matters and as tools used to guide investment strategies. The sustainability rating or ESG rating provides a synthetic assessment that ensures the compliance of a company, an enterprise, or an association with regards to social, environmental and governance topics. The sustainability rating is processed by the various agencies specialized in the collection and analysis of data on aspects involving the environment, social impact, and governance. The ESG rating is also an important indicator for investors because it allows them to have a deeper understanding of the company and its sustainability. Interest in ESG parameters and criteria is becoming increasingly popular amongst companies, who also consider these parameters to obtain a positive opinion from an external public. Thus, the investors have become very sensitive to these issues (ESG) and therefore in order to continue to raise money from shareholders - companies must also be ESG compliant. Otherwise, they lose investors and consumers. To define a responsible and sustainable investment, this must create value for both the investor and the company which, through a medium-long term strategy, integrates financial analysis with ESG. The attention to ESG parameters involves new strategic choices for companies and a new, still evolving, approach where the factors that characterize this interest for ESG parameters are: threats associated with climate change, reduction of waste and better management of resources and presence of products and services capable of guaranteeing and communicating social commitment and environmental impact reduction policies. Seven categories of strategies have been identified as part of the application of ESG criteria: sustainability themed investment, best-in-Class investment selection, exclusion of holdings, countries, sectors from investment universe, engagement and voting on sustainability matters and impact investing. The techniques used to invest funds with an ESG lens are still developing and maturing. The most basic strategies exclude companies, while more sophisticated strategies integrate ESG metrics and goals alongside financial information. Focusing our attention exclusively on financial returns and the fundamentals of a particular sector or company has now become insufficient to take investment decisions. Investors became socially conscious operators, requiring an Economic Rate of Return and not only an Internal Rate of Return. This investor's approach led inevitably the asset management industry to pay more and more attention to ESG factor and to incorporate them in all investment decisions. The substantial difference between the two rates is that while the IRR measures only components of economic return (internal rate of

return on economic cash flows), the ERR is a cost-benefit analysis, also considering both social and environmental positive and negative externalities. ERR provides an advantageous metric that compares economic costs and benefits of a program, through a cost-benefit analysis. All necessary economic costs are included in the cost-benefit analysis as well as income that should be generated through social environmental improvements such as clean water on health outcomes. Generally, ERR of a project is required to exceed a threshold rate of 10% to be considered for an investment. Finance has begun to show great attention to the evaluation of ESG criteria, first for the management of different forms of investment that are inspired by criteria of social and environmental responsibility. The importance of considering ESG elements is determined by a series of factors, first of all a "sustainable" society faces fewer risks related to environmental emergencies, compliance regulations and At the same time these are companies that express a greater commitment in terms of scientific research, innovation and production capacity and as regards the relationship with its customers and partners in terms of transparency and trust. Sustainable investments are becoming increasingly popular in the financial markets, as investors are increasingly required to focus on non-financial outcomes as well. This means integrating environmental, Social and governance factors into the investment management process. "social impact investment is the provision of finance to addressing social needs with the explicit expectation of a measurable social, as well as financial, return. A core characteristic and challenge are the measurement and management of social and environmental outcomes alongside financial returns." Investors are increasingly interested in ethical and moral values that have led the financial world to face new needs, thus developing new financial instruments that allow them to pursue ESG goals. In recent years, new initiatives and investment tools have been introduced that can attract investor interest in ESG investments: green bond, sustainable bond and social bond. The green bond market has grown which is making a positive contribution to environmental welfare, In fact, the market was extended with new impact investing products in the form of social and sustainability bonds to support prosperity. The growth in green, social and sustainability bonds started with the Paris climate accord and the publication of the UN Sustainable Development Goal (UN SDGs). These financial products provide an innovative financing tool for issuers, and they boost market transparency by requiring issuers to communicate their ESG policies. Moreover, the use of proceeds of green, social and sustainability bonds contribute to society by enhancing environmental and social welfare. Green, social and sustainability bonds share financial characteristics similar to those of traditional bonds, in terms of structure, risk and returns. They can be corporate or government-related, vary in credit quality ranging from investment grade to non-investment grade, differ in maturities and present various types of yields and interest rates. They have the same security of conventional bonds and the yields and expected returns are therefore comparable to those of the same issuer's plain vanilla bonds. The crucial difference between green, social and sustainability bonds and plain vanilla ones lies on the allocation of proceeds. green bonds are financial instruments whose proceeds must be to finance partially or fully new and/or existing climate or environment-related projects such as investments in renewable energy and low carbon building or energy efficiency. Social Bonds are used to finance partially or fully new and/or existing social welfare investments for an identified target

population (affordable housing and community development). Sustainability Bonds are a mixture of both green and social bonds. They are expected to provide environmental and social benefits for the identified target population. Can be used to finance, partially or fully, new and/or existing projects related to education and sustainability research, modernization of education and public health facilities.

The ESG analysis of the real estate component (Propco) will be carried out through the study and analysis of the main certification standards (CSs) of environmental assessments of buildings, In particular BREEAM, LEED and CREEM providing recommendations on how to effectively use their potential for contribute to the development of sustainable student housing. The main difference between BREEAM and LEED, the major sustainability schemes, is the process of certification. BREEAM has trained assessors who assess the evidence against the credit criteria and report it to the BRE, who validate the assessment and issue the certificate. While LEED does not require training, there is a credit available if an accredited professional (AP) is used. The role of the AP is to help gather the evidence and advise the client. The evidence is then submitted to the US-GBC which does the assessment and issues the certificate. Both schemes share common components. Early involvement of the assessor or AP at the design stage is beneficial to the project and the final rating. Both schemes drive the market to improve building design. The application of the ESG criteria is essential that it is integrated above all in the operational-management part of the building. Good application has a positive impact on people (Social and governance) and on the territory (environmental). The reduction of CO2 emissions, energy efficiency, efficiency in the use of natural resources (e.g., water), the adoption of policies to combat air and water pollution and the waste of natural resources and deforestation of the environment have a positive effect on people's health and soil well-being. The Social factor includes qualitative policies for the work environment, for trade union relations, for the control of the supply chain, as well as attentive to the diversity of sex, skills and age, working standards, safety conditions in the workplace, respect for human rights and an all-round assumption of social responsibility. Governance concerns the ethics and transparency of corporate governance, the diversity policies in the composition of the BoDs, the presence of sustainability plans and objectives linked to the remuneration of the board, as well as control procedures, policies and more generally the conduct of top management and the company in terms of ethics and compliance. All these policies go to protect the person in terms of risk management, cost reduction, access to capital, customer relations, human resource management and innovation capacity. The global society is facing a huge sustainability challenge and the building sector is a major contributor. The sustainability challenge calls for an emergent transition towards a socially and ecologically sustainable society. To align with sustainability, Housing sector conducted an assessment of relevant sustainable practices in the areas of managerial decision making, procurement, energy and water management, dining services and renovation. Buildings are the largest consumers of energy worldwide and contribute negatively to global climate change which increases greenhouse gasses in the atmosphere, declining global resources and increased damage from their extraction and toxic pollution. Sector moved into specific operational goals for environmental issue areas of energy and water, procurement and design, waste, dining and grounds management. There is a greater focus on sustainability with the presence of governmental legislation and a

few instruments, such as voluntary Certification schemes (CSs). Legislation regarding sustainability of buildings is focused on energy: the Energy Policy Act of 2005 and the Energy Independence and Security Act of 2007. Furthermore, there are many policies including energy and water efficiency, use of recycled content, waste recycling. Certification schemes (CSs) are environmental and management tools focus on the construction sector aiming at sustainability. The most widespread are BREEAM and LEED that incorporate environmental methodologies and management tools. LEED is the most widespread sustainability certification In Italy, with 210 LEED buildings. Several real estate companies apply certification to their properties both to comply with the new sustainability policies and for an economic return. The application of a sustainability certification (BREEAM-LEED) increases the economic value of the property to which it is applied, making it more attractive on the market. The value increase between 7% and 11% more than properties without environmental certification. The market rewards properties with LEED certification, recognizing sustainability as a decisive element to guide investment choices: the market consequently appreciates the value of the real estate asset with an increase between 7% and 11% depending on the quality of the certification. The effect of the certification is not limited only to the different valuation of the assets, but affects the timing of their marketing, highlighting a significant improvement in the time required to place the property on the market, if certified. The combined effect of the two effects (increase in prices and faster placement on the market) determines an increase in the return on investment: therefore, a significant signal for investors for whom sustainability is not only an ethical choice, but an opportunity for superior economic and financial performance. LEED is also a flexible and articulated system that provides differentiated formulations for new constructions, existing buildings, small homes, for urban areas while maintaining a coherent basic approach between the various areas. BREEAM certification is structured in two distinct approaches and protocol families, one for new constructions and renovations (BREEAM New Construction, BREEAM Refurbishment & Fit-out) and one for existing buildings (BREEAM In-Use). By interviewing market experts, tax as well as environmental benefits due to the application of a sustainability certification were also leaked. For example, in Milan, there is the “Carbon Tax”: emissions tax paid by owners (25 euros per ton excessive compared to the permitted consumption). There are many other incentives for the application of sustainability criteria, some defined by building regulations or by Italian laws such as D.Lgs n. 11/2008 where in the event that a higher number than the number of renewable sources are integrated provides you with the possibility of accessing a volumetric premium or under certain improvement characteristics of the building envelope you can deduct the thickness of the wall. The application of sustainability certifications has been a topic that has been around for some years now, the companies concerned are now aware of how to behave, how to move in the market and who to contact. Initially it was difficult to align with the sustainability criteria due to the lack of knowledge of the subject and scarcity of eco-sustainable materials as well as a lack of adequate training of professionals, such as the suppliers themselves. From an operational point of view, the biggest problem was certainly the management of construction sites, from the cleaning of vehicles to waste management, so much so that people from outside the company in charge of controlling the process were chosen. The most difficult issue in terms of

sustainability was certainly finding the right balance between what it costs to align with the criteria for acquiring the certification and what you gain from it afterwards. Many companies have an internal rating system for alignment with ESG criteria, and one of these is the acquisition of a sustainability certification as for COIMA. COIMA is a leading platform in the investment, development and management of real estate assets on behalf of institutional investors and during an interview with Dr. Stefano Corbella, sustainability officer at COIMA, it emerged how COIMA has developed its own rating system, COIMA Charter, with the declination of 3 areas of intervention: protection (resilience, environment), inclusion (in social terms) and growth (economic regeneration of the territory, therefore the impact that the operation has on the soil). COIMA provides for the application of its rating system to the product before its regeneration, COIMA Charter, measuring its performance with the KPIs selected by the company itself. One of the most common KPIs from an environmental point of view is certainly The application of a sustainability certification to the building (LEED, BREEAM) and an assessment is assigned depending on the target level achieved. Generally, the aspects of future operational emissions compared with the Paris targets are also taken into consideration. We will therefore have a sector decarbonization curve with the definition of the company's objective where the more time passes from the expected future performance compared to the Paris objectives, the more it has been possible to minimize the risk of transition. The contribution is then measured on a self-defined scale taking the Paris objectives as a reference. We have considered a student residence under development, located in Rome in the San Giovanni area. Before describing the project specifically, I would like to focus on an in-depth analysis of the city, in which the student residence will have to operate. Rome is one of the Italian cities that hosts more students, both off-site and non-resident, during the year. The great demand for beds has meant that in recent years various operators have committed themselves to satisfying the demand, increasing the supply of university residences. Among the most recent we find Campus X of Tor Vergata, inaugurated in 2010, designed with great attention to eco-sustainability and energy saving and inspired by the Domus Romana, the campus promotes cohesion and sociality among the residents. This attention to environmental and social issues that is increasingly at the centre of the new Student Housing policies, in line with compliance with ESG policies.

The third and last chapter to corroborate my thesis I have taken into consideration a structure in San Giovanni (Re di Roma), in one of the areas of the city with the highest population density (+10400 inha / km2). The area, easily accessible as it is adjacent to the San Giovanni e Re di Roma Metro, is in great demand by university students and young workers. San Giovanni is a neighbourhood with a high population density, well connected to the rest of the city (metro A). The presence of metro and buses allow easy access to the main universities of the city (La Sapienza, Roma Tre, Tor Vergata). Rome La Sapienza and Roma Tre are about 15/20 minutes from the property and can be reached by metro. Very attractive area for students and young workers, located near the recreational areas of the city (strong demand for housing solutions in the area where the property is located). The proximity to the center makes the neighbourhood very popular with young off-site workers. The property benefits from an excellent location, quiet and with privacy, being located on an internal street. The property is divided into 7 floors above ground connected by 2 main

staircases, one internal and one external. The property has a good structural layout and a beautiful facade (1950). The property has a large basement that can be used for the provision of common services to students. The structure, in Via Faleria 21, was built in 1950, with a partial renovation in 1999, and was born as a school for private use. The operation is aimed at transforming the property into a social infrastructure at the service of university students and young workers. The goal is to implement the concept of educational living in which the training services provided (tech & soft skills complementary to university training courses) are accompanied by quality housing services that are instrumental to networking. Falaria offers three different types of stay, in addition to the student residence service to which 94 rooms are dedicated, has 11 rooms for hotel use for user co-working and 105 rooms for hotel use only in the summer period.

Faleria Student Housing presents a split between ownership and management. The structure was purchased by the Azimut Libera Impresa Infrastructure Fund and managed by Edu Living. Edu Living is a manager that offers services of co-living: management of high-quality living spaces with single rooms and facilities for university students and rooms dedicated to providing short-term accommodation services (max 10% of the structure) for teachers, university staff, and co-workers of the structure.

The management of the living spaces is supported by a strategic partnership with TH Resort, co-studying: provision of training courses complementary to the university course for the enhancement of transversal skills and co-working: management of flexible shared workspaces for companies with partnership agreements (including exclusive ones) with big corporates, spaces that encourage "positive contamination" between students and the world of work, promoting employability. The Ingenium Edu Living Project is based on a very lean and efficient business model, characterized by a scalable model, which can be replicated in various cities In Italy and Europe. Via Faleria an infrastructural project capable of generating positive multiplier effects on the real economy, given the multiple functionalities, not only as a university residence but also as an educational environment. The project has the following objectives: cover an outstanding demand for training services, providing training courses complementary to university training necessary to easily access the labour market such as sector certifications, IT or development of required soft skills; bridging the university / labor market gap: integration into the world of work is difficult and slow due to the lack of specific skills required in the working world; increase the effectiveness of incubators, anticipating the birth of successful startups, also thanks to co-working spaces in which to encourage "contamination" between companies and students; foster the employability of students by developing their skills and entrepreneurial skills; encourage the sharing of skills & experiences during the university period. Therefore, Edu Living project aims to cultivate skills in society by promoting cohesion and teamwork given the great importance given to common spaces. In addition to high-quality living spaces, the residence also benefits from co-working areas, spaces that foster a sense of community and aggregation. From the educational point of view, the student can enjoy courses with a strong technological / IT content and courses that allow the development of soft skills through lessons with industry experts. Via Faleria also offers spaces entirely dedicated to startups with the aim of rejuvenating the job market through young students with skills

aligned with the market or through the birth of new companies. The presence of all these training activities and spaces used for the community is aimed at improving youth employment, which is increasing sharply. In Italy, the youth unemployment rate rose further from an already very high level of 28.7%, reaching 33.8% in January 2021. Promote the country's growth by reducing youth unemployment and boosting GDP growth.

The student residence in Via Faleria presents a split between ownership (PropCo) and management (OpCo). The structure was purchased by the Azimut Libera Impresa Infrastructure Fund and its operational management will be by Edu Living. Edu Living (OpCo), on behalf of the operating company, is responsible for daily operations and management.

Assumes the role of a tenant and pays the rent of real estate assets to Azimut Libera Impresa (PropCo), which owns the ownership of the assets. In other words, OpCo sells products, signs contracts, hires employees, and deals with customers. PropCo owns buildings and holds commercial assets such as real estate. Azimut Libera Impresa is an integrated platform of products and services dedicated to entrepreneurs / SMEs on the one hand and investors / savers on the other, with the aim of encouraging the injection of liquidity into the real economy in order to stimulate growth and make it sustainable over time. The development plan of Azimut Libera Impresa SGR provides for the progressive supervision of the main investment strategies in Alternative Asset Management. These costs may be construction and design fees, inspection fees, land and real estate costs, loans, lease tools, project management, local and state taxes, surveys, feasibility study costs, etc. New construction laws have also led to rising costs in terms of soft costs, such as LEED certification for buildings. The structure is used both as a student residence during the academic year and as a hotel in the 2 summer months (July and August). Summing up the potential profits obtained from the student hotel service and the hotel service, Faleria realizes an income of € 1218,663.64. The structure Via Faleria offers several additional services: enrolment in training courses within the structure complementary to insertion into the world of work is equal to € 6000.00 per year; by "other services" we mean the gym and restaurant service which we assume equal to 10% of the revenues. Assuming 70% student participation, the training courses offered generate € 441000 annually and assuming that 15% of students use the food service, gym or other services available in the residence, the annual profit of the residence increases by 182799.55. Thus, the total revenues are equal to € 1796,263.18. The value of the total revenues varies as the rate of participation in the additional services provided by the structure varies.

Our analysis is based on general assumptions, in which the participation rate in training courses equals 70% while the restaurant, gym or other service represents 15% of total profits. Nonetheless, as we can see from the graph above, total revenues increase / decrease as the rate of participation in courses or ancillary services increases / decreases.

The Effort Rate is the percentage of the household’s total income used to repay the agreed credit instalment. Our effort rate is 45%, therefore the rent that the residence manager is willing to pay is equal to € 808318.43 for year. Changes in effort rate and/or total residential income can change the fees that managers can pay to owners. As can be seen from the above table, an increase in the effort rate and/or profit generated by the

services provided by the structure will result in an increase in the expenses that the operator can pay, on the contrary, the reduction in the value of these expenses will result in a decrease in the expenses.

In summary, according to our forecast, the Faleria university residence generates revenues equal to 2008,129.55 through the accommodation service and the services provided by the structure. The facility faces various fixed and variable costs including management fees, personnel costs, utilities, cleaning, maintenance costs and marketing costs. EBITDA is expected to be 135.502.46.

Student Housing is already an integrated market segment in Europe, but In Italy, it still has great potential for development. Although The European market has recorded different dynamics in different countries, it is characterized by an overall insufficient supply of student beds: the prevalence of this structure is still directly managed by universities or religious groups. The strong demand for beds by students has aroused great interest from investors. In fact, from 2012 to 2018, the amount of investment in student apartments in Europe and the UK has increased steadily. The Netherlands, Germany, and Spain have initiated the internationalization of their university systems, aiming to reach the level of the United States and the United Kingdom. A process of development of the sector is necessary with the realization of new structures which will be able to satisfy the demands of the market. The construction of new university residences must be accompanied by the provision of extra-university activities within it that can have a positive impact on the student. It would be very useful for students if complementary training services to the university were provided within the structure where they are staying, useful for entering the world of work and the enhancement of transversal skills. Slow entry into the world of work due to the lack of specific skills required in the world of work can bridge the gap between the university/labour market, increase the efficiency of incubators, predict the birth of successful startups, and owe space to work together to promote collaboration between companies and students. The “pollution” of the time, through the development of students’ skills and entrepreneurial skills to improve students’ employability and encourage the sharing of skills and experience during university. A process of development of the sector is necessary with the realization of new structures which will be able to satisfy the demands of the market. The university residence market, therefore, needs new investments, new capital to be made available to market operators. The new world of Real Estate is increasingly characterized by the presence of infrastructural and not just real estate investors, careful in choosing the assets on which to invest. Social infrastructures (retirement homes, schools, sports facilities and student residences) are facilities that provide essential services for the community resulting in a better society. In order to attract a greater number of investors it is necessary to guarantee a Dual Return, which provides in addition to a financial return, ensuring at least the coverage of the initial investment, an Impact Return, aimed at improving the conservation of resources with positive impact on the community. The investment must include the production of long-term services aimed at creating a positive impact from an environmental point of view by reducing CO2 emissions and consumption (gas, electricity and water). Infrastructure investments generally have a low volatility and a long-term time horizon, as well as a good diversification from the point of view of the services provided to

overcome inequalities. It is advantageous for investors that the asset enjoys a high liquidity such as to be easily traded on the market. In recent years, in terms of ESG, there has been a 29% increase in social investments in 2020. To incentivize the increase in infrastructure investments it is necessary to attract private investors guaranteeing a financial return capable of covering the investment made and a positive impact on the community. Investors are becoming more and more interested in ethics and ethical values. These values have caused the financial community to face new demands to develop new financial tools that enable them to pursue ESG goals.