Interreg CENTRAL EUROPE

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MESTRI-CE

D.3.1.3 Individual gap analyses for innovative energy financing models, standards and investment procedures

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A. Introduction

The central Europe region faces a very uneven energy transition due to unbalanced economic development, distribution of technology and finance flows. Public and private buildings account for 43% of the final energy consumption in the EU and have been singled out in the European Green Deal as key drivers of energy transition. Energy efficiency investments must more than double to achieve the EU's new climate and energy targets, and it is increasingly urgent to deliver anticipated progress by 2030. The financing of the transition towards climate-neutral buildings remains a key challenge for which the EU is expecting member states to involve private investors to a much bigger extent than before.

The purpose of this document is to determine the market maturity of each Central European pilot country (Austria, Croatia, Germany, Italy, Poland) and Slovenia by assessing the financing needs of local energy project developers, availability of green investments evaluation criteria with performance tracking methodology for investors and the existence of citizen financing models. The analysis focuses on current market gaps and solutions for deep renovation of buildings (public and private), including access to finance, risk perception, viability and policy framework gaps. A stronger emphasis has been placed on innovative financing models that involve private investors and citizens. The results of this study will be presented to key stakeholders during roundtable sessions, and the results of this gap analysis, in combination and with studies will present inputs for the piloting action: development of green financing methodology, tools and financing models.

B. Country gap analysis

1. Italy

The deep renovation of buildings, both public and private, is supported in Italy for the most part by European and national public funds (European structural and investment funds, PNRR, Kyoto fund, etc.). Subsidies, tax deductions and tax credits are currently the most widely used financial instruments for these interventions alongside traditional or subsidised bank loans. Green bonds, both sovereign and corporate, are also growing on the market as main instrument of sustainable financing (Figure 1).

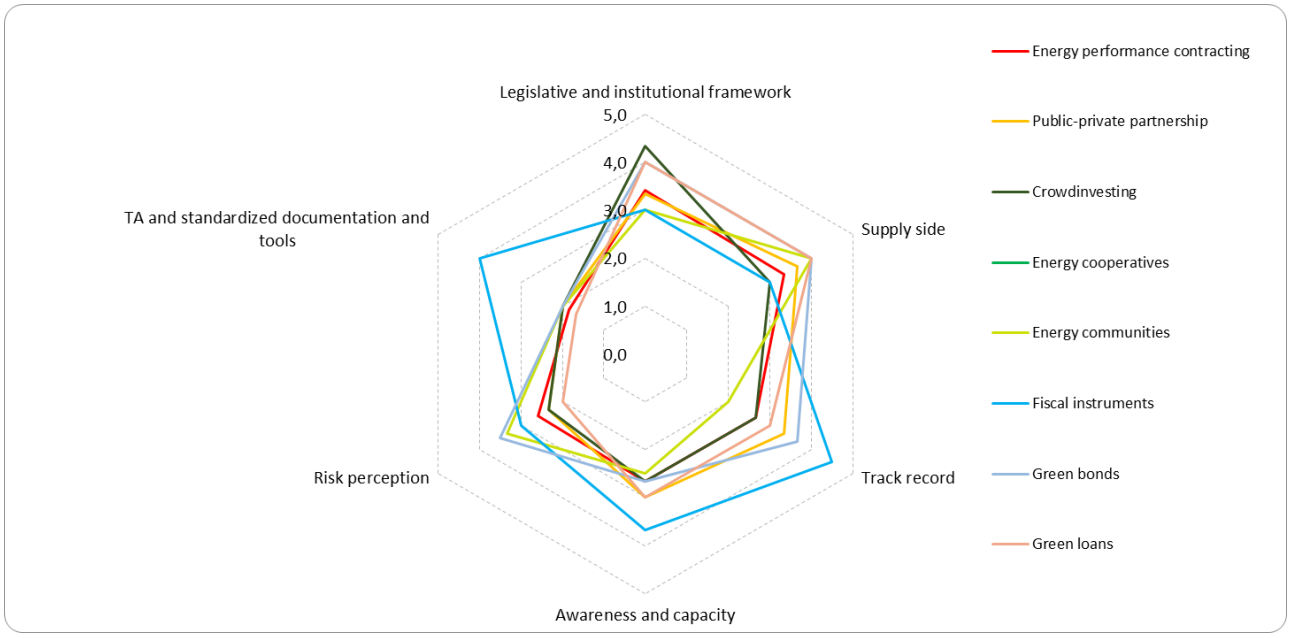

Figure 1: Market assessment of different financial instruments in Italy through a spider diagram

The gap assessment of each financial model and instrument was conducted in the following chapters.

1.1. Fiscal instruments

Fiscal instruments are a major support mechanism for energy renovation of private buildings and households in Italy. In recent years, the tax policy has played a key role in increasing energy efficiency and implementing thermal and electrical renewable energy in private buildings. Until August 2019, the national tax policy for energy efficiency was based on the use of tax deductions. With the introduction of the Superbonus, two further options for the use of the tax credit by the proven beneficiary have been introduced:

- the transfer of the credit to a third party (company, bank, financial intermediary, etc.) that provides the customer with the liquidity to pay for the intervention in exchange for the tax credit;

- the assignment of the credit to the company carrying out the work or to the supplier in the form of an invoice`s discount.

These two options have been later applied also to the other tax policies available: Ecobonus and Bonus Casa.

The large deficit generated by public spending related to building bonuses (especially Superbonus 110%) has triggered great alarm among the institutions, also due to their inability to correctly estimate to date the benefits in terms of increased tax revenues related to the construction work and related services. The government has recently quantified at EUR 116 billion the debt to be borne by the State as a result of the allocation of credits related to building bonuses. In too short a period, the construction bonuses have led to too much spending at the expense of the state, and therefore radical corrective measures have been taken in the last months to prevent this spending from spiralling out of control, from a significant reduction of the credit granted to a return to the tax deduction mechanism alone.

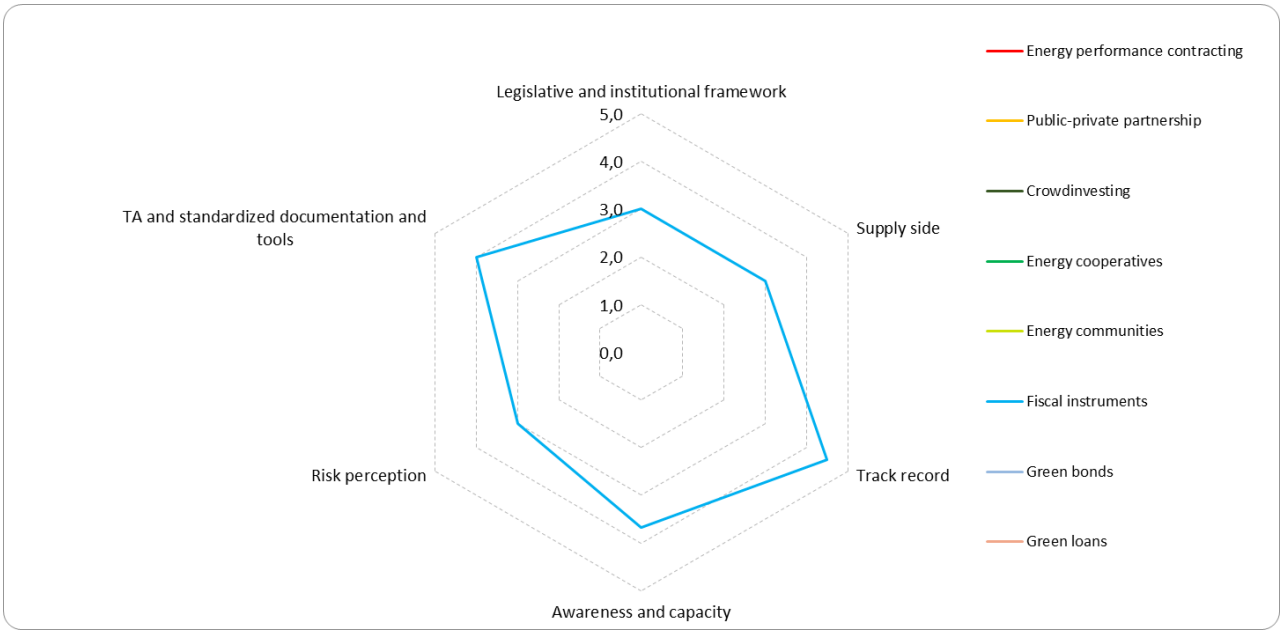

Figure 2: Fiscal instruments - assessment of the market status

While tax deductions are well-established and stable mechanisms on the Italian fiscal landscape, the introduction of the Superbonus with 110% of tax deductions was a novelty that strongly impacted the building renovation market. The high tax deduction rate has made this instrument very attractive compared to any other instrument. However, there have been many critical aspects: the mechanism has undergone numerous regulatory revisions and has been extended several times, creating uncertainty for developers, planners and contractors alike. For many developers it has been very difficult to start renovation works in time and to comply with the myriad of bureaucratic steps and controls, both upstream and downstream of the work.
A very high and over-concentrated demand for work has also triggered a supply gap with important impacts on the costs of materials and services but also on the quality of the renovation works carried out, which have not always shown a good cost-benefit ratio. Banks have provided the necessary support for the credit assignment component, but the system's ability to provide adequate technical assistance to customers was lacking.

However, the Superbonus deduction rate and the credit transfer mechanism to third parties or to the company carrying out the work as discount on invoice have so far proved to be the only models able to mobilise even multi-family housing (condominium) for deep renovation.

Among the various alternatives, income tax deductions appear to be the most effective instrument because it is more directly applicable and because it makes it possible to achieve objectives of relevance, such as energy saving and the renovation of the most energy-intensive structures, with expansionary effects on aggregate demand.
In order to avoid triggering distorting dynamics (first and foremost the increase in the prices of construction products) that call into question the usefulness and effectiveness of this bonus, the deduction rates must be revised downwards, and the deduction periods must be substantially extended.

According to the national PNIEC, a general reform of fiscal deductions should be carried out soon, to address the renovation of existing residential buildings with an integrated and more efficient approach and overcome the current fragmentation of the several deductions currently in force. Considering also the new EPBD targets, it is necessary to draw up a long-term intervention plan which, by making use of tax deductions, allows a systematic renovation action to be spread over time; it is necessary to identify the perimeter in which to intervene in the coming years, also adopting selective criteria that maximise results in terms of energy performance while minimising costs. In any case, the experience of deductions exceeding the value of the expenditure incurred no longer seems feasible today.

1.2. Green and climate bonds

Green bonds are growing on the Italian market as main instrument of sustainable financing. Green bonds issued by companies represent more than 50% of the cumulative values over the last five years while financial institutions cover 24% and the Government 25%. With the proceeds of the Sovereign Green Bonds, Italy finances government expenditures intended to contribute to the achievement of the environmental objectives outlined in the European Taxonomy of Sustainable Activities and help Italy support the Sustainable Development Goals of the UN 2030 Agenda. The category relating to energy efficiency, represented by a series of facilitation measures granted for expenses incurred for energy renovation interventions in buildings, was allocated a share equal to 12.2% of the total expenses reported (i.e. EUR 1.63 billion). Incentive measures for the production of energy from renewable sources accounted for 2.2% (i.e. EUR 296 million) of the total green expenditure reported in the four-year period 2018-2021.

For companies the issuance of green bonds and access to more favourable financing conditions linked to sustainable investments will depend on the alignment of the projects financed with the EU Taxonomy. The 'Green Building' category was mostly used in green bonds issued by financial institutions and insurance companies. In the case of the financial institutions, bond proceeds are allocated not only to the acquisition, financing or refinancing of real estate portfolios, but also to the financing of loans/mortgages to retail customers and, more recently, to monetise tax credits related to public subsidies for energy efficiency interventions (Superbonus, Ecobonus), or to seismic risk reduction on existing buildings (Seismic Bonus) of private owners (not corporate) and condominiums.

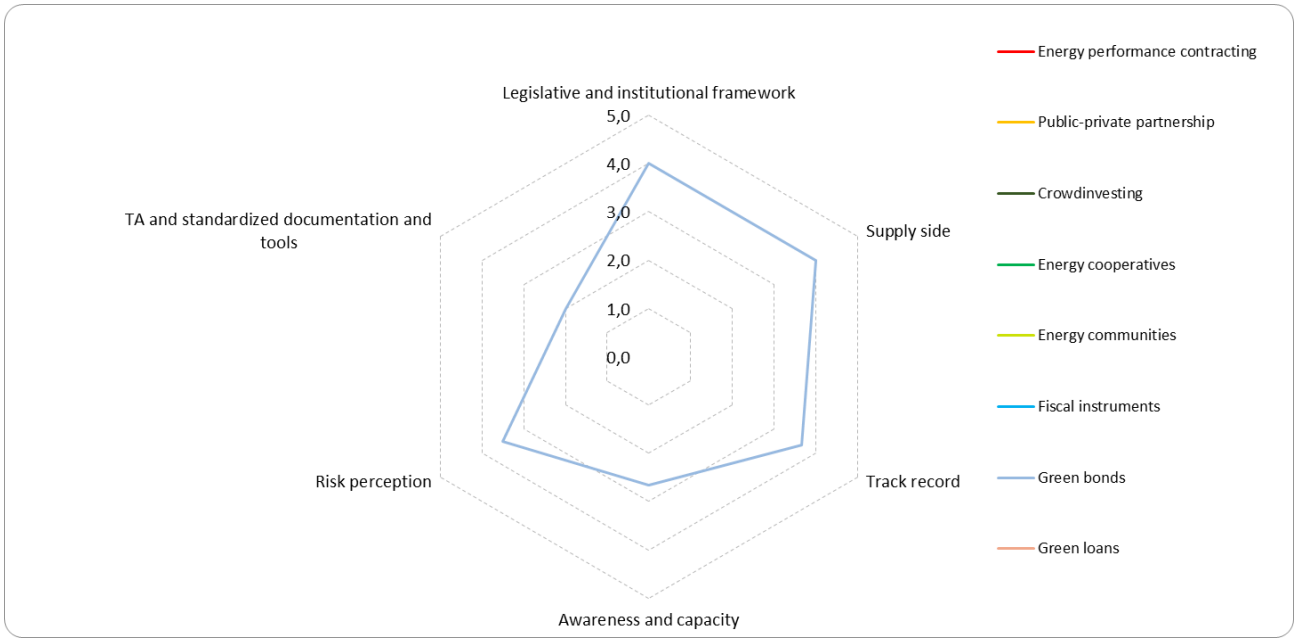

Figure 3: Green and climate bonds – assessment of the market status

The legislative and institutional framework for green and climate bonds in Italy is well established and the market shows a stable positive trend. In the last two years a significant growth can be observed also in the field of green- and sustainability- linked mini-bonds.

Availability of market facilitators at regional level and availability of grant funding as well as standardised documentation are still weak points for a larger development of this instrument. Awareness level of public and private institutions on green bond instrument and how it works is still low, at least at regional level.

The market for green bonds continues to grow as regulatory developments have increased transparency and driven investor demand. While in the beginning green bonds were mainly an instrument proposed by governments and financial institutions, over time green bonds have conquered individual companies and municipal utilities, which issue them to support their ecological transition projects. Due to the nature of the sector in which they operate, utilities can be a very important driver for the implementation of energy efficiency projects at territorial level with the required capacity of developing a portfolio of green projects for green bond issues. The main municipal companies in Italy (e.g. ACEA, HERA, A2A and IREN) have already been able to issue sustainable financing instruments worth around EUR 6 billion.
The success of this instrument will also depend on the availability of local expertise capable of organising information and training events and providing technical assistance for the use of these instruments.

1.3. Green loans

Green mortgages and loans have become a significant part of banks' offerings in recent years in Italy as they constitute a product category that drives market interest, both for private clients and businesses. Despite their growing use, green mortgages are still not seen as an instrument that can sufficiently stimulate the market of building retrofitting to meet the actual and future energy efficiency targets. In the absence of public guarantees, it remains difficult for banks to grant green mortgages and loans at favourable rates and to clients with low credit scores, who are often the ones most in need of upgrading their buildings.

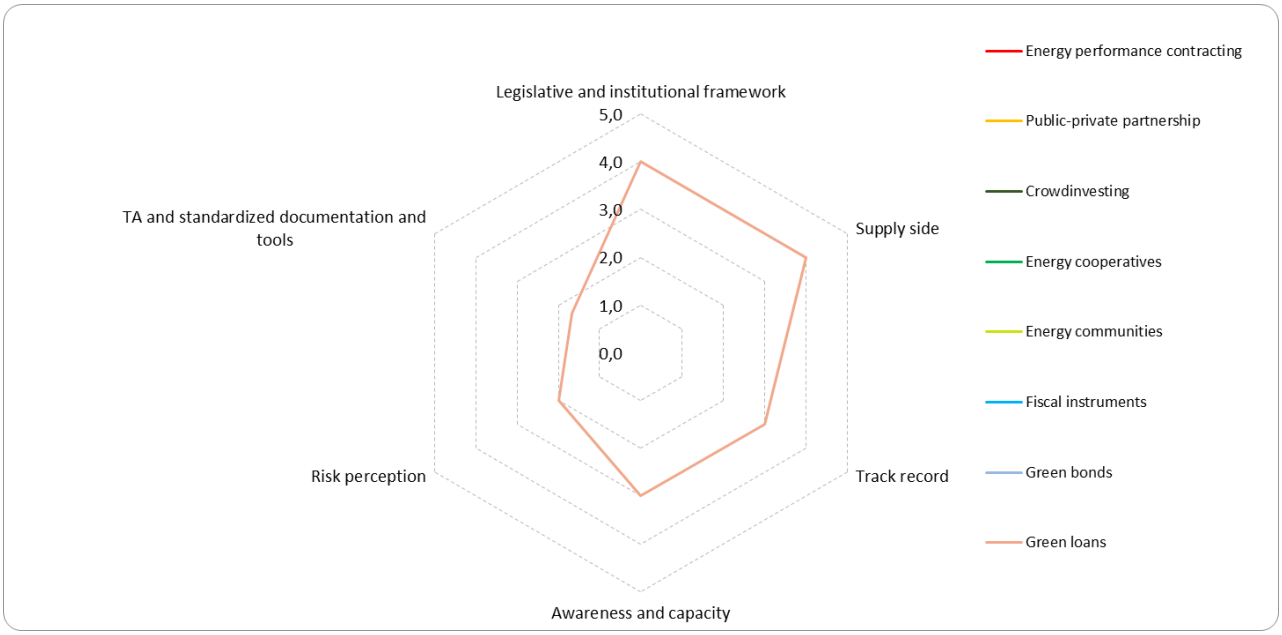

Figure 4: Green loans – assessment of the market status

A critical factor in the provision of green loans by banks is also their difficulty in the technical evaluation of the efficiency interventions and their reporting. For example, in order to verify the requirements of the taxonomy or the DSNH (Do No Significant Harm), it is usually necessary to request the assistance of external technicians at additional cost to the financing.

The possibility for banks to assume a central role in the energy transition of the building stock depends also on their ability to position themselves not only as lenders, but also as advisors. Some banks have already tried to develop these competencies internally, others have relied on external technical support, but this should be reinforced. There is still a lack of easy access for banks to national EPC databases and to data about the actual energy performance of the building to facilitate credit risk analysis based on interventions and savings achieved. As banks prefer to lend money with guarantees or with the inclusion of requirements that allow capital savings, the buildings requirements must be clearly defined, with simplified verification and demonstration options for both companies and banks. A more precise quantification of the savings achieved could allow banks to be compliant with the European taxonomy and fully assess the ability of the instrument to promote sustainable investments.

1.4. Energy service companies (ESCO) and Public-private partnership

In Italy, there are 1025 ESCOs certified according to UNI CEI 11352. ESCOs are reorienting their own commercial offer towards solutions capable of integrating renewable and efficiency technologies in a 360° sustainable perspective.

This is reflected in a variety of different approaches and contract types, and a greater tendency to provide services such as design and consultancy, alongside more traditional implementation activities. Among the types of contracts offered, the turnkey mode currently dominates. However, there has also been a significant increase in energy performance contracts (where the financial risk is borne by the supplier), at around 8%, and project finance, albeit to a lesser extent (around 5%).

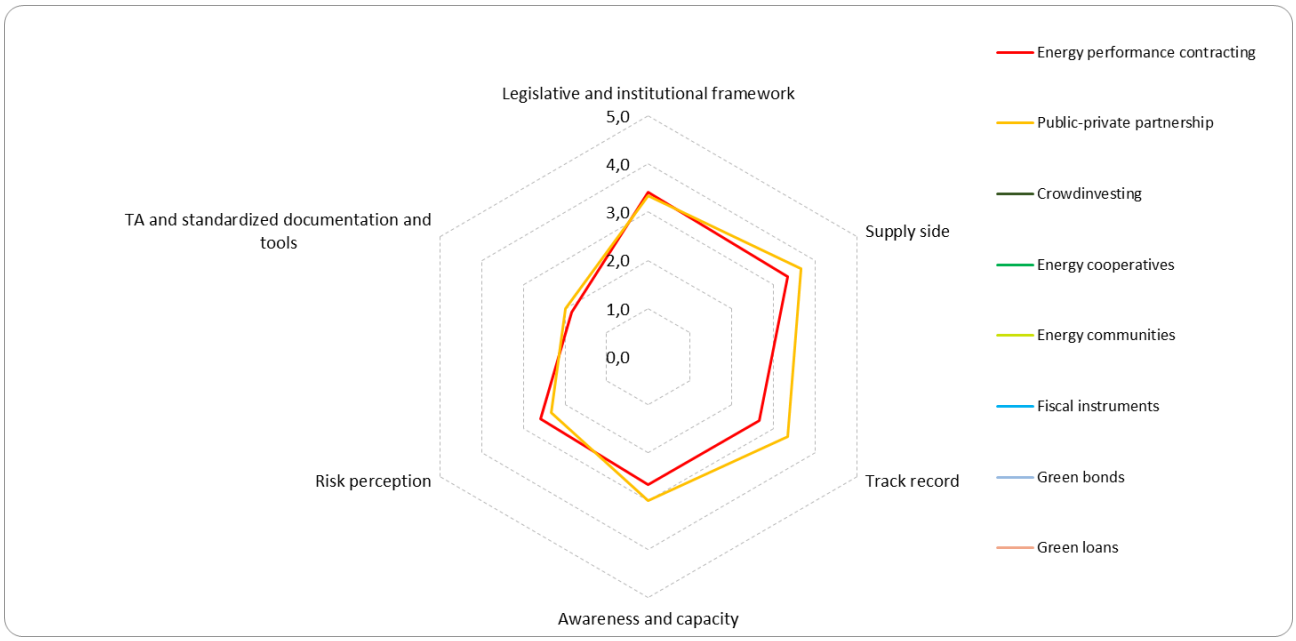

Figure 5: EPC and PPP models – assessment of the market status

The involvement of ESCOs and the use of EPC and public-private partnership (PPP) contracts have increased in the public sector in recent years, more in administrations that are well structured and equipped with skills to make the best use of the Public Procurement Code, using EPC for procurement or PPP depending on the nature of the interventions and the characteristics involved. In addition, EPC has also been used in smaller administrations thanks to European support or the support of territorial agencies acting as one-stop-shops.
Indeed, the lack of in-house expertise, standardised model contracts and facilitators are the main obstacles identified by public administrations for a wider use of these tools and a less sceptical attitude towards the services offered by ESCOs.

The recent entry into force of the UNI CEI EN 17669 standard "Energy Performance Contracts - Minimum Requirements" and the preparation by ANAC of the Standard Energy Performance Contract for Public Buildings could give a new boost to the use of this type of contract.
The UNI CEI EN 17669 standard defines the minimum requirements for Energy Performance Contracts (EPC) and applies to Energy Performance Improvement Actions (EPIA) on existing

buildings. The aim of the standard is to address all the many aspects of an EPC (technical, financial, legal) and to respond to the demand for widely accepted guidelines and best practices that meet the needs of the different actors involved.
The model Energy Performance Contract, on the other hand, is a guide for public administrations involved in the implementation of energy efficiency measures in public buildings and will help them to prepare Energy Performance Contracts according to public-private partnership procedures and in the light of the entry into force of the new Procurement Code.

However, in order to increase the use of EPC in public administrations, more investment is needed in the qualification of professional resources (not only those within administrations): EPC and professionalism are closely linked and are interdependent variables in the achievement of objectives.
The positive development of the ESCO market can be further strengthened through the creation of schemes linked to energy efficiency funds and the introduction of new financing options. At the national level, a new mechanism is being developed to support the energy efficiency of low-income households and social housing using the 1.380 billion NRP funds. The work will no longer be financed through the tax deduction mechanism, but will be carried out directly by ESCOs on the basis of an agreement with an operating partner to be designated by the government.

1.5. Citizen-led initiatives

1.5.1. Crowdinvesting

Crowdinvesting is a fairly regulated market in Italy and it will be even more with the national implementation of Regulation (EU) 2020/1503, whose requirements became fully operational in autumn 2023. Since 2019 there has been a great increase of investments in projects with a strong focus on sustainability and also on energy efficiency in buildings. In any case, the impact of this instrument on the building renovation market remains limited.

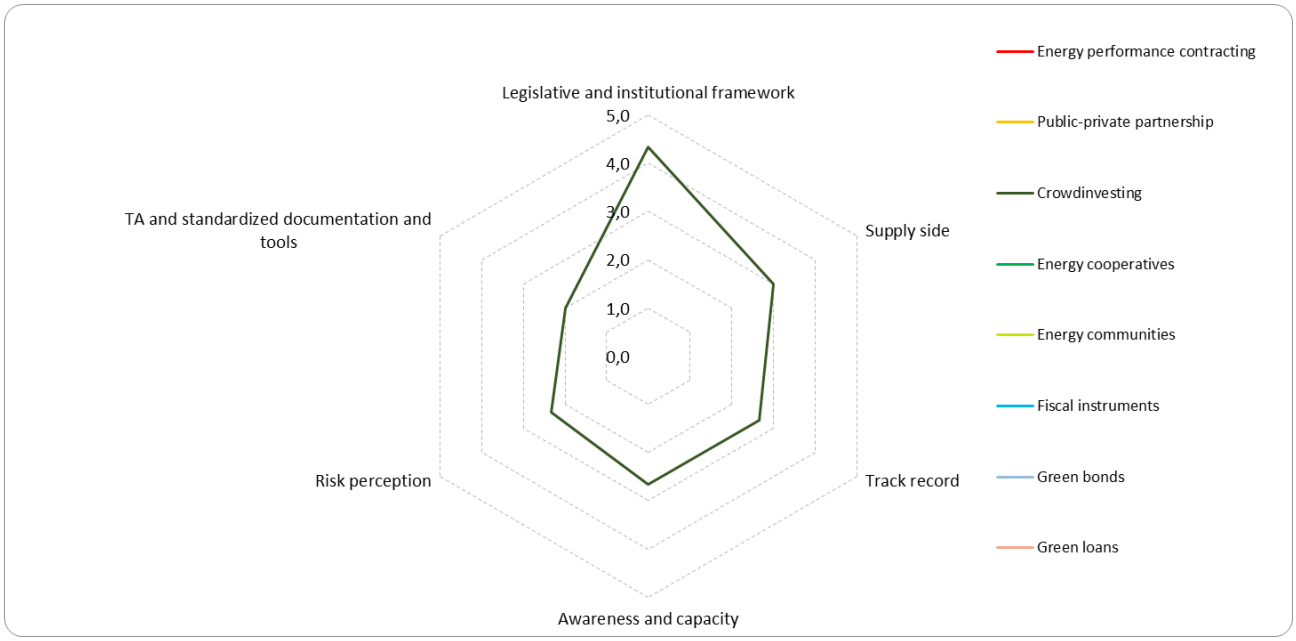

Figure 6: Crowdinvesting – assessment of the market status

The awareness level of public and private authorities and of investors on crowdinvesting models is still low and both view crowdinvesting as highly risky. The instrument is mainly used in the retail sector as a boost in initial financing, due to the speed of collection and the absence of collateral securities. It is often used as a "marketing tool" to give more visibility to the investment or to create consensus on a project. The use of crowdinvesting is always generally combined with other financial or fiscal instruments.

1.5.2. Energy communities and cooperatives

Renewable energy communities are groups of people, companies, condominiums, cooperatives, local authorities, associations, religious bodies that join together to self-produce and self-consume electricity from renewable sources: photovoltaic, wind, hydroelectric and biomass. The Energy Community concept is very promising and is attracting considerable attention from local administrations, stakeholders and investors. However, the high expectations placed on this sector in the last years have not yet been fully realised due to a regulatory framework that is only now being finalised. At the end of November 2023, in fact, the European Commission gave the green light to the Italian decree on incentives for energy communities, which provides for a non-refundable contribution (up to 40% of the investment, only for municipalities with less than 5,000 inhabitants) and an incentive tariff for the renewable energy produced and shared. With the decree about to be officially published, the sector is expected to grow rapidly in the coming years.

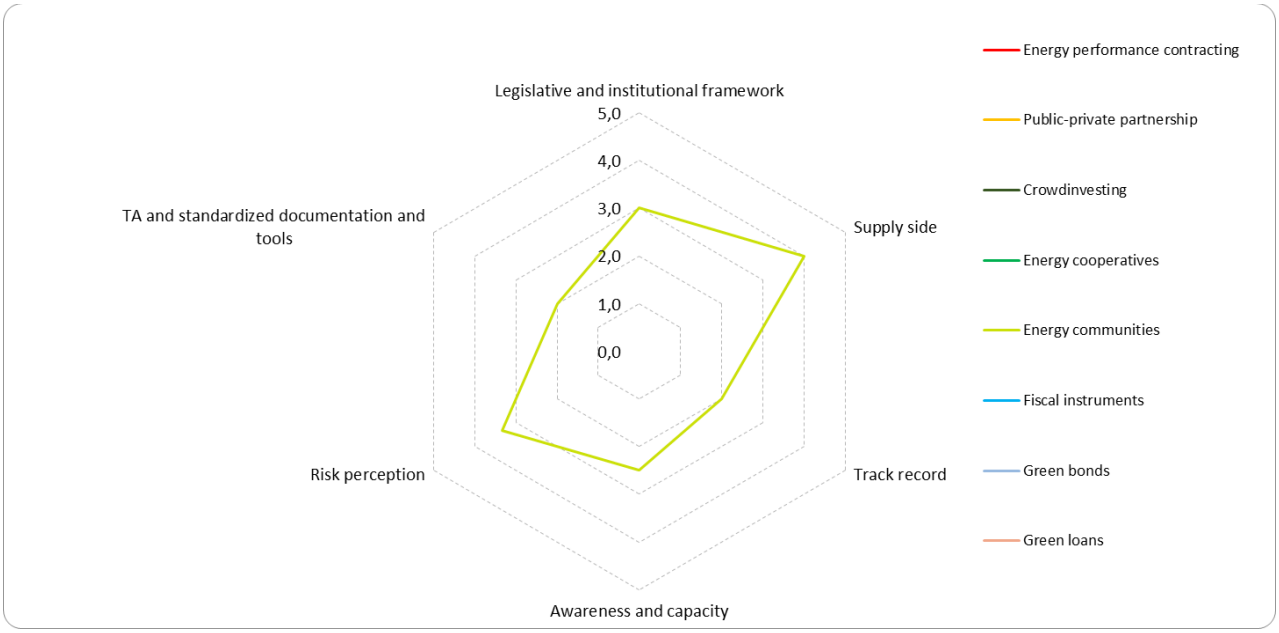

Figure 7: Energy communities and cooperatives – assessment of the market status

Although the concept of an Energy Community is now established and defined from a regulatory point of view, there are still many aspects that need to be clarified in order to implement this instrument effectively and on a large scale. The first issue to be defined is the choice of the legal nature of the Energy Communities and the relationships that must exist between their members. Notwithstanding the central role of public bodies, the contribution of private parties, in particular utilities, will be crucial in terms of their potential role in the implementation and technical management of energy communities, as well as that of credit institutions in terms of their

financing. It will also be necessary to standardise the rules governing the relationship between the participants in the energy community and the related documentation. Another important aspect is the availability of facilitators who can provide technical and legal support for the creation of an energy community, but who can also activate participatory pathways for the involvement of members.

The development shortly of Energy Communities could also be exploited to stimulate energy efficiency actions in the sites included in an Energy Community, taking into account the different type and legal nature of the actors potentially involved (e.g. citizens, enterprises, non-profit organisations, public bodies) and the different possible incentive instruments and financing models that can be applied.

1.6. Conclusion and recommendations for potential piloting actions

In Italy fiscal instruments and public funds are the main lever for financing energy efficiency improvements in buildings.

The experience with the Superbonus 110% shows that there is a need for regulatory stability and long-term stabilisation of incentives. A reorganisation of the areas, timing and amounts of incentives could direct a new attitude towards energy renovation of buildings by introducing differentiated rates that reward solutions according to their contribution to energy efficiency, use of renewable resources and reduction of emissions. The possibility of combining incentives, non-repayable grants and guarantee instruments should also be introduced, also for the benefit of the banks providing the funds. Guarantee funds could be a powerful lever to accelerate the deployment of resources by the private sector, while facilitating access to finance for other actors. This type of resource would, for example, make it easier for banks to provide higher-risk loans, such as those for energy efficiency.

The use of more innovative instruments for financing the energy renovation of buildings is still limited, although the legal and institutional framework has gradually been defined and is currently quite stable for all the instruments analysed.

On the supply side, the market is quite active, although not all instruments are considered to be competitive with more traditional instruments.

In the discussion with local stakeholders, the most critical aspects were related mainly to the awareness and knowledge of these new instruments by public and private investors and their capacity, also in terms of internal skills, to successfully use innovative financial instruments for the energy retrofitting of their own assets. The lack of in-depth knowledge of the different financial instruments is reflected in a certain mistrust towards them and a higher perception of the risk associated with their use compared to more traditional forms of financing. The availability of technical assistance and, for some instruments, of standardised documentation (guidelines, model contracts, etc.) remains a fundamental issue for the adequate development of these instruments.

The interest of public and private investors, but also of the ESCOs participating in the regional working groups, is currently mainly focused on energy communities. Other instruments, on the other hand, are still little known and used and should be better explored, also in relation to the possibility of combining them with more traditional instruments.

Financial institutions, on the other hand, expressed the need to simplify the assessment of energy efficiency requirements of buildings to align with the EU taxonomy, but also to receive support in assessing the climate-environment risk of buildings to better report on their green investments.

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