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. Buildings, both public and private, 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 this 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 assess the overall state of policies and financial markets in five central European countries for the building sector. A stronger emphasis in this baseline assessment has been placed on the innovative financing models that involve private investors and citizens. The results of this study will be presented to key stakeholders during roundtable sessions as part of the development of the market gap analysis for the introduction of innovative financing models.

1. Germany

1.1. General overview of the financial sector

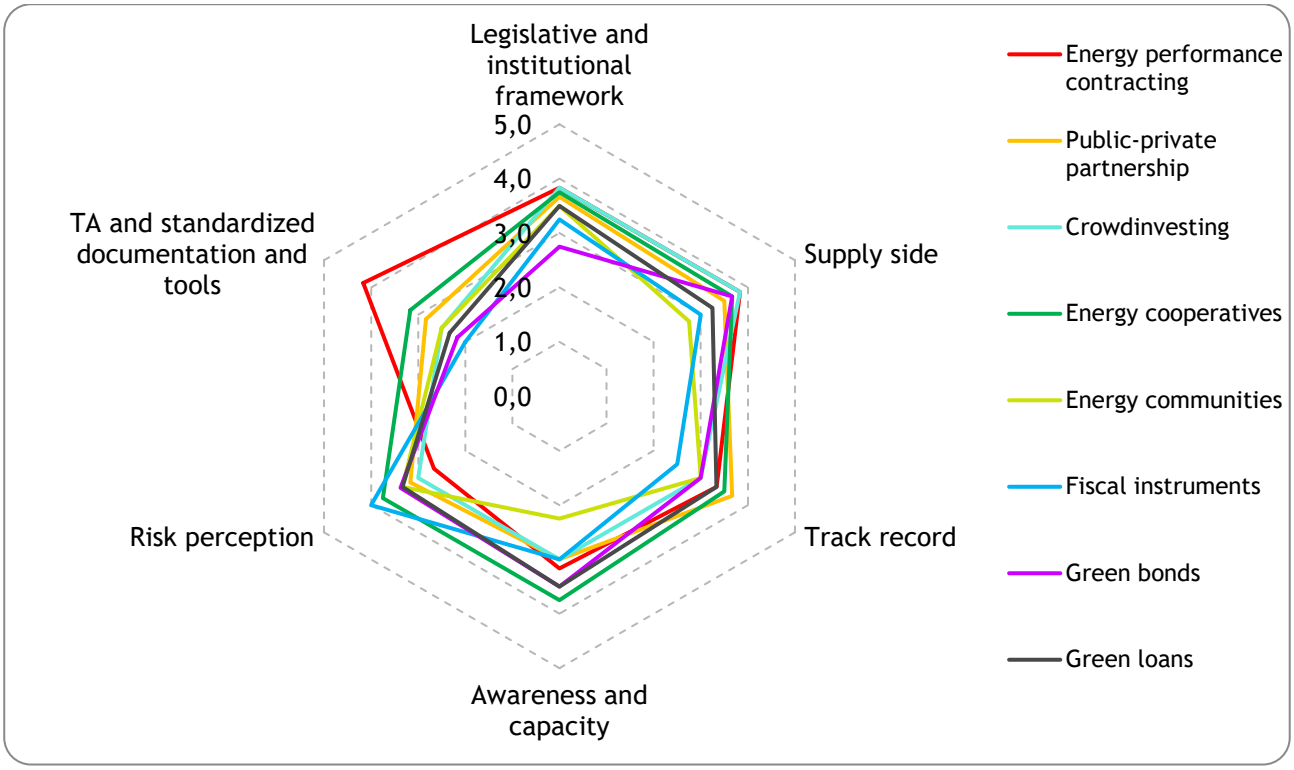

Figure 1: Market assessment of different financial instruments in Germany through a spider diagram

The financial instruments were all evaluated by the Energy Agency of Northern Bavaria (EAN). In order to get a wider insight, the GLS bank and the Energy Agency of Berlin (BEA) helped to include their experience in the field.

The overall result can be seen in the spider diagram above. It shows that most of the methods have a good availability and a working system in Germany.

The negative evaluation of technical assistance, standardized documentation and tools is outstanding across almost all methods. One reason is that one of the three criteria was “grant funding for project preparation costs which use this model”. This form of grant is not a common tool in Germany. Another reason is that standardized documentation usually develops over a longer period. As some of the financial instruments discussed in this project are relatively new, this thorough documentation has not yet been developed. The exception for energy performance contracting can be explained by their nature being programs that are highly funded and defined by the federal government with detailed documentation.

The best evaluation was given for legislative and institutional frameworks. This shows that the German federal government managed to create a solid basis for sustainable financing over the last years. The largest critic in this indicator is that in some methods like green bonds are missing standardized sustainability criteria that help to systematically prevent greenwashing.

1.2. Public support schemes

As described in 3.1.1, the major public support scheme for sustainable buildings in Germany is the BEG which grants funding to both sustainability renovation projects as well as sustainability in new buildings. The overall reputation of this program is positive and it is well-known throughout the society.

One weakness of the BEG is the changes that are induced regularly to the funding criteria. Even though those changes are in the interest of sustainable development, they damage the trust as a project could lose its funding unexpectedly.

Moreover, some critics see it as a weakness that the BEG does not differentiate between the economic situation of the project developer. They discuss that the money could be distributed more wisely if the funding would be lower for very rich people or companies and higher for poor citizens who struggle to afford a renovation. This is a political discussion.

1.3. Fiscal policies

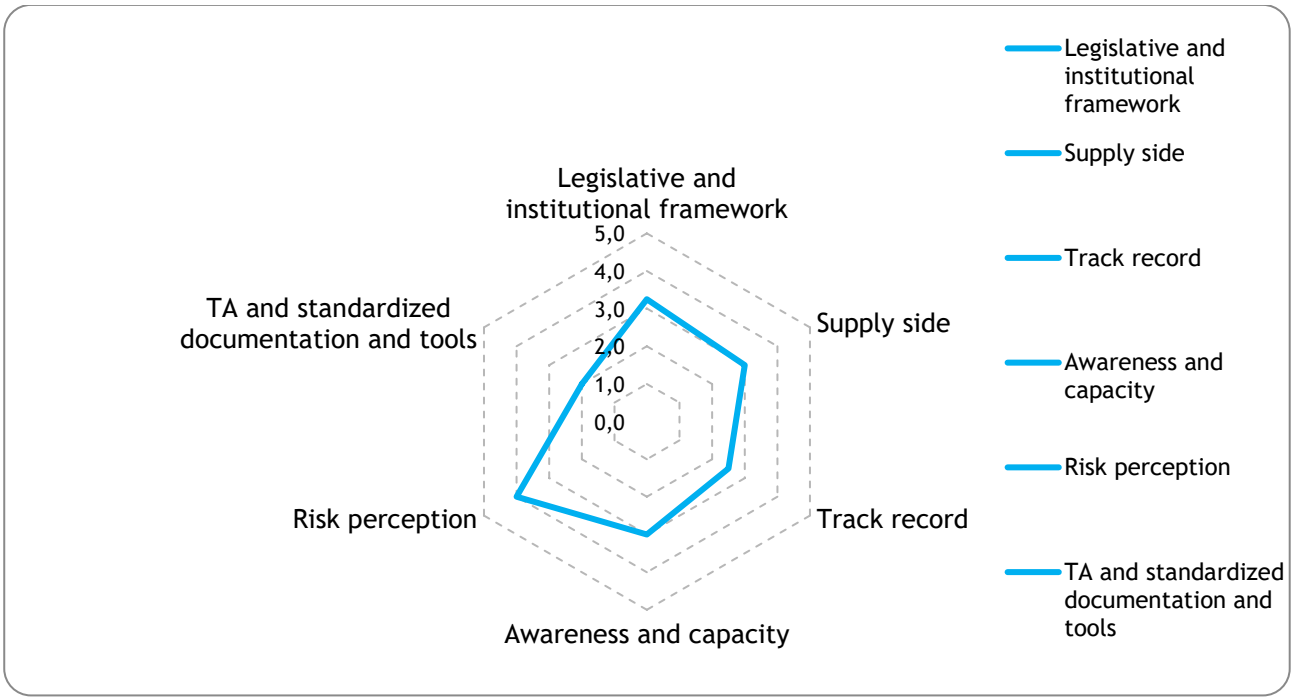

Figure 2: Fiscal instruments - assessment of the market status

There are some options to get fiscal benefits in Germany through energy efficiency measures. As this is a useful and well-known tool but does not have a large impact on the feasibility of renovation projects, most points in the spider diagram have been rated averagely.

The risk perception stands out positively because the tax system is generally very stable in Germany and both companies and private building owners have trust that the system will work as foreseen if they follow the rules.

The negative evaluation of the documentation and tools is due to the question that specifically asked for specialized market facilitators and tools supporting this measure. Energy agencies and similar entities do not provide this. This does though not mean that no help can be found in the search for fiscal instruments and their implementation. This falls under the responsibility of tax consultants.

1.4. Green and climate bonds

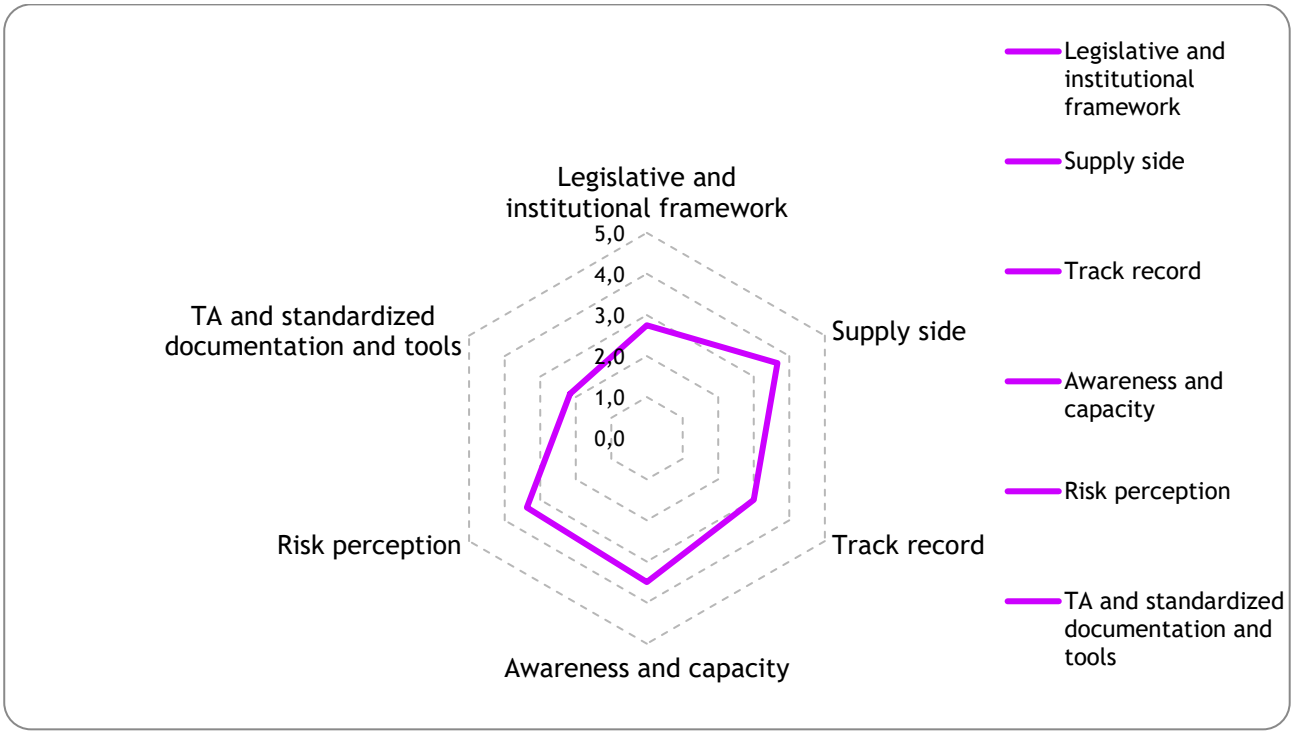

Figure 3: Green and climate bonds – assessment of the market status

Green bonds are a very new method on the marked which makes it hard to assess the overall development yet. The method was assessed by the Energy Agency of Northern Bavaria and by the GLS bank.

The German federal government issued green bonds with large volumes both in 2020 and in 2023. This is the reason for the positive evaluation of the supply side both from EAN and GLS. The risk perception, awareness and capacity were evaluated nearly as positive which shows that all market players in Germany are well aware of the options and interested in pursuing the path of green bonds.

There are no statutory regulations for green bonds in Germany. Even though private players initiated standards, this is a negative factor that led to the low score of TA and standardized documentation and tools.

It is too early to evaluate the track record of green bonds at this time. A first quick assessments seems medium to positive, but a real development will appear over the coming years.

1.5. Green loans

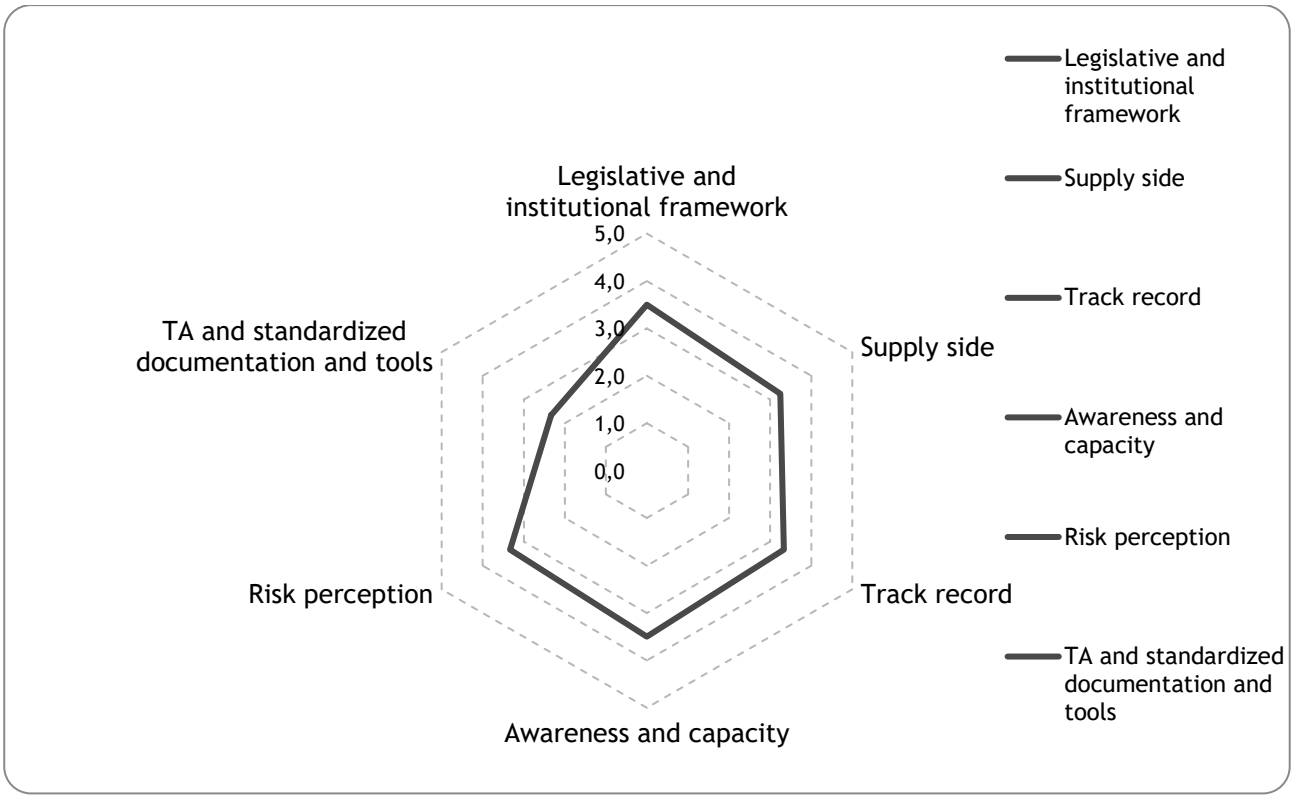

Figure 4: Green loans – assessment of the market status

In this spider diagram, green loans were evaluated through EAN and the GLS bank. As for green and climate bonds, green loans are a relatively new method which makes it hard to foresee the general development and leads to the average evaluation.

Fact is that the supply of green bonds is driven by various players including the development bank KfW, private banks and specialized green banks. The certification as "green" can be done both through predefined ESGs or KPIs. The problem here is that the KPIs and ESGs are defined individually and can sometimes be used as greenwashing. This leads to a lower evaluation of the supply side as well as risk perception. As the products from the various suppliers are very diverse, a standardized documentation and tools are hardly available.

Overall, the awareness and interest for green loans are high both for private investors and for companies. But the wide range of offers, fear for greenwashing and missing standardization decrease the final reputation of the method.

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

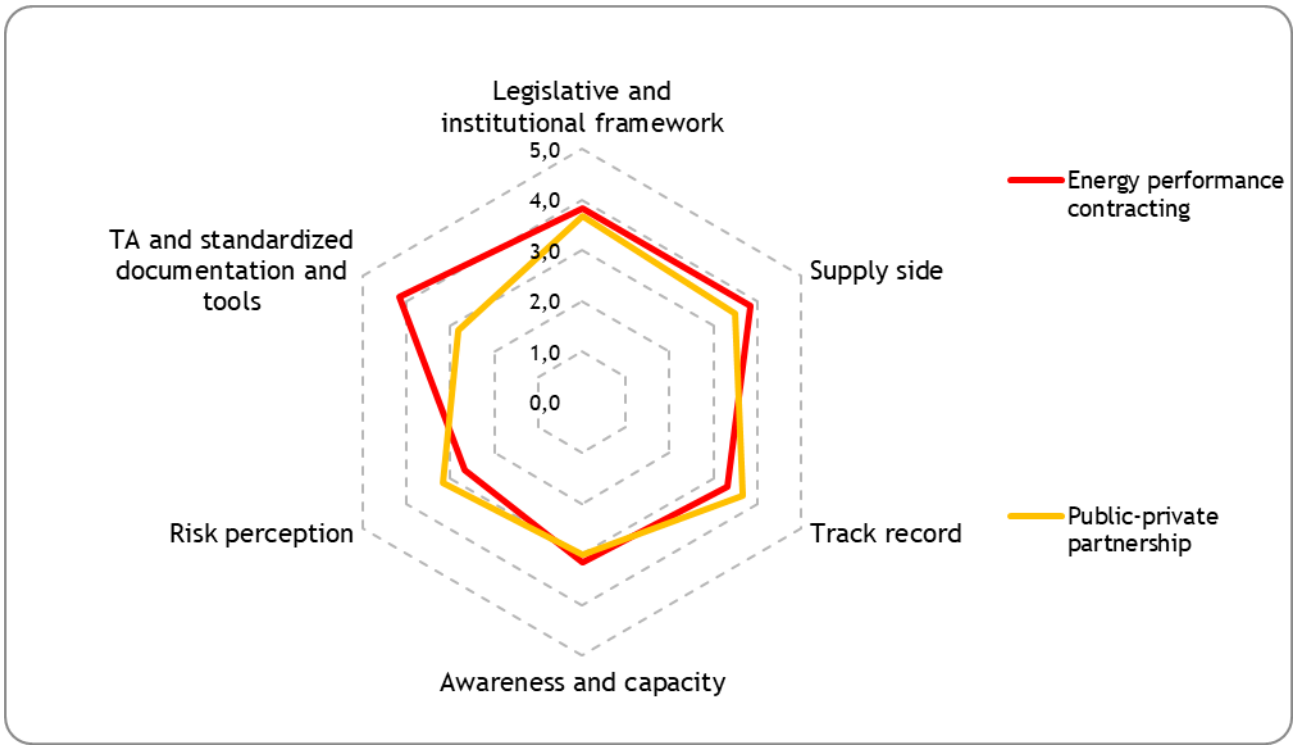

Figure 5: EPC and PPP models – assessment of the market status

The energy agency of Berlin (BEA) helped with their experience as an energy performance contracting company whereas the GLS bank gave insight about public private partnerships.

Overall, both models have a good framework and reputation in Germany. Energy performance contracting is a well-known method that is regularly performed in municipalities and larger buildings. As energy agencies form a well-established network in most regions, the supply of the service is very good. The German Energy Agency (dena) provides extensive material on legal and organisational issues. The spread of energy performance contracting varies significantly from state to state, depending on public support and specific public orientation. With their professional services, energy efficiency is maximised by the choice of the best measures, correct use of for example heating systems and long-term data observation. Depending on the measure, energy performance contracting is often funded or relatively cheap compared to the savings. This leads to a good evaluation in track record, awareness and risk perception. As most energy performance contracting is established through the initiative of funded public programs, the technical assistance, documentation and tools are well standardized and available.

Public-private partnerships have a long tradition in Germany especially in energy efficiency measures. Private energy agencies are often chosen to support the measures due to information lack in the public sector. The programs set up by public authorities as shown at the example of energy performance contracting. In some cases, the documentation and support are not always as good as for energy performance contracting, especially when new targets are necessary.

1.7. Citizen-led initiatives

1.7.1. Crowdinvesting

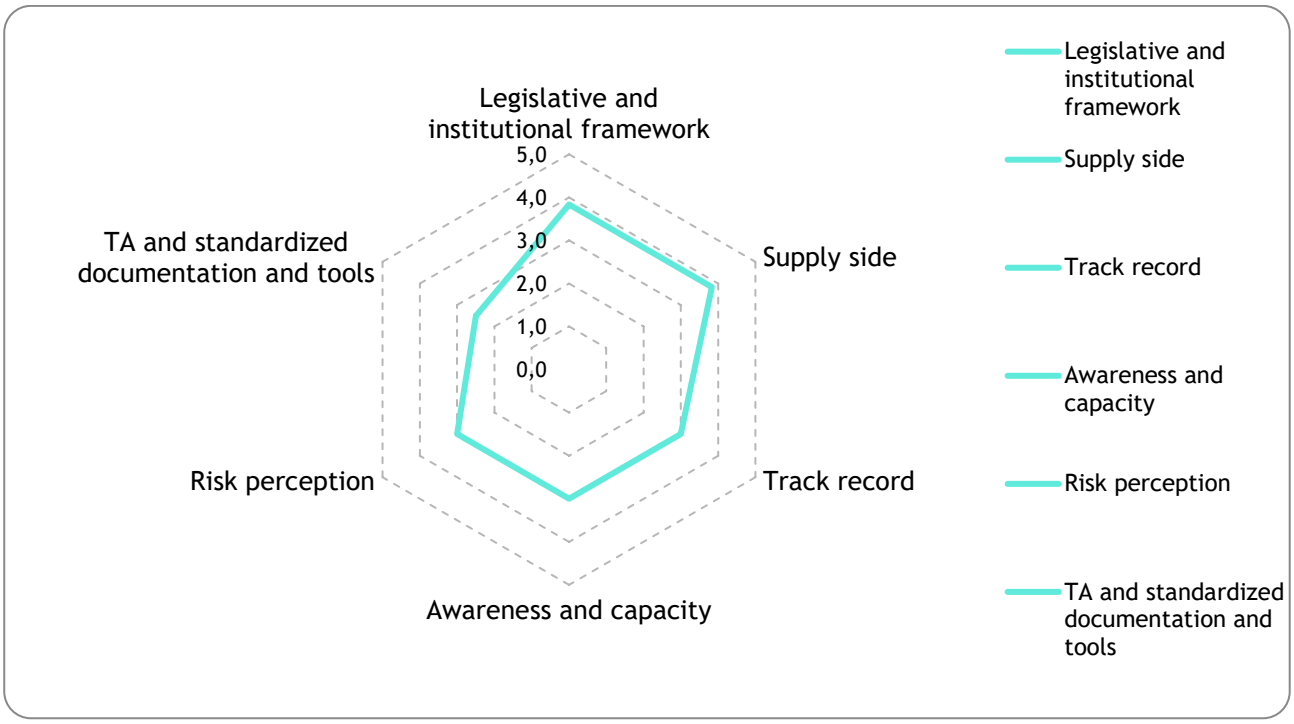

Figure 6: Crowdinvesting – assessment of the market status

The overall framework for Crowdinvesting in Germany is very positive. Both the GLS bank and EAN ranked the legislative and institutional framework for this method high, especially after the implementation of EU legislation. Moreover, this framework is not depending on the use case which makes it solid even for unusual sectors.

There is contradictive information about the application of crowdinvesting in the building sector. Our partner GLS bank does not see crowdinvesting as a relevant method in the building sector. A marked report on the platform crowdinvest.de though states buildings as the largest field of application. It is possible that this difference originates from different viewpoints of the building sector. The GLS bank has a strong focus on sustainable and energy topics. From the viewpoint of EAN, the method is often used for energy generation projects. This is why the track record and awareness of the method have been ranked negatively. As EAN had no insight in the builiding marked, we filled out the spider diagram with our knowledge of the energy generation sector.

As described in 3.1.1, the number of suppliers has drastically increased over the past years. Their offers are usually online applications that can be easily adapted to the projects and include extensive service by the supplier. As the suppliers are well regulated since the EU regulation was implemented, there is no large need for further documentation and tools.

The problem with the risk perception is that it highly depends on the project. Investors need to be well informed about the project in order to decide whether it is a trustworthy investment or not. The wide range of projects and their trustworthiness leads to mixed opinions regarding risks and track record as well as the investment capacity.

1.7.2. Energy cooperatives and communities

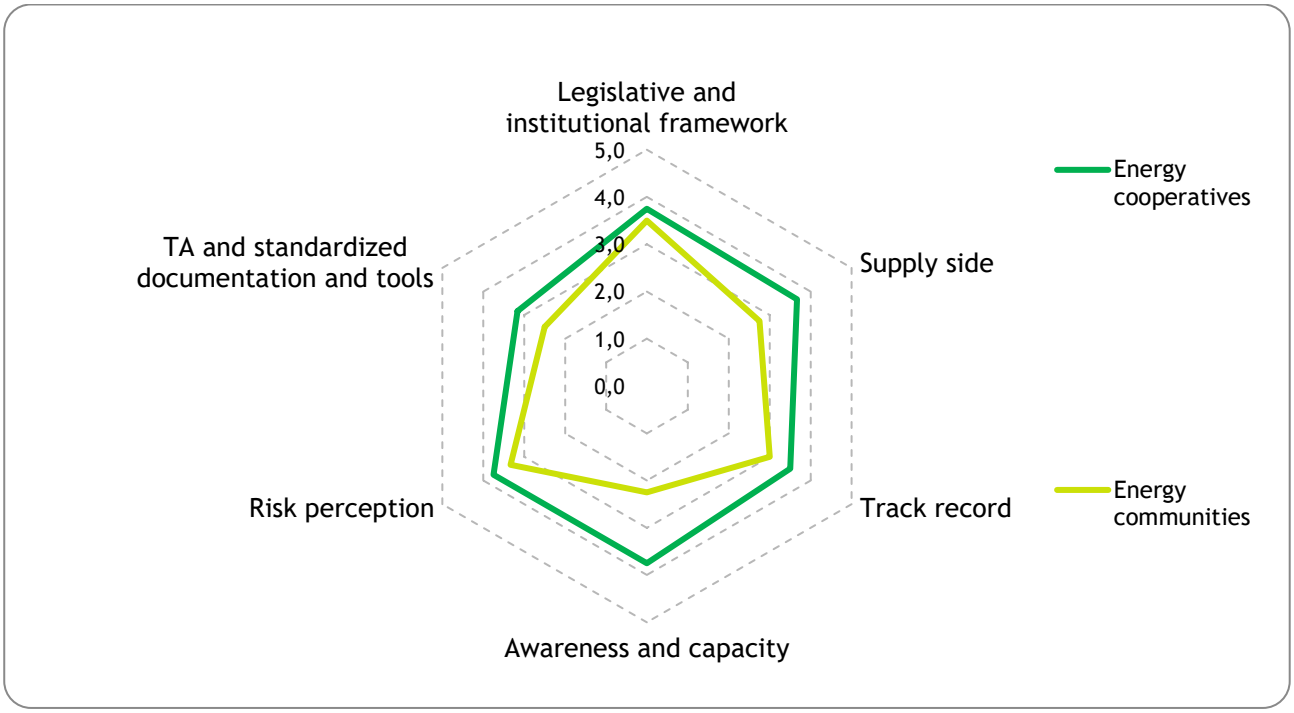

Figure 7: Energy cooperatives and communities – assessment of the market status

EAN has experience with energy cooperatives and communities from the viewpoint of large-scale sustainable energy projects like wind farms. This means that the evaluation done in this section is mostly done for this specific use case. Additionally, those two methods were discussed with the GLS bank who have huge experience in all types of sustainable energy projects including both large-scale and domestic power generation.

In Germany, energy cooperatives are the most popular form of energy communities. The cooperative method fits very well with the goals of sustainable energy generation – including as many people as possible, reaching a democratic decision-making process and hence creating a project with great acceptance boosting the regional economy and development. As the method is used regularly, it has high awareness, good documentation and risk perception. Overall, those factors lead to a very positive evaluation of this finance model.

Other forms of energy communities such as limited commercial partnerships, civil law partnerships, or limited liability companies do not fit the democratic goals as well as cooperatives do. This leads to a low awareness of those options as well as a bad supply situation. Following on that, best practice examples and standardized documentation are hard to find. The legislative and institutional framework is evaluated as nearly identical to energy cooperatives because all types of energy communities are handled in the sustainable energy law equally.

1.8. Conclusion and recommendations for potential piloting actions

Some key conclusions about financing conditions in Germany can be drawn based on the conducted gap analysis. The legislative and institutional frameworks in Germany are generally very strong, this provides a good foundation for moving forward with exploring different approaches to financing. Of the eight financing approaches considered we found three to be worthy of focusing on in the piloting phase: green loans, ESCOs, energy cooperatives/energy communities.

Fiscal instruments have a good track record in Germany although their impact has been perceived as very limited in this context. Energy agencies also do not provide tax consultations and any changes initiated by a public authority would require an expert in this field.

Green loans present instruments that have been used for energy renovation of buildings in the past, but the unstandardized and untransparent methodology for the calculation and monitoring of green KPIs has led to potential greenwashing of investments. Green bonds on the other hand have not had a long track record and the project developers have used various green/climate standards to prove how green their investments are. Actions for both instruments, that would lead toward a more transparent methodology should be explored as part of the financial piloting with financial institutions and project developers.

ESCOs have the potential to be a significant financing instrument in Germany due to legislative and supply-side conditions, which have produced positive track records. However, most ESCOs are looking into individual or purely HVAC projects which are seen as “low-hanging fruits” in the renovation process. Deep renovation projects are considered by ESCOS as deal breakers that cause the project to have much longer payback periods.

Crowdinvesting has so far had a very solid success in Germany although the energy renovation of buildings has not been explored extensively by the platforms or banks. Further consultations with financial institutions are needed to determine the true potential of this financial model.

Energy cooperatives and communities have a well-established legislative framework, and more importantly, an excellent track record so far which bodes well for additional exploration in form of pilot projects. The cooperative model could be further developed by increasing resources and providing increased technical support.

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