Feasibility study for financial instruments under ERDF 2021-2027 in South Muntenia, Romania

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Abbreviations

Abbreviation	Full name
CPR	Common Provision Regulation (Regulation (EU) 2021/1060)
EBRD	European Bank for Reconstruction and Development
EC	European Commission
EIB	European Investment Bank
ERDF	European Regional Development Fund
EU	European Union
FNGCIMM	The National Credit Guarantee Fund for Small and Medium Enterprises
GBER	General Block Exemption Regulation (Regulation (EU) 651/2014)
HF	Holding Fund
IFI	International Financial Institution
NPB	National Promotional Bank
SFH	Single Family Homes
TFEU	Treaty on the Functioning of the European Union

Table of contents

Introduction

For the 2021-2027 programming period the South Muntenia (SM) region, for the first time, will have a dedicated ERDF programme. The programme, which will be managed by SM Regional Development Agency, is currently under discussion with DG REGIO.

The programme is expected to include as key priorities:

- digitalisation support, including business infrastructure such as industrial parks, incubators, and business centres.
- energy efficiency in both public and residential buildings, urban mobility, blue and green infrastructure.
- tourism and cultural heritage;
- more accessible roads including county roads and ring roads;
- schools and nurseries.

Under previous programmes (2007-2013), ERDF finance was made available to local authorities as grant, to support, for instance, the development of tourism and business infrastructure projects, subject to the authority co-investment of at least 50% of the total cost. Due to the lack of availability of debt finance especially for small local towns, which represent the majority of localities in SM, the co-investment requirement was often a barrier to accessing the grant funding.

In common with many EU regions, SM has a large number of single family homes in need of modernisation to improve energy efficiency. Typically built between 1940 and 1980, the region's housing stock would benefit from improvements to its insulation and heating systems to reduce carbon emissions, as well as addressing fuel poverty issues amongst homeowners.

Although the details are still being developed, the Regional Development Agency intends to finance some of the actions within the above key priorities through financial instruments, potentially including:

- a 'Regional Fund for Local Authorities' to provide loan finance to local authorities for tourism and business infrastructure;
- a financial instrument for 'Energy Efficiency in Housing' to provide loan finance to owners of individual houses, potentially in combination with grant, to support their modernization in terms of energy efficiency. This financial instrument would complement a national programme targeting apartments and social housing.

The purpose of this feasibility study is to investigate the need for, and the possible implementation of these two financial instruments. It has been undertaken in two parts, a market assessment, followed by consideration of implementation options.

The market assessment has three main parts. The first is an overview of the SM context and main features of the three sectors (tourism, business infrastructure, and energy efficiency). The second focuses on the demand side, illustrating the main challenges in accessing finance in each of the target sectors and presenting some of the potential projects, proposed by local authorities (county and municipality level), that could be object of the financial instrument support (i.e. Regional Fund for Local Authorities). The third section investigates the supply side, presenting the main challenges and the past and existing financial support.

Information has been collected mainly through two questionnaires (see Annex I for detail), one for the demand side (split into questions for tourism and business infrastructure and those specific for energy efficiency) and one for the supply side (sent to financial intermediaries). The study team has received 13 answers from local authorities, 8 from building/professional associations, and 6 from financial intermediaries. Additional information derives from interviews and desk research, mainly based on Regional Development Agency documentation.

The second part concerns the implementation options design. The objective is to provide recommendations for the proposed financial instruments as concerns their:

- governance structure;
- proposed financial products and combination with grants, State aid options, final recipients;
- initial financial size and the potential for private co-financing.

This part is structured in chapters addressing each of the objectives. It responds to the findings of the market assessment which identified significant markets gaps in relation to the sectors under consideration as follows:

- for business and tourism, related investment costs are estimated at about EUR 135-190 million, including EUR 100-145 million for tourism and EUR 35-45 million for business infrastructure;
- for energy efficiency, about 50 000 single family homes are expected to be renovated in the period up to the end of 2030, generating an investment requirement well in excess of available resources.

1. South Muntenia Economic Background

This chapter describes the key economic characteristics of South Muntenia (SM). After a brief overview of the region, the analysis presents the main features of the tourism, business infrastructure and energy efficiency sector. For each of the sectors analysed, the chapter discusses the general potential and challenges.

1.1 Overview

Located in the south of Romania, SM is a development region[1] extending to the border with Bulgaria, surrounding the capital city Bucharest, which is a separate administrative unit.

Highly populated with nearly 3.2 million inhabitants in 2020[2], it is the second most populated region in the country. Made up of seven counties, nearly 25% of the inhabitants are concentrated in Prahova County, followed by Argeș (20%), and Dâmbovița (17%) in the north. Since the 1990s the population has followed a declining trend, with a higher and increasing rate than national average, reaching -0.7% per year between 2010 and 2020 against -0.2% of Romania.

Most of the population (more than 60%) live in rural areas. Moreover, **most municipalities are small** with less than 100 000 inhabitants and more than half with less than 20 000 inhabitants. The municipalities are **strongly affected economically and socially by Bucharest.** This causes a weak development of the adjacent cities[3], which are unable to counterbalance or capitalize on the influence of the capital. For instance, in 2018, Bucharest, which represents nearly 9.8% of the country's population, attracted 60.7% of foreign direct investment in Romania. For SM this percentage is only 6.3% and mainly concentrated in the three northern counties (Prahova, Argeș and Dâmbovița).

The region is also subject to **aging and emigration challenges.** The age structure of the population bears the characteristic imprint of a demographic aging process, with lack of labour force and pressure on the pension system. SM is also challenged by the emigration phenomenon, ranking second in 2018 with a negative net migration[4]. Most of young people that emigrate to work abroad come from the more disadvantaged counties and rural areas, severely affected by poverty and lack of work opportunities.

GDP has grown in recent years, but a high rate of poverty still persists. GDP per capita was EUR 15 400 in 2018[5], placing the region in sixth place at national level[6]. Between 2012 and 2018 it followed a slow but upward evolution, from 41% to 51% of the EU27 average. Approximately 17% of the population on the verge of severe poverty at the national level is situated in SM, the largest proportion among the eight development regions[7].

SM is characterised by **significant territorial disparities**, highlighted by the gap between the economic performance of the counties in the north (Prahova, Argeș and Dâmbovița), specialized in industry, but also in trade, construction, and tourism, compared to those in the south (Teleorman, Ialomița, Giurgiu and

[1] The eight development regions of Romania were created in 1998 by the association of the Romanian county councils in order to coordinate the regional development necessary for Romania to join the European Union. Romania's development regions correspond to the NUTS-II level divisions in the EU. Although they are becoming increasingly significant in the field of regional development, these regions have no administrative status, no legislative council or executive body. The development regions are not administrative-territorial units, they do not have legal personality, being the result of a free agreement between the county and local councils. Their function is to allocate EU funds for regional development, to interpret and research regional statistics.

[2] National Institute for Statistics, data refers to 1st January 2020.

[3] Within a radius of 100 km there is no city with a population of more than 100 000 inhabitants, with the exception of Ploiesti.

[4] The number of people who left their home was 10 380 higher than the number who moved to SM.

[5] At standard purchasing power.

[6] The GDP per capita inn2018 at regional level registered a value lower by about 11 percentage points than the national one.

[7] The rate of severe material deprivation of 25.8% in 2017 and 23% in 2018 (data provided by the Ministry of Labor, Family and Social Protection in the document Indicators of social inclusion calculated by the Ministry of Labor, Family and Social Protection, 2011 - 2017).

Călărași) more dependent on agricultural activities. The three counties in the north contribute to more than the 70% of the regional GDP. The four counties in the south, with a small population, contributed the rest. The disparity between the different counties in South Muntenia is shown by the fact that the GDP per capita in Prahova county - ranking first in the country in terms of industrial production - is nearly double the one in Călărași county.

1.2 The tourism sector

Third in size out of the eight development regions, SM covers 14.5% of Romania's territory[8]. It has a rich cultural and historical heritage, with several natural and historic elements of special attractive value.

Due to its geographical position, it is characterized by a number of specificities that can influence the potential of the tourism sector. First of all, the **proximity to the city of Bucharest** offers unexplored opportunities, such as the access to the largest national market and the largest airport in Romania. The capital is also part of the Brașov-Ploiești-Bucharest-Giurgiu development axis, which crosses the region from north to south and is the main development corridor of Romania, with around 30% of the country's urban population and a large part of the industrial activity.

Moreover, there is the **Prahova Valley conurbation**, a linear agglomeration of small cities - such as Azuga, Bușteni, Sinaia, Comarnic, Breaza - with a similar economic profile dominated by the tourism sector. Finally, the **proximity to the Danube River** provides good opportunities for business expansion and development, including tourism, in non-urban and southern areas of the region. For example, the existence of five partner cities on the Danube has the potential for integrated urban development (including within cross-border urban functional areas).

> ***Key challenges:***
>
> • Due to the small size, municipalities lack access to finance and the necessary experience to manage investment into tourism infrastructure projects.
>
> • The proximity to Bucharest prevents the development of other cities around it as poles of attraction and absorbs most of the development resources in their neighbouring territories, which led to the phenomenon of hypertrophy of the urban network in SM.
>
> • Most of the tourist cities have reduced accessibility (for instance, lack of a highway), poor tourist infrastructure and technical and urban endowment, insufficient promotion of tourist potential and uncontrolled expansion of residential (secondary) areas.
>
> • Weaker cooperation among cities.
>
> • Low-intensity connections due to poor infrastructure for crossing the Danube.

The region has **high tourism potential.** On one side this is due to the natural component, represented by spectacular landscapes, a varied configuration of the relief, favourable climatic conditions, and abundance of natural healing factors. It has a rich protected natural heritage due to its biodiversity, with three national and natural parks (out of the 13 of Romania) and there are over 100 000 hectares of protected areas. On the other, a number of the region's historical features have great tourism potential, including several archaeological sites, historical monuments and secular and religious localities, museums, elements of ethnography and folklore of great beauty and originality, architecture and art with a unique value. The region has also a very rich protected built heritage, with 4 778 buildings as part of the national patrimony, and 2 758 places of worship, out of which 79 wooden churches.

[8] This corresponds to an area of 34 453 km2. SM includes three major landforms: mountain 9.5%, hill 19.8%, plain and meadow 70.7%. In the four counties in the south (Ialomița, Călărași, Giurgiu and Teleorman) the characteristic form of relief is the plain, while in the other three counties in the north part (Argeș, Dâmbovița and Prahova) there is plain, hills and mountains. In these counties there are the highest mountain altitudes of the country: Moldoveanu (2 544 m) and Negoiu (2 535 m) peaks from Făgăraș Massif, and Omu peak (2 505 m) from Bucegi Massif.

Moreover, there is also a specific potential for further improvement in several existing touristactivities. For instance, **spa tourism**, a sector of great importance for the national tourism industry is practised especially in Dâmbovița, Ialomița and Prahova counties. There is also an untapped potential regarding mineral waters[9]. SM is also the **main destination for winter mountain tourism in the country**, mainly through the resorts of Prahova county. There is also a modern and developed ski infrastructure[10], even if the potential is only partially exploited, such as in Argeș and Dâmbovița counties.

Concerning **aquatic tourism**, the banks of the Danube (which crosses the region along the counties of Călăraşi, Giurgiu, Ialomiţa, Teleorman) and of the other flowing waters in the region have a great potential even if they are still not properly arranged. **Rural and eco-tourism** is also appreciated as another source of capitalizing on regional potential and to diversify tourist activities. **Cultural tourism** is also a valuable resource for SM, with a huge potential for development, but currently constrained by the degradation state of the heritage and lacking a proper strategy for its development.

! ***Key challenges:***

• In recent years, only a small number of heritage sites in the region have benefited from significant investments for their restoration and capitalization for tourism purposes and many of them were in an advanced state of degradation (about 70%).

• Spa tourism infrastructure still requires investments in rehabilitation and marketing to promote this type of tourism.

• In the mountainous area there are numerous tourist itineraries, but most of them do not benefit from specific signalling and marking facilities and they need investments for the rehabilitation of signalling, marking and approval of regionally recognized routes.

• Despite the aquatic tourism potential, there are no modern tourist infrastructures such as aquapark or marina, but only small rudimental beaches in the riparian cities.

• Overall, despite the high potential, tourism activity is concentrated in few centres while the rest of the region's cities' potential remains largely untapped as, for example, the area bordering the Danube River. This also reflects a lack of more modern and efficient tourism facilities.

The number of **accommodation structures** has followed a significant upward trend in the last 20 years in SM, especially since 2010 from 472 to 773 in 2020 (figure 1.1). However, the peak was reached in 2017 (826 structures), therefore the trend has reversed in the last years. This change has been mainly driven by Prahova county (-59 units), which has been the county with the highest number of structures during the two decades, overtaken by Argeș county only in 2020 (295 units *vs* 286 in Prahova county). Overall, more than 75% of the structures in SM are concentrated in these two counties, underlying the great divide between the north and the south. By adding the structures in the third northern county of Dambovita, the percentage reaches 86.7%.

In line with the national average, most of the structures are agritourism pensions (32.2% in 2020, the majority located in Argeș county), boarding houses (20.8%, mostly in Prahova county) and hotels (20.3%, mainly in Prahova county). On the other hand, structures such as hostels (3.9%) or camping structures (0.6%) are marginally represented. Overall, the structure of accommodation capacity is heterogeneous, so that counties

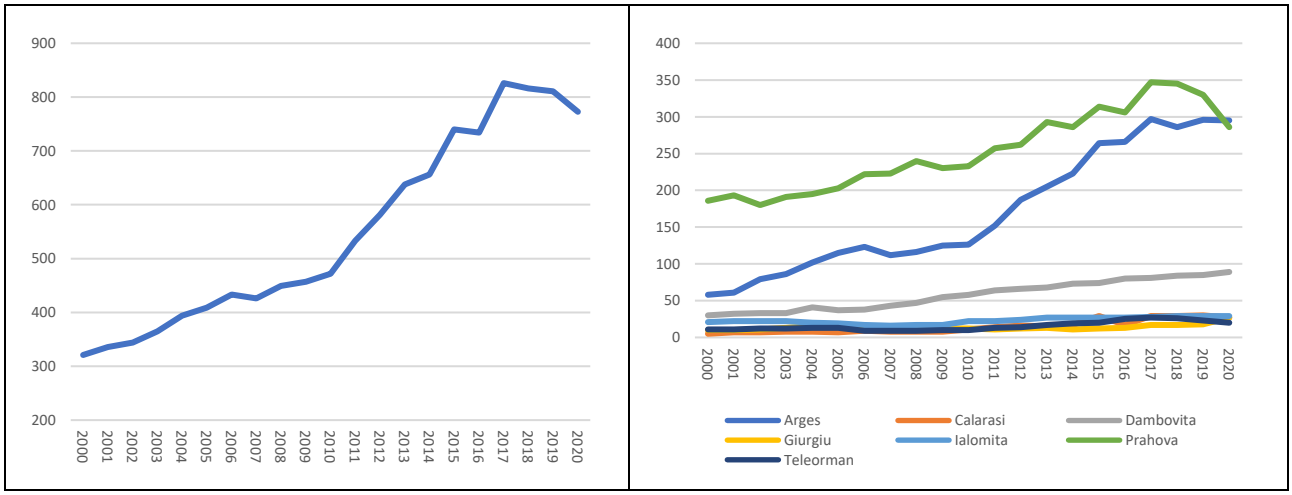
[9] Vulcana Valleys, Ovesa in Vulcana - Băi şi Ursei commune and Dealul Ticului in Bezdead commune, Dâmbovița county. In the region there is the Slănic Prahova Salt Mine, which is the main objective for tourism and treatment (for saline therapy). The tourist circuit in the salt mine follows a route that allows highlighting some spatial elements of tourist interest in the internal structure of the salt massif.

[10] In the mountain resorts there are 17 cable transport installations and 26 approved ski slopes in Sinaia, Busteni, Azuga. Currently, there are new ski slope projects in the Cocora-Padina, Padina-Peștera (Dâmbovița), Ghițu-Moliviș, Lerești-Voina, Albeștii de Muscel (Argeș), Babeșu-Cheia (Prahova) areas. In 2018, there were 8 tourist resorts of national interest (out of the 47 existing at national level), respectively balneoclimateric resorts of national interest (Pucioasa in Dâmbovița county, Amara in Ialomița county, Slănic in Prahova county) and Mountain resorts of national interest (Busteni, Azuga, Sinaia). The mountain resorts on Prahova Valley - Bucegi massif, tourist localities and natural parks located in Bucegi Mountains and Piatra Craiului Mountains, spa resorts - Slănic Prahova, Vălenii de Munte, Pucioasa, Câmpulung-Muscel are areas heavily exploited for tourism.

with a high flow of tourists (Argeş, Dâmboviţa and Prahova) have a diversified offer of accommodation units, while in counties with very little developed tourism (such as Teleorman or Giurgiu) the offer includes a very few types of units.

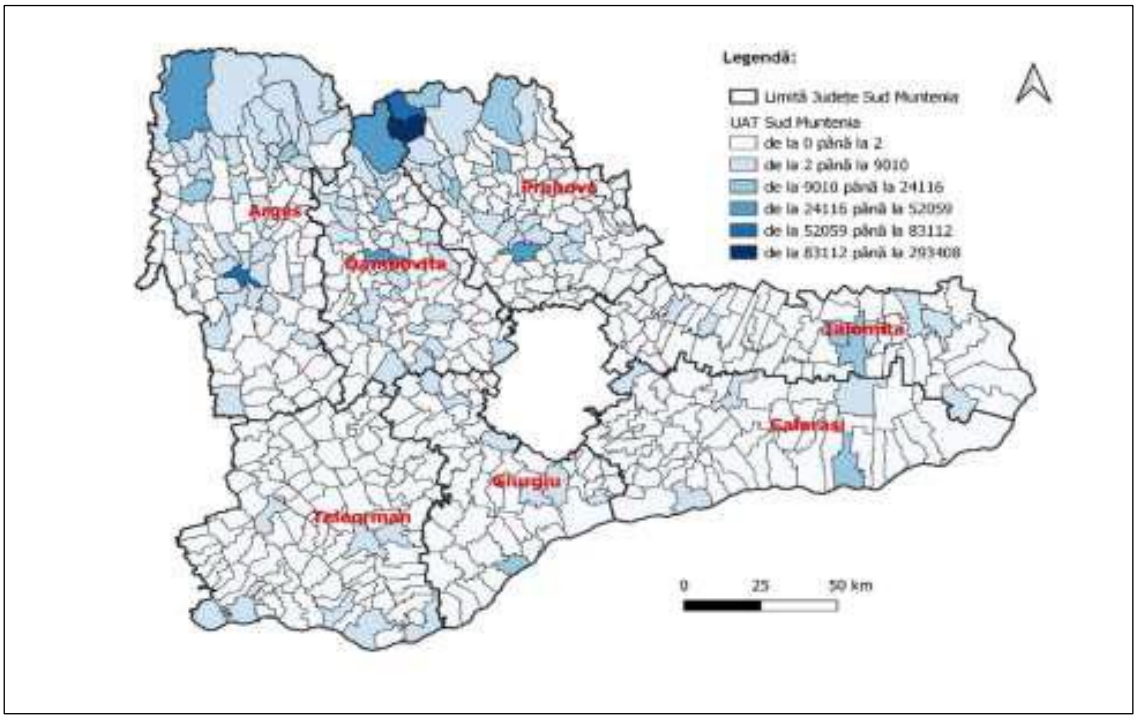
If 2020 is excluded, due to the covid-19 and related movement restrictions, the number of tourist arrivals - both national and foreign - has constantly increased during recent years, reaching the peak of nearly 1.1 million in 2019 (nearly doubled with respect to 2010), representing 8% of total arrivals in Romania. However, the share of foreign tourists is still low and remained nearly unchanged, with 13% of total arrivals in 2019. The localities that attract the largest number of tourists are concentrated in the northern counties (figure 1.2). The average stay of a tourist is rather short: it was of 2.17 days in 2018, slightly below the national average (2.35 days / tourist). The average stay for domestic tourists was 2.13 days, and 2.40 days in the case of foreign tourists.

Figure 1.1: Number of accommodation structures in SM and by county, 2000-2020



Source: INS - National Institute of Statistics Romania, indicator TUR101D 'Establishments of touristic reception with functions of tourists accommodation by type of establishment , macroregions, development regions and counties. The data include any building or settlement which provides permanently or seasonally the tourists with accommodation and other specific services. Tourist accommodation structure with a capacity of less than 5 places are not included in the statistical survey.

Figure 1.2: Number of arrivals in accommodation units, by localities, 2018



Source: reproduced from "Planul De Dezvoltare Regională 2021 – 2027 Al Regiunii Sud Muntenia" draft version June 2021

> ***Key challenges:***
>
> • Most accommodation structures were built between 1960 and 1980 and some of them are in an advanced state of physical degradation.
>
> • High concentration of investments in tourist infrastructure in limited parts of SM, especially in the north.
>
> • Most of the tourists come from the rest of the country, the internationalisation is rather weak, and the tourism is more transit oriented.

1.3 The business infrastructure sector

The old structure of the region's economy, which experienced a massive industrial development during the 1970s, has left its mark on the region's profile, still dominated by industry and agriculture but with a rising tertiary sector. Some of the industrial activities have survived and now represent an engine of economic growth, also due to foreign investment, but several localities have an underdeveloped industry.

Industry in SM has a **traditional but diversified** profile, largely based on territorial oriented activities dependent on the location of natural resources. It covers all the component fields, especially the chemical and petrochemical industry (in Prahova and Argeş counties), industry of machines, equipment and means of transport (in Prahova, Argeş and Dâmboviţa counties), the textile industry, and the food industry (especially in the counties in the south). SM is first at national level in terms of performance in the manufacturing industry, mainly due to the northern counties of Argeş and Prahova. Mono-industrial areas were specific especially to the communist period, when the dependency on a single economic sector was significant. Currently, most of these localities have managed to diversify their economy.

There are more than 60 000 active enterprises, positioning SM in fourth place at national level for the first time between 2011 and 2018[11]. **Over 89% of enterprises are micro** (0-9 employees), and other 9% are small (10-49 employees). Newly created active enterprises are moslty in trade (36.6%), followed by those in industry (18.4%), in hotels and restaurants (15.5%), in other services (13.3%), in construction (11.6%), and

[11] The dynamics of enterprises has in fact followed an increasing trend with +27.56% (+13 675 enterprises) in 2018 compared to 2011.

the least in transport (4.6%). 34% of the active service-related enterprises are located in Argeș county (north), while in Călărași county (south) these are only 5%. Prahova county ranks first in commerce, construction and industry, followed by Argeș County.

> ***Key challenges:***
>
> • There is still a number of vulnerable localities, in which a single employer provides over half of the jobs.
>
> • SMEs are mainly found in urban areas, thus deepening the discrepancies between urban and rural areas in terms of enterprises/jobs concentration and creation.
>
> • There is an unequal distribution of enterprises across counties and there are significant imbalances regarding the territorial concentration of business activities.

SM has the highest number of **industrial parks** at national level (26 out of the 94 at national leve in 2020). The main fields of activity of the enterprises hosted in these parks are mainly active in the textile, petrochemical, construction, electronic, medical and sanitary equipment industries. The range of services offered is limited in most cases only to utilities (electricity, natural gas, water, domestic sewerage, storm sewerage, parking lots).

Concerning **business incubators**, they are rather poorly represented in Romania[12]. The situation is similar in SM where there are only 2 business incubators (ITAF Ploieşti Technology and Business Incubator within the University of Oil - Gas Ploieşti and the Incubator of Business at the University of Pitesti).

There are 11 **research and development institutes**, in fields such as agriculture, viticulture, fruit growing, horticulture, fish farming, oil and oil installations and nuclear research. There are also two technological information centres[13]. In the R&D activity, in 2018, there were 2 631 employees, with an increase by 12.2% compared to 2017 and 16.7% compared to 2011. SM ranked sixth at national level in 2018, maintaining the same position as in the previous two years. Most employees came from Argeş County (1 891 employees), followed by Călăraşi county with 306 employees, while on the last place was Giurgiu county with 10 employees. In Ialomiţa county there is no employee in this sector of activity. In 2018 there were 201 innovative enterprises out of a total of 4 198 in Romania, ranking SM at the sixth place at national level. Most of the innovative enterprises operate in industry (146).

SM is third at national level in terms of total **expenditures for R&D**. Of the total expenditures[14], current expenditures have a share of 98.45%, while capital expenditures have a share of only 1.55%, decreasing as a share compared to the previous year, indicating the predominant orientation towards maintaining the market and not for development. The strong territorial polarization is evident also for the R&D expenditures in the north-south axis, with Argeș county having a share of 88.7%, followed by those from Prahova county with 4.90%. The last places being occupied by Giurgiu counties with a share of 0.06% and Teleorman with a share of 0.02%, while Ialomița does not enter the ranking. The dynamic analysis in the period 2011-2018 of this indicator reveals a constant increase of the level of R&D expenditures at regional level, but slower than the national level.

[12] At the end of 2014, in Romania, only 10 incubators were operational, most of them operating in fields such as consulting services, IT, biotechnologies, biomaterials, know-how transfer, scientific research, and transport services. Most were located in the Bucharest-Ilfov region. In total, in Romania, 330 businesses were thus "incubated", being created more than 700 jobs.

[13] The CIT Casa Dunării - Foundation for Democracy, Culture and Freedom - Călăraşi Branch - authorized in areas such as wind and solar energy, co-generation, hydraulics, Internet, fixed and mobile communications, transport, culture and tourism; CIT-CCIA Ialomița, Slobozia - Technological Information Center - authorized in areas such as food industry, agriculture and environmental protection.

[14] In 2018, LEI 363 924 million (around EUR 73.5 million).

Key challenges:

• The discrepancies between the southern and the northern part of SM are also found in the geographical distribution of the business support structures.

• Industrial parks infrastructure requires major investments, and their visibility among private enterprises needs to be improved.

• Business incubators are poorly represented in SM.

• The business support structures at regional level are still insufficiently developed and only a limited number of SMEs were located within these structures.

• The R&D and innovation system has several problems such as underfunding, poor endowment with high-performance technology, migration of specialists, low capacity of the business environment to invest in research or to assimilate the results of research and technological development, and very low investment attractiveness.

1.4 The energy efficiency sector (individual houses)

At the end of 2018, the building stock of the SM region was estimated at almost **1.4 million dwellings**, an increase of 2.2% compared to the end of 2011. Of the total number of dwellings, more than half (60.2%) were in rural areas, confirming the predominantly rural typology of the region. The only exception is Prahova county, where the share of housing in urban areas was 50.8%. Of the existing building stock, the majority were privately owned dwellings, 99.1%, and the remaining 0.9% were state-owned.

Table 1.1: Characteristics of the housing stock in the South Muntenia region for 2018

Region/County	No. dwellings	Nr. rooms	Nr. rooms on a dwelling	Living space (m^2)	Living space	
					on a room (m^2)	*on a house (m^2)*
Sud Muntenia	1 363 969	4 008 385	2.94	62 419 075	15.57	45.76
Argeș	281 132	784 663	2.79	13 324 356	16.98	47.4
Călărași	128 629	378 204	2.94	5 177 749	13.69	40.25
Dâmbovița	217 855	639 870	2.94	10 177 481	15.91	46.72
Giurgiu	120 530	390 579	3.24	5 378 729	13.77	44.63
Ialomița	115 106	343 216	2.98	5 191 883	15.13	45.11
Prahova	328 379	966 507	2.94	16 115 176	16.67	49.07
Teleorman	172 338	505 346	2.93	7 053 701	13.96	40.93

Source: National Institute of Statistics; TEMPO – Online

According to the SM Regional Development Plan 2021–2027, the most recent data on the total number of individual houses comes from the Population Census 2011[15]. At that time, out of a total of 989 239 residential buildings, there were **968 433 individual houses**. Of these, **78% were in rural areas** (771 797) and 22% in urban areas (196 636). **74% of the region's population was living in individual houses**.

[15] www.recensamantromania.ro/noutati/volumul-iv-cladiri-locuinte-gospodarii

In 2018, 5 603 homes were built, of which 5 489 using private funds, most of them in rural areas (66.3%). The number of finished homes from public funds was significant in urban areas (89.5%)[16].

The counties of SM fall into the macrozone with the seismic magnitude between 71 and 92 MKS scale, the value increasing from the southwest to the northeast direction[17]. This **seismic risk affects a population of over 2.1 million inhabitants** or two thirds of the regional population.

Typical characteristics of individual houses in SM are not available and only provided at the national level[18]. Most of the individual houses in Romania were **built between 1940-1980**, with ground floor or one storey in addition to the ground floor. Additional details on the typical characteristics of individual houses in Romania are given in the following table.

Table 1.2: Typical characteristics of individual houses in Romania

Structure:		
Exterior walls: 375mm masonry brick or 300mm clay brick.		
Solution	Material (from int. to ext.)	Thickness (mm)
masonry brick	cement plaster	15
	masonry brick	250 / 365
	cement plaster	25 ... 30
clay brick	clay plaster	15
	clay brick	300
	clay plaster	20 ... 30
Inner walls: 75/125mm masonry brick or 200mm clay brick.		
Slabs:		
Consisted of reinforced concrete cast-in-situ with 100mm thickness or wooden beams, rigid junctions.		
Terraces/Roofs:		
Ceilings are usually 15mm cement plaster, the roofs with attic, without thermal insulation.		
Floor on the ground:		
Consisted generally of 28-48mm wood parquet and as cold floor 40mm cast-in-situ mosaic.		
Windows/Doors:		
Doors: wood panel **Windows:** double glazed, wooden frame.		

Even at the national level, data on the useful floor area is only available in aggregate for individual houses and in multi-family apartment buildings. Over 63% of these homes are **less than 50 m² of useful floor area**, which is much smaller than typical in other EU Member States[19]. Romania also has the highest rate of owner-occupation in the EU and the **highest proportion of residents who are homeowners** with 96.8% of the population owning their own property in 2018 (compared to the EU-28 average of 69.0% in 2017). These homes are, however, well below EU standards.

There is an **important difference between multi-apartment buildings and individual houses in terms of energy performance**, with the energy consumption per m^2 of individual houses built before 1994 about 83% higher than for multi-apartment buildings. However, this gap had reduced to 12% for buildings constructed

[16] Out of the total of 114 dwellings completed from public funds, at regional level 72 were in Prahova, 30 in Călărași and 12.Dâmboviţa.

[17] According to SR 11100 / 1-93 national seismic zoning.

[18] There are very poor records in general on the building stock in Romania and particularly in the south and east part of the country there is no adequate cadastre. Thus, quantifying the building stock and assessing its main features represents a challenge. This information gap is likely going to be closed after a new housing census will be finalised in July 2022.

[19] E.g., less than 5% of homes are of the same size in the Netherlands, Spain, Denmark, and Luxembourg.

between 2014-and 2016[20]. In terms of energy consumption by type of heating fuel, the highest share in the residential sector is consumed by on-site energy generation using **wood or biomass** heaters i.e., mainly old heating stoves in rural areas using firewood, followed by **natural gas**[21].

Energy poverty is an important issue in the country. In 2018, almost one in ten households reported not being able to keep home adequately warm, higher than the EU average - about one every fourteen households. In the same year, the proportion of households with arrears on utility bills (14%) was over twice the EU figure (7%)[22]. **In 2021, costs of electricity and gas have increased substantially** - 2-3 times compared to 2020 and previously. A new law to protect vulnerable consumers is being approved and should become applicable as of November 2021. This is expected to cover exclusively income support for poorest consumers (by income threshold), for heating and other sources of energy, during the winter. However, the higher prices for electricity and gas will affect significantly the medium-income owners of individual houses with inefficient energy consumption.

While these are likely not to benefit from the vulnerable consumers law, their heating bills could still become unaffordable during winter peak demands, particularly for individual houses with gas heating. Also, the Government supports the extension of gas networks to rural areas and included a call under the Large Infrastructure Operational Programme (POIM). However, the programme is not coordinated with any measure to increase energy efficiency in individual houses that would be newly connected to gas. This might lead to unaffordable heating for such their respective owners in the future or their refusal to actually connect to the newly available gas network.

! ***Key challenges:***

- Most of the individual houses, where of the majority of population lives, are old, located in rural areas and subject to high seismic risk.
- Individual houses are less energy efficient compared to multi-apartment buildings.
- The vast majority of houses consume on-site energy generation using old wood or biomass heaters.
- The country and also SM are significantly affected by energy poverty.
- The recent increase in the price of electricity and gas is remarkably affecting not only the poorest population but also medium-income owners of individual houses with inefficient energy consumption.

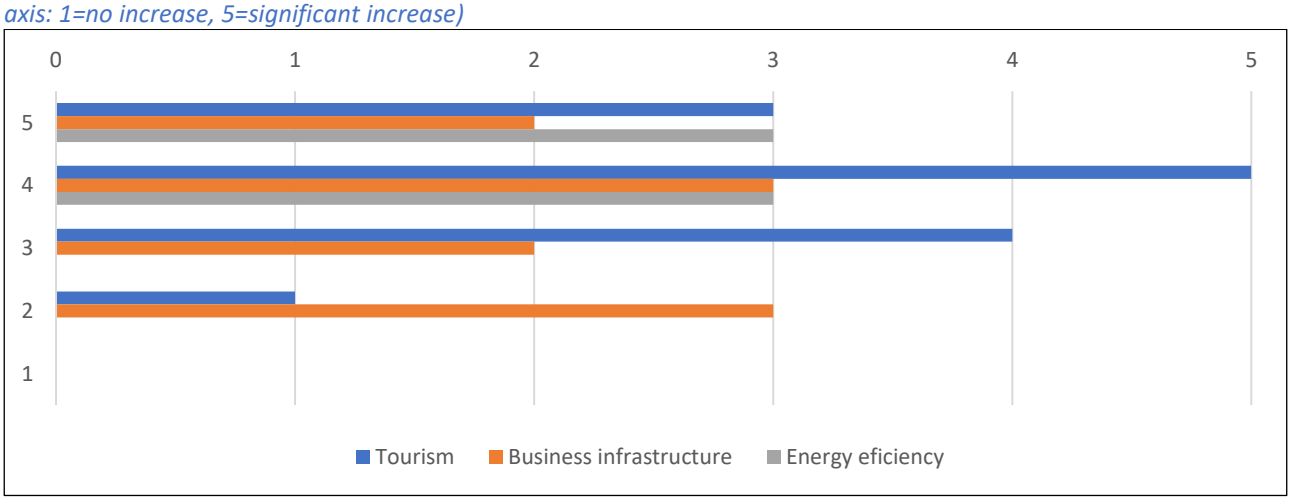
[20] *fi-compass* (2020), The potential for investment in energy efficiency through financial instruments in the European Union, Romania in-depth analysis, May 2020.
[21] The World Bank (2019), New Long-term Renovation Strategy - Final Report.
[22] EU Energy Poverty Observatory (2020), Member State Report - Romania.

2. Demand Side Analysis

This chapter analyses the existing financing demand needs in the three target sectors. Information is obtained from desk research (mainly SM documentation[23]) and from the questionnaire sent to public authorities (for tourism and business infrastructure) and to project promoters (public authorities and building/professional associations for energy efficiency in individual houses).

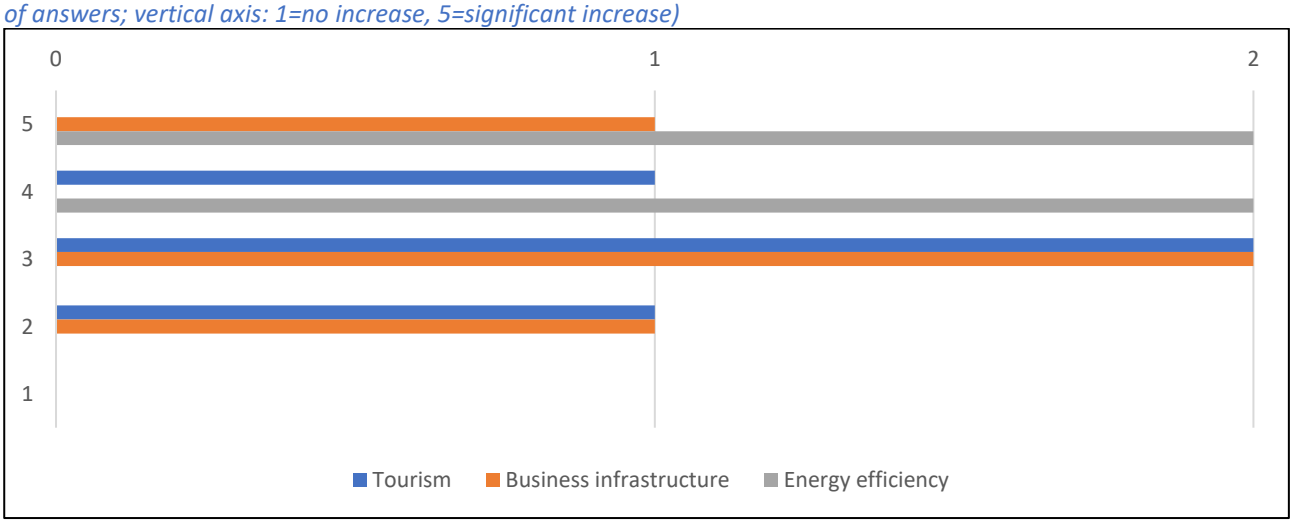
Looking at the questionnaire answers, demand for finance is expected by respondents[24] to increase - from moderately to highly - in the next seven years (i.e. next programming period), as evidenced in figure 2.1, especially for energy efficiency in individual houses and tourism. This perception is confirmed also from the supply side questionnaire by the six respondent financial intermediaries (figure 2.2).

Figure 2.1: Perception that the demand for finance will increase in the next seven years (number of answers; vertical axis: 1=no increase, 5=significant increase)



Source: question Q.7 in the questionnaire for public authorities (see Annex I for detail) and question Q.4 in the questionnaire for energy efficiency stakeholders (see Annex I for detail).

Figure 2.2: Financial intermediaries perception that the demand for finance will increase in the next seven years (number of answers; vertical axis: 1=no increase, 5=significant increase)



Source: question Q.4 in the questionnaire for financial intermediaries (see Annex I for detail).

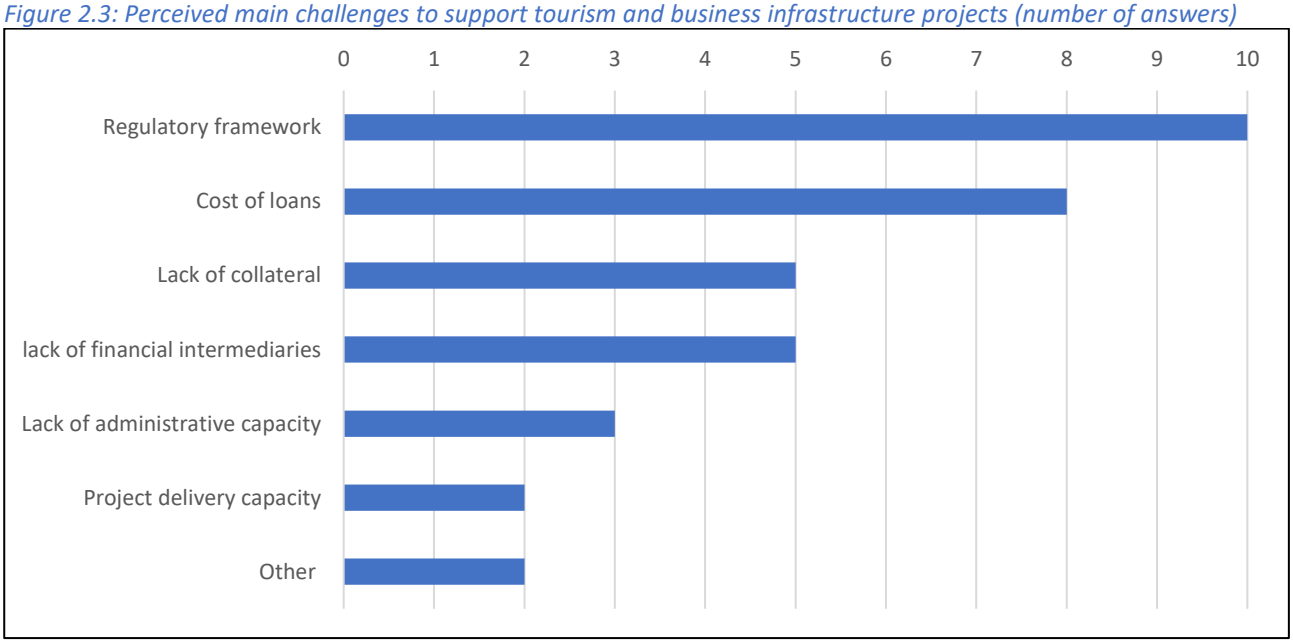
[23] ERDF South Muntenia Regional Operational Programme 2021-2027, Draft Version July 2021; Regional Development Plan 2021-2027 of South Muntenia Region, June 2021.

[24] The study team has received 13 answers from local authorities and 8 from building/professional associations and the academia.

The demand-side questionnaire also provides an overview of the general challenges faced in accessing finance. It is interesting to note that the perception of the challenges is different in tourism and business infrastructure sectors (figure 2.3) from the energy efficiency in individual houses (figure 2.4). For the tourism and business infrastructure sectors, the main challenge is represented by the **regulatory framework** (10 respondents out of 13). Further analysis through interviews confirms that this is mostly related to different rules concerning permits, yearly changes to the state budget rules (i.e. implying challenges for local budgets to adapt), repeatedly modified VAT-related laws, and the increasing costs related for the payment of social workers[25].

The **cost of the loans** is the second most important difficulty for accessing finance (8 respondents), followed by the lack of collateral (5 respondents). Internal capacities (administrative and project delivery) within public administrations seem to have less importance. One respondent highlighted the problem of a lack of promotion especially in the tourism sector. The investments here often require substantial resources that do not guarantee the subsequent use of infrastructure as well as an increase in the number of tourists attracted. Promotion actions play therefore a key role for the success of these projects, but these are often only poorly funded if at all.

Figure 2.3: Perceived main challenges to support tourism and business infrastructure projects (number of answers)

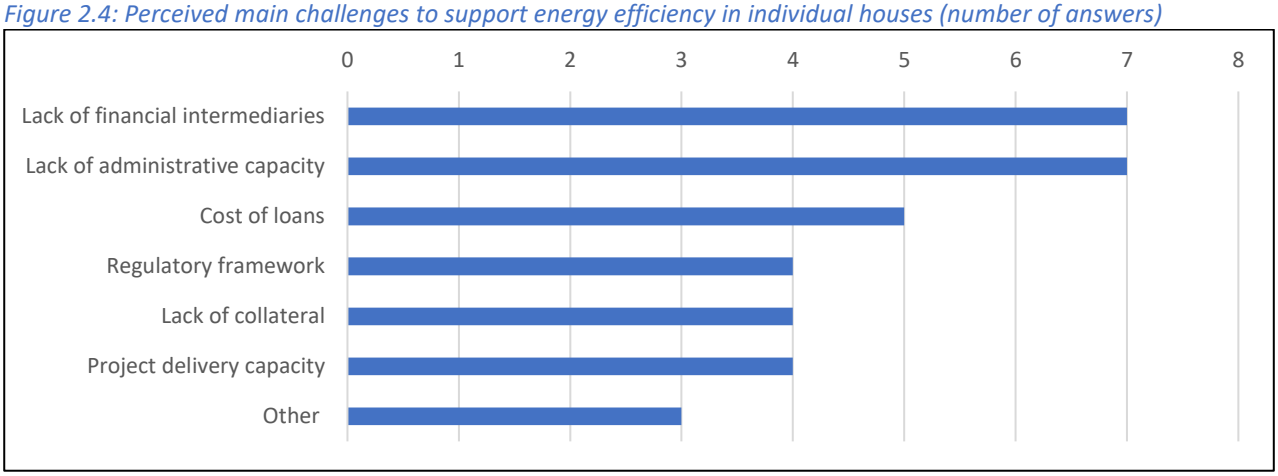


Source: question Q.5 in the questionnaire for public authorities (see Annex I for detail).

For energy efficiency in individual houses, instead, the main challenge (for seven respondents out of eight) is represented by the **lack of financial intermediaries**, which may indicate a lack of specific products targeting these investments. An equal number of respondents indicated a **lack of administrative capacity** as a main challenge. One respondent stressed the need to implement programmes to develop local capacities for collaboration between local specialists (energy auditors within energy agencies, experts from specific departments of public authorities, etc.) for the successful implementation of energy modernisation financing schemes in individual homes. **Cost of the loans** is the third most mentioned challenge for accessing finance. One respondent highlights that the lack of collateral and high-cost loans translates into a lack of dedicated loan products with subsidised interest.

[25] iclg.com/practice-areas/employment-and-labour-laws-and-regulations/romania

Figure 2.4: Perceived main challenges to support energy efficiency in individual houses (number of answers)



Source: question Q.7 in the questionnaire for energy efficiency stakeholders (see Annex I for detail).

The following sections provide a more in-depth analysis of the main challenges and financing needs for each of the target sectors. Examples of projects - for tourism and business infrastructure - proposed by local authorities that could potentially be supported by the financial instruments are also illustrated, providing the financial size, the scope, and the expected risks.

2.1 The tourism sector

Romania was, before 1990, an important tourist destination especially for the eastern market. However, given that the tourist offer has not changed over time, the sector currently attracts a limited number of international tourists. The situation is similar in SM, despite the increasing number of arrivals, especially from the rest of the country, since 2000.

Due to the significant natural, historical and cultural potential of the SM territory, capitalising on both tourist attractions and potential new activities can be an important factor for economic development, new business opportunities, jobs creation and investor attractiveness. The demand side needs can be classified into two main categories: investments for the modernisation and improvement of existing facilities (for instance, for spa and mountain tourism) and financing new opportunities (such as in water, rural and eco-, and cultural tourism).

2.1.1 Modernisation and improvement of existing facilities

A sector of great importance in Romania as the country enjoys almost a third of the water thermal baths in Europe, spa tourism can be practiced in SM in the counties of Dâmbovița (3 resorts), Ialomița (1 resort) and Prahova (1 resort). The main problem for this kind of tourism is represented by **low investments in the modernisation of tourist reception capacities** and the treatment base, despite the allocation of substantial funds for the development of this sector in the period 2014 - 2020. Investment in hotel and treatment structures is close to the limit of their operational activities so these are experiencing a process of deterioration since 1990. They work less on the basis of market tourist demand, but rather by ensuring a flow of tourists through the National Pension House and the National Insurance House of Health. Moreover, there is also the perception that this type of tourism is addressed exclusively to people with health problems without considering the leisure aspect, which could be a significant potential to be explored. In this context, there are cases where the **thermal and mineral springs in the region remain unexploited**.

Project name: Establishment of a leisure and spa centre in the Giurgeni thermal water area

Location: Ialomița County

Project promoter: Territorial Administrative Unit of Ialomița County plus possible partnership with the Giurgeni commune

Estimated costs: 5-10 million (new project)

Scope: The project, foreseeing the construction of a leisure and spa centre, is located in a land whose water resource was highlighted geothermal. It is close the national road Bucharest - Constanța, 8 km west of Giurgeni commune. The land is fenced, it has an archaeological site category A and is located under the administration of Ialomița County Museum.
The implementation of this project aims to ensure a sustainable development of geothermal resources with protecting the environment. The overall objective is to increase the importance of tourism and the development of natural heritage, as a stimulating economic development of Ialomița county, with respect principles of sustainable development and environmental protection.
Potential risks: poor planning; inadequate resources; lack of senior management support; poor communication; poor definition of roles and responsibilities; unclear objectives for some people involved; changes in the scope of the project; unrealistic expectations.

Another sector in need of investment in modernisation and to relaunch its potential is mountain tourism. This accounts in SM for 8 resorts of national interest (out of the 47 at national level), 17 cable transport installations and 26 approved ski slopes. The main tourist attractions for winter sports and tourism weekend are the mountain resorts on Prahova Valley - Bucegi Massif.

In recent years, investments have been made mainly in the three northern counties - Prahova, Argeş and Dâmboviţa - aimed at expanding the hotel network and improving the quality of services. Weekend tourism and sports have brought significant benefits to investors in this area. However, overall, **mountain tourism is characterised by a low level of investments, insufficient promotion of routes and a scarce marking and signing system**.

The region also has to face **challenges such as climate change** which affects the resorts for winter sports. Rising temperatures is leading to a reduction of the tourist season, and the opportunities for carrying out sports and recreational activities is decreasing. At the same time, while on one hand the summer season is having a higher demand creating new business opportunities, on the other it has a negative impact on the environment as it exceeds the capacity of certain areas.

Project name: Development of a tourism infrastructure in the Padina-Peştera area

Location: Dâmbovița County

Project promoter: Territorial Administrative Unit of Dâmbovița County

Estimated costs: EUR 10-20 million (new project)

Scope: The new tourist attraction will be created by building the ski area and a tourist infrastructure in the Padina-Peştera area, adding to those already existing, eventually leading to the creation of a single tourist area, with a major impact at regional and national level. As the existing tourist attractions are mainly related to the spring-summer season, by making investments in winter tourist facilities, there will be a tourist resort that will be of interest throughout the year. The tourism in this area will acquire therefore a permanent character. This investment objective aims to capitalize on the alpine landscape and recreational resources in the Bucegi Mountains.
The project will consist of a skiable area (construction of the Cocora Slope, cable transport installations, specific exploitation road) and a base area (lower station mixed installation chairlift-gondola, administrative spaces, sanitary facilities, access road).
Risks: Factors that may impede the effective implementation of the project relate to the acquisition of the ownership of the remaining area.

2.1.2 Financing new opportunities

Water tourism is a sector of great potential but still very underdeveloped in SM. With regard to the development of the banks of the Danube and other waters areas of the region, **the infrastructure is deficient**, given that **there are no modern tourist facilities such as aquaparks or tourist ports**. There are only small beaches rudimentarily arranged in the riparian cities. However, there are large projects in Călăraşi (sports complex, nautical, swimming pools) and in Amara (Ialomița county), which are in different stages of implementation. On the other rivers and lakes in the region there are no tourist facilities, with the exception of some areas designed for fishing, including accommodation places (as in Săruleşti - Călăraşi). Unfortunately, there are no regional data on authorised beaches and bathing sites. Among the causes of not exploiting the potential of this type of tourism there are the **lack of strategic investors, concerns about setting up public-private partnerships, and the restrictions imposed by environmental legislation** (for instance, the Danube corridor is, for the most part, a Natura 2000 site).

Project name: Amara Multifunctional Centre

Location: Ialomița County

Project promoter: Territorial Administrative Unit Ialomița County

Estimated costs: EUR 1-5 million (new)

Scope: The Amara lake is a special avifauna area that hosts several protected bird species. At the same time, it is the main tourist attraction and the main therapeutic natural site (Amara Resort). The project foresees the construction of a Multifunctional Centre which will include a 105-seat conference room, meeting room with a capacity of 30 seats and 11 accommodation in which trainers can be accommodated. Proposed works also include a vertical systematization, road access, car parking, pedestrian platforms and landscaping.

Risks: Environmental constraints, legislative constraints, poor planning, inadequate resources, changes in the scope of the project.

The high potential of the region in terms of rural and eco-tourism is also largely untapped. Until now, **few investments have been directed** to this form of tourism. The possibility of obtaining pre-accession funding until 2007 (SAPARD, PHARE) was used for the creation of tourist units, such as pensions, that offered the chance of a valorisation of the rural space. But more financial resources are needed to valorise the entire regional potential. This type of tourism can in fact contribute to the diversification of leisure opportunities as in the Bucegi Natural Park, which is the main mountain destination for winter sports in the country. Considering the particularly easy accessibility from Bucharest and from Giurgiu (approx. 30 km from both directions), the Comana Natural Park could also become an important national and international ecotourism destination, provided the development of specific infrastructure, diversified tourism programmes and the establishment of an efficient management of visitors.

Project name: Vidraru Adventure Park

Location: Argeș County

Project promoter: ADI Molivișu

Estimated costs: EUR 10-20 million (new project under the financing contract of April 2012 for the "Creation of general and specific infrastructure for tourism activities in the Ghițu-Molivișu climate area")

Scope: The projects will directly contribute to increase the attractiveness of the county, generate new jobs opportunities and overall enhance the strategic development of the area. Travel agencies, the owners of the accommodation and reception structures as well as local food producers will also benefit from the implementation of the project.

The investment includes: the arrangement of a 4 000 sqm forest lot in the immediate vicinity of the Vidraru A1 ski slope with zip lines of different degrees of difficulty, a 365-day tubing system; equipping with off-road cars for taking tourists from accommodation and organizing expeditions in nature for various topics (there will be circuits of a few hours to circuits of 48 hours). At the beneficiary's premises there will be a garage for off-road cars in the form of a light structure building equipped with a pressure car wash system to maintain the cars at a quality standard. Within the forest lot there will be two buildings with a light structure: an administrative building of 100 sqm in which the activity of ticketing and souvenirs of photography type is carried out; a building with an area of 50 square meters for bathrooms. Both buildings will be equipped with water supply, wastewater drainage system and connected to electricity for lighting and heating.

Risks: At the moment, the principal adverse factor that can hinder the effective implementation of the project is the lack of funding.

Finally, despite its significant potential, cultural tourism constitutes only a small part of the tourism sector revenues in Romania and also in SM. Overall, **the cultural, including religious, heritage is in poor condition** (about 70% of it is in an advanced state of degradation). The strategy and approach for the development of cultural tourism is still underdeveloped, with **lack of partnerships, integrated solutions for the communities, and funding**. In recent years, only a small number of heritage sites in the region have benefited from significant investment for their restoration and for attracting tourists.

Project name: Târgoviște Urban Telegondola - Dealu Monastery

Location: Dâmbovița County

Project promoter: Territorial Administrative Unit of Dâmbovița County

Estimated costs: Over EUR 20 million (new)

Scope: The projects aims at developing the tourism infrastructure of Dâmbovița County and its promotion by valorizing two of the most important historical monuments in the area, the Royal Court and Dealu Monastery, by creating an urban gondola to solve the transport problem between the two objectives. The means of transport will connect the central - northern area of Târgoviște, respectively adjacent to the Royal Court Ensemble and to the Dealu Monastery. Departure and arrival areas will be arranged, as well as easy access to them. A tourist information point will be also created, and the arrangement of specific trade points will also be considered.

Risks: Factors that may impede the effective implementation of the project relate to the acquisition of land ownership.

2.2 The business infrastructure sector

As underlined in chapter 1, SM has the highest number of industrial parks at national level. But **business infrastructure facilities are unevenly distributed in the region** (see table 2.1). An overwhelming share of industrial parks is located in the northern counties, most of them in Prahova County (16 units), which ranks first both regionally and nationally, followed far behind by Dâmboviţa (4 parks), Giurgiu and Ialomița (2 parks each), Argeș and Teleorman (1 park each). Călăraşi county, in the south, does not have any industrial park.

Table 2.1: Industrial parks in the SM in 2020

County	Name of the Industrial Park	Stage	Location
Argeş	Parcul Industrial WDP Oarja	Operational	Rural
Dâmboviţa	Parcul Industrial Răcari	Operational	Urban
Dâmboviţa	Parcul Industrial Moreni	Operational	Urban
Dâmboviţa	Parcul Industrial Mija	Operational	Rural
Dâmboviţa	Parcul Industrial Priboiu	Operational	Rural
Giurgiu	Parcul Industrial București - Bolintin	Operational	Rural
Giurgiu	Parc Tehnologic și Industrial Giurgiu Nord	Operational	Urban
Ialomița	Parcul Industrial IMM Slobozia	Operational	Rural
Ialomița	Parcul Industrial OCH Slobozia	Operational	Urban
Prahova	Parcul Industrial Prahova	Operational	Urban
Prahova	Parcul Industrial Ploieşti	Operational	Urban
Prahova	Parcul Industrial Brazi	Operational	Rural
Prahova	Parcul Industrial Mizil	Operational	Urban
Prahova	Parcul Industrial Urlaţi	Operational	Urban
Prahova	Parcul Industrial Allianso Business Park- Ariceştii Rahtivani	Operational	Rural
Prahova	Parcul Industrial WDP Ariceştii Rahtivani	Under construction	Rural
Prahova	Parcul Industrial Ciorani	Green field	Rural
Prahova	Parcul Industrial Primus 1 Ariceştii Rahtivani	Green field	Rural
Prahova	Parcul Industrial Primus 2 Ariceştii Rahtivani	Green field	Rural
Prahova	Parcul Industrial Plopeni	Operational	Urban
Prahova	Parc Industrial Allianso Development Park Ariceștii Rahtivani	Green fiend	Rural
Prahova	Parc Industrial Bărcănești	Green field	Rural
Prahova	Parc Industrial Dibo	Operational	Rural
Prahova	Parc Industrial Breaza	Green field	Urban
Prahova	Parc Industrial Strejnicu	Green field	Rural
Teleorman	Parc Industrial Alexandria	Green field	Urban

Source: Ministry of Internal Affairs

On the one side, **northern areas with established business structures need investment for further modernisation and enhancement;** on the other, **there is also a potential for developing business infrastructures in the southern counties**. For instance, Călărași county experienced a rapid development with the establishment of a large steel plant in Călărași city and of a large shipyard in Oltenița. After their closure, the county was left with a series of sites well connected to utilities (natural gas, electricity, sewerage, water) that can provide favourable conditions for the establishment of industrial / commercial parks, as well as port areas or free zones that could facilitate the transfer of goods between the road / rail and naval systems. Moreover, Călărași city was an industrial city with functional economic units in several economic

fields (heavy industry, light industry, agriculture, trade, services, etc.) which, after the decline in the period immediately following 1989, is in a process of economic recovery, consisting in the operation of several large economic units in the field of services, trade and agriculture. However, the lack of skilled labour, the limited financial resources to start large-scale businesses, the unfavourable conditions of recent times (economic crisis, pandemic, climate change, labour migration) have led to poor development and capitalisation of existing resources.

Potential projects displayed in this section are proposed by local authorities in Călărași city - currently Călărași county has no industrial parks - and in Pitesti in Argeş county - currently with only one industrial park.

Project name: Construction of Călărași industrial park

Location: Călărași county

Project promoter: ATU Călărași and other ATUs

Estimated costs: EUR 10 million (new)

Scope: The overall objective of Călărași Industrial Park is to revive and develop sustainable local and regional economy, raising living standards by attracting investment and creating new job opportunities in the city of Călărași. The industrial park will offer several services to companies, such as leasing of parcelled land, hall rent, public lighting along the external road, parking for visitors, utilities and endowments distributed at the level of each plot, rent of office spaces, public catering space, other spaces for services expected to be provided by providers (banking, courier, post office, medical assistance, etc.), as well as consulting services in the field of business planning and development, project development, marketing and staff recruitment, management and knowledge transfer, audit and accounting.

Risks: At this time, no risks are identified.

Project name: InnovationHUB technology transfer center Pitesti

Location: Argeş county

Project promoter: Pitesti Municipality

Estimated costs: between 1 and 5 million EUR (new)

Scope: The general objective of the project is to increase the capacity of innovation in companies in the fields of intelligent specialization. The project is part of the National Strategy for Research, Development and Innovation 2014-2020 and the Smart Specialization Strategy of the South-Muntenia Region, as well as the Integrated Strategy for Sustainable Urban Development of the Municipality of Pitesti 2014-2023.
The implementation of the project will lead to the creation and development of the infrastructure of innovation and technological transfer. Also, the project aims at the reconversion of a non-functional building by carrying out construction works and equipping it with tangible and intangible assets.

Risks: Financial (impossibility to ensure the percentage of co-financing necessary for the implementation of the project); legislative (legislative changes during the implementation of the project); and technical (difficulties in executing the works within the estimated time).

2.3 The energy efficiency sector (individual houses)

There are only very rough estimates of the number of individual houses which have been renovated so far in Romania, as there is practically no record of the works made by individual owners inside their own houses. Renovation works are typically very partial and do not necessarily need construction permits, which implies they will not be found in construction permit records[26]. Notwithstanding such limitations, existing estimates indicate that **only a small fraction of the individual houses have been renovated by 2020** in Romania[21], with

[26] Construction permits are in principle required only for certain types of works that change the architecture of the building, but this generally does not include, for instance, exterior insulation, roof or basement insulation.

a relatively higher proportion for urban (8%) than rural (3%) houses. Stakeholders feedback indicated that a comparable rate of renovations can be expected in SM.

As concerns total investments in residential buildings, including both individual houses and multi-apartment blocks (MABs), the **average yearly energy related investment in the period 2012-2016 was EUR 2.8 billion**[27] in the country, most of which for below threshold or light renovations[28]. Given that the Long-term Renovation Strategy recommended measures should lead to an incremental **10-30% building renovation rate by 2030** at the national level, the potential demand for finance for individual houses renovation in SM can be also expected to increase substantially.

Low disposable income of homeowners represents a barrier for renovation of individual houses[29], especially in rural areas[30]. Renovations are typically made by owners by using their own funds or by taking general consumer loans. This implies that also **banks do not really have a good estimate of how much renovation has been done** in the houses. Households are quite reluctant to take mortgage loans for more important renovation works, due to uncertainties about the payback periods. This also reflects the fact that **energy prices have been relatively low for a long time**.

According to stakeholders, **awareness is another key bottleneck limiting individual houses renovations**. People are generally not aware of the benefits of energy efficiency in terms of reducing bills and increasing comfort. They are also not very well informed about what to do to increase energy efficiency. Some stakeholders also highlighted the need to increase confidence of homeowners, given the lack of visible results and delays of some earlier support programmes (see supply side analysis for more details).

Additionally, **there is a need for improved capacity in the region**. Strengthened capacity for cooperation between relevant actors at the local level was identified as a crucial element for increasing demand (see the following box for a European best practice where local actors have been successfully involved for residential energy efficiency renovations). The need to improve the expertise of energy auditors so they can better address demand for renovations was also mentioned. Other stakeholders recommended to establish a well-trained group of consultants who could act as interface between the financier(s) and the local authorities and final recipients. These could help, for instance, with identifying tailor-made approaches based on the level of income and education of homeowners, collecting monitoring data and information, as well as with informing potential final recipients about any changes in the type and conditions of support provided.

Hauts-de-France Pass Rénovation (formerly known as Picardie Pass Rénovation) is a financial instrument designed by the Public Service for energy efficiency of the region. Together with an all-inclusive financing solution, it offers turnkey technical support supporting the energy efficiency renovation of individual or collective housing. Technical support encompasses all renovation phases:

- Upstream, through information, personal advice, dwelling heat diagnosis, defining of an appropriate works schedule;
- During implementation, through consultation and selection of partner companies, site tracking, management and payment of bills from companies responsible for the renovation work,
- Downstream, via equipment maintenance and tracking of energy consumption for 3 years.

The mechanisms helps **local authorities** with their initiatives and policies in terms of energy transition and home improvement. Under the mechanism, partner local authorities contribute with notifying and detecting final recipients, deploying support and mobilising local companies and craftsmen. Some local authorities also agreed to make a complementary financial commitment. The mechanism also promotes a **sustainable local market for dwelling energy renewal** as more than 700 local companies and craftsmen have joined.

[27] European Commission (2019), Comprehensive study of building energy renovation activities and the uptake of nearly zero-energy buildings in the EU - Final report

[28] I.e., renovations with up to 30% non-renewable primary energy savings achieved in a specific calendar year.

[29] The World Bank (2019), New Long-term Renovation Strategy - Final Report.

[30] Apart from rural areas that are suburbs or larger cities.

Stakeholders also emphasised the importance of a **smooth implementation of renovation projects** to promote demand. In this regard, the establishment a one-stop shop to provide technical support to the recipients of public support during the entire project, from application to implementation and settlement was recommended. This should ensure smooth interaction of homeowners with public support programmes as well efficient document flow between all the organisations involved.

In terms of the type of public support required to stimulate demand, stakeholders reported a need to improve the profitability of individual houses renovations by providing a combination of grant and loan support. This should reflect the fact that, while certain type investments have a relatively short payback period e.g., thermal insulation, other measures are expected to take longer to generate sufficient savings e.g., solar term panels. There are **different views among stakeholders about the proportion of grant support that would be necessary to attract sufficient demand**. While some suggest a variable grant of up to 50% of the investment cost, depending on the level of energy performance achieved after rehabilitation, at least 80% grant support is considered necessary by other stakeholders. However, concerns were raised that a high proportion of grant support may not be sufficient to ensure responsibility of the final recipients and realise the benefits of renovation. Some stakeholders emphasized the need for a **different proportion of grant support according to level of energy performance achieved after rehabilitation**, given the long payback period of deep renovations[31]. By way of comparison, the 'Energy-Efficient House' programme launched in late 2020 by the Ministry of Environment, Waters and Forests[32] provide 60% of the value of the improvements increasing the energy efficiency of the individual houses by at least one class[33].

Sustained price increases may reduce the appetite for energy efficiency renovations in individual houses. As construction materials and energy prices both increased, the overall effect on payback periods remain uncertain. Nonetheless, available public resources would reduce compared to the investment required, implying less homeowners could be supported. There are as well other side effects to be considered, such as a larger investment required relative to homeowners income and the possibility that higher costs lead to lower income households reducing energy consumption voluntarily.

[31] One of the stakeholders estimated this to be up to 18-20 years.

[32] See supply side analysis for more details.

[33] In a different context, the grant intensity of the 'Energy Saving in Existing Housing Programme' in Greece was between 15 and 70%, based on personal and family income of final recipients, with the remaining loan support being partly subsidised. Projects should have improved houses by one energy efficiency class or reduced their energy consumption by 30%, as measured by energy auditors before and after implementation.

3. Supply Side Analysis

Information on the supply side derives from desk research, questionnaire feedback from six financial intermediaries and an interview with the European Bank for Reconstruction and Development (EBRD) who have managed financial instruments in the Energy Efficiency sector in Romania.

The information collected reveals the following key challenges:

• ***The structure of guarantees and credit risk*.** The main challenges are related to the bankability of the projects and/or the project owners. Especially the degree of indebtedness of local authorities, subject to the limits regulated by national laws, can represent an obstacle for financing (i.e. projects for tourism and business infrastructure).

• ***The pandemic and its effects.*** Related to the previous challenge, the market value of projects decreased due to the decrease in the demand for tourism and business infrastructure, but also for the numerous infrastructures that went on sale following the pandemic.

• ***A perceived lack of mature projects from local authorities and consequent scale problems for potential financiers*.** This can also affect the supply of specific targeted products for the three sectors.

• ***Concerning the financing of energy efficiency projects, the absence of a full inventory of buildings.*** Romania does not yet have a comprehensive cadastre. Records are better in the Western part of the country but in rural areas in Southern Romania (including in SM) the records are very poor. It is also not known what share of buildings, especially in rural areas, is de facto no longer used e.g., people who moved to the city or abroad, and what are the trends. However, the Romanian NRRP includes a component on buildings in the 'renovation wave', comprising a plan to build a cadastre also covering individual houses.

• The ***scarce availability and involvement of specialised technical companies*** who could confirm the energy efficiency improvements achieved is perceived as an additional barrier for the lending to energy efficiency projects in individual houses.

• ***Potential difficulties for banks to deal with different financial instruments*** at the regional level. Financial intermediaries reported that regional financial instruments can create potential issues in administrating as well in promoting and leveraging resources on them unless sufficient critical mass can be achieved.

A closer look into these challenges is provided in section 3.1, where both tourism and business infrastructure sectors are considered, and in section 3.2, about energy efficiency. These sections also discuss the presentation of the past and existing sources of finance.

3.1 Tourism sector and business infrastructure

The capacity for local authorities to finance tourism and business infrastructure, as other activities, is mainly challenged by the **budget rules**. Currently, the law on local public finance allows municipalities an indebtedness level of 30% of own revenues (local taxes, quotas from VAT and income tax). There is an exception for debt for co-financing of EU funds. Municipalities may also borrow from the Treasury within certain limits (varying depending on availability of budgets etc.) or may receive bailouts in various forms. The annual budgets may impose additional restrictions on borrowing. There is a committee pre-approving loans for local authorities (made of Finance, MDRAP, associations of local authorities) which must approve the intention of a municipality to get a loan.

Moreover, there are **large differences in the financial situation of municipalities** in Romania. While large cities have rather large budgets, small municipalities and rural communes face significant deficit problems. These heavily rely on central budget transfers and would not have access to banks for lending. Thus, municipal borrowing could be a solution for larger urban centres, not the small urban or rural ones. The situation in SM reflects that of Romania (table 3.1) with smaller administrative units (i.e. communes) suffering more budget pressures with respect to bigger ones.

Table 3.1: Deficit by administrative units in 2019 (EUR)

County	*All*	*Communes*	*Municipalities*	*Towns*	*County councils*
Argeş	-31 724 045	-12 756 623	-14 683 607	-7 935 037	3 651 222
Călăraşi	-609 865	-1 122 904	364 353	20 280	128 405
Dâmboviţa	6 218 375	-3 758 796	75 159	-285 731	10 187 743
Giurgiu	-2 565 088	-2 760 981	-92 867	-702 934	991 693
Ialomiţa	2 319 287	-1 141 284	-1 525 253	-106 952	5 092 776
Prahova	-13 116 749	-3 935 988	-2 094 999	-237 361	-6 848 401
Teleorman	8 331 357	-2 471 869	-1 915 917	-897 500	13 616 643
Total	-31 146 729	-27 948 444	-19 873 131	-10 145 236	26 820 081

Source: National statistics

Concerning tourism, most of the accommodation structures were built between 1960 - 1980 and they are in an advanced state of physical degradation. Some of them have been rehabilitated through the pre-accession funds (PHARE programme) and structural funds. Investments in the field of tourism over the last decade have focused mainly on construction and rehabilitation of accommodation units located in the mountainous area of the north of the region (Prahova, Argeş and Dâmboviţa). The higher appetite of investors for the northern area is mainly due to the high demand for accommodation in the mountain resorts on the Prahova Valley, the main weekend and mountain tourism destination, not only for the inhabitants of region, but also for those from Bucharest. The rest of the region lacks significant investments for the improvement of the accommodation offer. Resources are needed to increase the attractiveness especially of the southern counties and improve the accessibility to natural and cultural tourist attractions.

However, there is the perception, from the surveyed financial intermediaries, that **few projects are being developed by the local authorities** - probably due to budget difficulties and/or administrative capacities as discussed above. Moreover, potential investors are not so attracted as tourist infrastructure lacks basic investments in improving access to utilities, such as wastewater and sewerage systems. One financial intermediary remarked that the degree of indebtedness really represents another obstacle for financing local authorities.

Looking at the indicators from the 2014-2020 Regional Operational Programme, **nine projects concerning accommodation infrastructure** have been realized as well as additional **four projects involving the modernisation or extension of accommodation infrastructure**. This was well beyond the programme target values (one and two projects respectively). Additional investments were realized for cultural, sports recreational infrastructure: 11 projects realised (against the initial target of 36), plus 30 projects (against initial target of 86) for the rehabilitation or modernisation of the infrastructure. Moreover, 37 investments for the restoration / protection / capitalisation of cultural or historical monuments or ensembles or art were realised, the target value being 26.

Regarding support for business infrastructure, although seven related projects were expected to be supported under the 2014-2020 Regional Operational Programme, **no such projects has been identified so far**. In terms of support for knowledge and technology transfer, five projects were supported for knowledge transfer services for a total of 84 enterprises. This compares to a total of 348 enterprises initially targeted.

3.2 Energy efficiency in individual houses

Owner funding and general loans virtually cover all the renovated individual houses so far. For loans, owners prefer general consumer lending, as this is easier to obtain than a mortgage loan to undertake renovation works in the house. The typical consumer loan can be up to EUR 25 000, repayable in five years, requiring little or no collateral and for which banks do not require beneficiaries to disclose the use of the funds.

With regard to public initiatives, **there is no coherent programme to support energy efficiency renovation for individual houses**, as public policy has focused after 2009 on the renovation of the low-hanging fruit i.e., multi-family buildings, which have a higher cost-efficiency and rather standardised design. The measures below, instead, have contributed to only a few buildings being renovated (or implementation has only started):

- Bank offers targeted specifically for energy efficient buildings - such as 'green mortgages' - are extremely limited and have so far been mostly used for new constructions. There are only a few (new) buildings that used green mortgages through **Green Buildings Council scheme** and mostly industrial and office buildings, not residential. As of February 2020, there were only 250 certified 'green buildings' in Romania, located in the largest cities, none of which individual houses. However, the programme is also available for residential buildings (both single- and multi-family buildings), by providing discounted mortgages to buyers interested mostly in the purchase of individual houses or apartments in multi-family buildings meeting the scheme's energy efficiency and environmental standards. The scheme works with Raiffeisen Bank, Alpha Bank, and BCR which have mortgage instruments certified for green homes[34]. These instruments are mostly used for the purchase of apartments in energy efficient multi-family buildings certified by the scheme. In addition, there is a programme administered by Libra Bank targeting real estate developers to support them to build according to the Green Homes scheme standard.

- The **EBRD Green Economy Financing Facility (GEFF)**, provides financing and advice to households to reduce residential energy costs using high-performance technologies and practices. The programme, launched in late 2017, has a total budget of EUR 100 million out of which EUR 85 million has already been used for loans disbursed to clients by the financial intermediaries (the remaining EUR 15 million was transferred in September 2021 by EBRD to UniCredit Consumer Financing). The programme is administered by UniCredit Bank, Banca Transilvania and UniCredit Consumer Financing[35]. UniCredit and Banca Transilvania mostly provide mortgage loans to buy class A or upper-class B (B+) homes, whereas UniCredit Consumer Financing provides lending for renovation / insulation works and energy-efficient appliances (only certain appliances are eligible e.g., fridges, not washing machines. Importantly, both banks intend to continue the lending products also beyond the GEFF programme end (end-2021). As in the case of Green Buildings Council scheme, the mortgage loans are for residential units, regardless of whether in individual houses or multi-family buildings. EBRD will publish at end-year a report with detailed results of the programme.

- **Central support schemes**, including the Ordinance 69/2010 allowing individual houses and multi-family buildings to obtain preferential loans with public budget guarantee (central budget from Ministry of Regional Development) to undertake energy efficiency renovations (external insulation, heating source etc.). Up to 90% of the costs are eligible for a full guarantee and the interest is

[34] Raiffeisen Bank provides mortgages for the purchase of an energy-efficient house, EUR 5 000-300 000, 3-30 years, 15%-35% down payment, currently 4.2-4.7% effective interest rate; Alpha Bank for purchase, construction and renovation with green materials – EUR 5 000 to 200 000 EUR, 5-35 years; maximum financing 75% (for EUR)-85% (for RON) of the value of the mortgaged building, fixed interest for the first 5 years and variable afterwards; BCR for purchase of energy efficiency residence, 15-40% down payment, RON 45 000 – 85% of the value of investment, up to 30 years.

[35] Unicredit Bank, EUR 35 million, mortgage loans up to EUR 250 000, 5-30 years, min 15% down payment, for relatively new residential buildings (after 2000, Class A or B+); Banca Transilvania, EUR 40 million, mortgage loans at 4.27% interest, 15% down payment; Unicredit Consumer Financing, EUR 10 million disbursed until now and another EUR 15 million until end-2021, loans between RON 1 500 to 100 000 for up to 5 years, for energy efficiency appliances, including heating solutions, windows and solar panels.

subsidised and repayment in up to 5 years. The instrument has practically not been used, as there were less than 5-10 single-family buildings applying for the program each year since 2010. The reason why owners of individual houses do not apply for the facility is the red tape: owners need to prepare the technical documentation, design, undertake an energy audit, and obtain the urban certificates and construction permits before the application. All the documentation for the application is paid for by the beneficiary. Individual houses were also included in Ordinance 18/2009 after 2012, but no renovation projects were financed**.** This is a programme designed to facilitate renovation of buildings, providing grants from central, local budgets and owner co-financing. The Ordinance worked for the renovation of multi-family buildings, but it did not work at all for individual houses. Multi-family buildings renovation was much easier as most blocks are standardised, so renovation designs could simply be replicated, and energy efficiency savings were significantly higher per EUR invested than in the case of individual houses. As a result, municipalities simply did not allocate local budgets for the co-financing of renovation and did not advertise the programme as in the case of multi-family buildings.

- The only **programme proposed by a local authority** for individual houses was announced in 2016 in District 1 of Bucharest (which had relatively fewer individual houses and was more advanced in the implementation of renovations than other districts, having almost finalised all buildings by 2019). In 2017, the local council approved a local strategy to improve energy efficiency in single-family buildings over 2018-2030. It comprises quite general proposals, and the target is to achieve an energy consumption for heating below 100 kWh/sqm for the renovated individual houses[36]. Following the approval of the strategy, District 1 announced in 2018 a pilot project for 35-50 individual houses selected from applications submitted by owners, with the intention of revealing the costs of such works and to budget accordingly a scale-up[37]. The programme was simply abandoned altogether, without any public mention of it from 2019 onwards (not even the announced pilot was implemented).

- **Environment Fund Administration (AFM) programmes.** AFM had a series of programmes that addressed upgrade of the energy source or insulation of individual houses. Thus, for **heating and insulation** (there are also programmes for energy efficiency in electricity consumption, such as to replace household appliances with more efficient ones; PV panels for prosumers) there are Casa Verde (Green House) for the installation of heating systems using renewable energy. The programme took place in 2010-2017, financed over 30 000 individual houses with a total budget of RON 180 million (EUR 40-45 million)[38]. The programme was relatively successful with the public and demand exceeded available financing e.g., in the last round of calls in 2016 the budget was exhausted in the first day. The budget administered by AFM for the programme came from the trading of free Emissions Trading System (ETS) allowances, which is set up as an Environment Fund. Casa Verde typical programme included grants for renewable heating for individual houses – solar panels for heat and hot water. There were separate programmes for individuals (residential) and companies. However, projects were selected on a first come, first serve basis, without prioritisation (as long as they met the basic programme criteria). The administrative burden for both beneficiaries and the AFM was low. However, no prioritisation meant probably a suboptimal use of the available funding

[36] The strategy proposed the setup of a governance structure for the program inside District 1 city hall; undertake an inventory of single-family buildings in district 1; setting up guidelines for applicants; communication with potential beneficiaries and promotion of the program; finding budget sources (local funds, EU, loans etc. – no mention of owner cofinancing); prepare program indicators and targets to be later approved by the local council; energy audits and works. The envisaged works would consist of insulation and heating source. All houses meeting certain criteria (no seismic risk, <160 sqm; no historic monuments etc.) are eligible.

[37] The pilot concept was developed jointly with Ashoka Association and Schneider Electric Foundation, which were supposed to provide technical assistance. The pilot would have covered buildings of up to 160 sqm, as proposed in the strategy, from various areas of the district, different construction years and different materials, to get a sense of the types of works and budget efforts required. To be eligible, houses had to be low seismic risk and with no damage to roofs. In the pilot, the full funding would be provided by the local budget with no owner cofinancing, after a competitive process.

[38] For residential beneficiaries, grants were up to RON 3 000 for non-pressurized solar panels, up to RON 6 000 for pressurized solar panels and up to RON 8 000 for heat pumps; any costs exceeding the grant would be paid for by the owner.

in terms of maximizing GHG reduction (AFM does not specifically collect and report such outcome targets on EE and emissions, though some rough desktop estimates exist).

In 2016-2018, AFM tried to launch a new programme for energy efficiency renovation of individual houses, called **Casa Verde Plus**, also separately for individuals and companies. It was meant to support the purchase of insulation materials; insulation works; and design of the works up to 5% of the total investment. The financing would have been up to 100% of the renovation cost, but not above RON 40 000. The programme, however, **never took off**. Though AFM prepared the applicant's guidelines, AFM never got the financing for it from the budget, ETS revenues or EU funds, and the programme was simply abandoned, after being postponed for several years. Casa Verde Plus was quite different (and more sophisticated administratively) than Casa Verde "classic" – it required the beneficiary to prepare a detailed technical project, obtain construction permits, provide proofs of no debts to tax authorities, even the criminal record of the applicant. Also, as projects would be selected competitively, AFM expected to need additional capacity to evaluate the project applications (in house or outsourced). These issues were not solved and would recur later in the Energy Efficient House programme. As in the case of the Casa Verde "classic", the performance of the programme would be monitored exclusively in terms of outputs (how many beneficiaries / houses in superior energy efficiency category), not outcomes (energy savings or reduction of GHG).

Energy Efficient House is currently the programme designed to replace both Casa Verde and Casa Verde Plus in a coherent package including energy efficiency renovation and upgrade of heating source. Launched in September 2020, it had an initial budget of RON 429 million (about EUR 85 million) for the first call. The programme is much more ambitious than previous programmes and is inspired from Slovakia. It provides up to RON 70 000 grant (about EUR 14 000), but **no more than 60% of the investment value**, to implement measures to enhance the energy efficiency of the building. It targets exclusively renovation (not new constructions) and exclusively individual houses. The **documentation for the application is quite substantial**; also, for the first time AFM requires applicants to prepare an **energy audit and energy performance indicators** to be achieved based on the works undertaken with the grant money. As expected, **the major challenge consisted in the evaluation of the projects**, which resulted in projects being rejected and then approved after contentions, with several months of delays. Initially, AFM was supposed to subcontract professional evaluators, then decided to do the evaluations in house although being a fund manager, dealing with various climate and environmental projects, not specialised in energy efficiency in buildings. So far, the first projects have only been approved (in August 2021), so implementation has just started. Currently, there were 60 projects approved from an initial round of applications of about 120 projects. Very importantly, **the projects require full pre-financing from owners**, who can then recover the grant from AFM submitting a statement of expenditures which then are checked for eligibility by AFM.

4. Preliminary conclusions from market assessment

The analysis of the market has shown that significant **tourism and business infrastructure** investments are needed in SM for modernisation and to exploit the potential of the region. While in recent years relatively few public investments have been directed to support the two sectors, especially in the case of business infrastructure, this also reflects the specific challenges affecting the demand of local authorities for this type of investments. In particular, looking at the information collected through the questionnaire, for those authorities intending to develop tourism and/or business infrastructure projects, **the regulatory framework and the cost of finance** represent the main difficulties in accessing financing.

On the supply side, the level of **indebtedness of several local authorities** was mentioned by financial intermediaries as an obstacle to providing finance. Financial intermediaries also clarified that the development of a **fluid project pipeline of business and tourism infrastructure projects** is key to secure the involvement of investors. Projects included in the pipeline should be sufficiently mature, implying that a coherent decision about the project has been made by local stakeholders, any land ownership issues have been clarified and required permits were obtained or can be made available within a reasonable timeframe.

In this regard, this market assessment could identify **projects having the potential to generate net revenues** according to local authorities, including nine tourism and four business infrastructure projects. Related investment costs are estimated at about **EUR 135-190 million**, including EUR 100-145 million for tourism and EUR 35-45 million for business infrastructure. The projects showed **a varying level of maturity**, with a feasibility study already carried out or in preparation for over half of the projects.

Looking at a potential financial instrument for the two sectors, this would need to include **appropriate mechanisms to attract financial intermediaries own resources**, such as guarantees partially covering the risk of investors. The feasibility of involving private parties in some of the projects, such as through public private partnerships, should also be explored. This would further ensure that the long-term operation of infrastructure has been carefully considered, increasing investor confidence.

Availability of sufficient **technical support subsidies** seems necessary to facilitating the development of a suitable project pipeline, improving the credibility of the financial instrument. Grant support would also be needed to close any viability gaps at the level of individual projects. Moreover, considering the severe deficit problems of several municipalities, especially the smaller ones, **interest rate subsidies** may also need to be considered to ensure the cost of finance makes the financial instrument sufficiently attractive.

Flexible eligibility conditions as concerns target final recipients can also help promote demand, especially by ensuring that private project promoters are also eligible. Additionally, addressing the two sectors under a single financial instrument could be considered as a way to help bringing together enough projects, increasing attractiveness for investors.

As a consequence of disparities between the southern and the northern counties, infrastructure investments (both for tourism and business) in recent years have been unevenly distributed across the regional territory. Therefore, **there could be a risk that a potential financial instrument is less used in those areas where investments are more needed**, also due the higher level of debt and lesser administrative capacity of local authorities in some areas. This calls for ***ad-hoc* solutions in terms of financial products**. In particular, the possibility could also be explored to differentiate the proposed financial products considering on one side the potential final recipients (southern *vs* northern municipalities, level of deficit), on the other the type of proposed project (modernization of an existing facility *vs* the creation of a new one). Provision of additional upstream technical support for projects in southern counties may also be considered to enable bankable projects to be brought forward for investment.

In the case of energy efficiency, the renovated individual houses (estimated to be 3% in rural areas and 8% in urban areas) were done **almost exclusively with private financing** (owner funds, very likely also general consumer loans). Banks provide mostly mortgages for purchase of energy efficient individual houses, not renovation. While there have been some national initiatives supporting such renovations, the number of actual energy efficiency renovations of individual houses supported by any programme is insignificant. All

the existing public measures mostly target well-informed, upper medium income owners of individual houses in urban areas, who have access to information on the available programmes, resources to ensure prefinancing and co-financing, and the required awareness of the need to improve residential energy efficiency. This is a very narrow category of owners of individual houses (probably less than 15% of the total and concentrated in larger cities and suburbs).

In terms of the future demand for energy efficiency renovations, an incremental **10-30% building renovation rate is expected by 2030** from the implementation of the measures recommended by the Long-term Renovation Strategy to scale-up the pace of the building stock renovations in Romania. Should renovations proceed at this increased rate in SM, that would imply that **50 000 individual houses** will be renovated by 2030 in the region, with the investment required going well beyond available programme resources. Whereas on this basis the potential demand for renovations can be expected to increase substantially in the coming years, **appropriate measures would still need to be established to stimulate actual demand**. A coordinated programme of awareness raising and technical support, such as that implemented in Picardy France described above, would complement the national Long Term Renovation Strategy to drive the increase in renovation of SFHs in the region.

In particular, this market assessment identified a **need to raise the awareness of homeowners about the benefits of energy efficiency renovations and provide stepwise support throughout energy efficiency renovations**. Information measures should improve owners awareness of the benefits of energy efficiency with reducing bills and increasing comfort in houses. These measures should also inform them about the availability of support through a potential financial instrument and the steps needed to receive and manage support. Communication measures could include presenting the financial instrument at local public events and publishing information and data in the local press, among others. Technical partners may also be interested in promoting the financial instrument, for example by temporarily placing ads on the buildings they have contributed to renovate. **A one-stop-shop could provide technical support to the final recipients throughout project implementation**, from application to implementation and settlement.

Moreover, there is a need for **strong capacity and intense cooperation between stakeholders at the local level**. Appropriate arrangements should be identified allowing for mobilisation and promoting close cooperation among local actors, including energy auditors, energy agencies, local authorities, financiers, commercial partners. Specific measures to strengthen the capacity of key professionals and the other involved parties to address demand for renovations, for instance through training, may also need to be considered. Specific measures to **enhance cooperation with local authorities** are worth considering. These could facilitate identifying and contacting final recipients directly to explain the benefits and types of works involved, especially in rural areas. However, only larger urban centres would have the capacity to take a more active role in implementation, such as through prioritising investments, supporting the preparation of terms of reference for works or launching competitive programmes for renovation. Also at operational level, the adoption of ready-to-use back-end software platforms could be considered for smoother management and monitoring of support by the relevant parties. These could also contribute to transparency and provide valuable data that can help inform any future changes of the investment strategy.

Stakeholders consulted by this study recommended to consider **full grant support for project preparation**[39] to all homeowners regardless of their level of income to increase demand, including fully reimbursable energy audits. At the level of the financial instrument, **the grant component should be the maximum allowed**[40] i.e., 50% of the investments supported. Some stakeholders recommended that a **different proportion of grant support is provided according to level of energy performance achieved after rehabilitation**, given the longer payback periods of deep renovations[41].

As disposable income of homeowners represents an additional barrier for renovation of individual houses, stakeholders recommended the **proportion of grant support** within a potential financial instrument should

[39] Including energy audits and technical design.

[40] By way of comparison, in a different context the grant component in the funding of the 'Energy Saving in Existing Housing Programme' in Greece was well over 50% after a change in the initial investment strategy.

[41] Currently, the 'Energy-Efficient House' programme launched in late 2020 by the Ministry of Environment, Waters and Forests provide 60% of the value of the improvements increasing the energy efficiency of the individual houses by at least one class.

provide suitable incentives and be **higher for lower income homeowners**. However, the feasibility of operational arrangements to provide a variable proportion of grant support based on income should be further assessed for the burden placed on financial intermediaries and final recipients. **Personal or family income-related eligibility ceilings** could also be considered to better target support.

5. Design of financial instruments

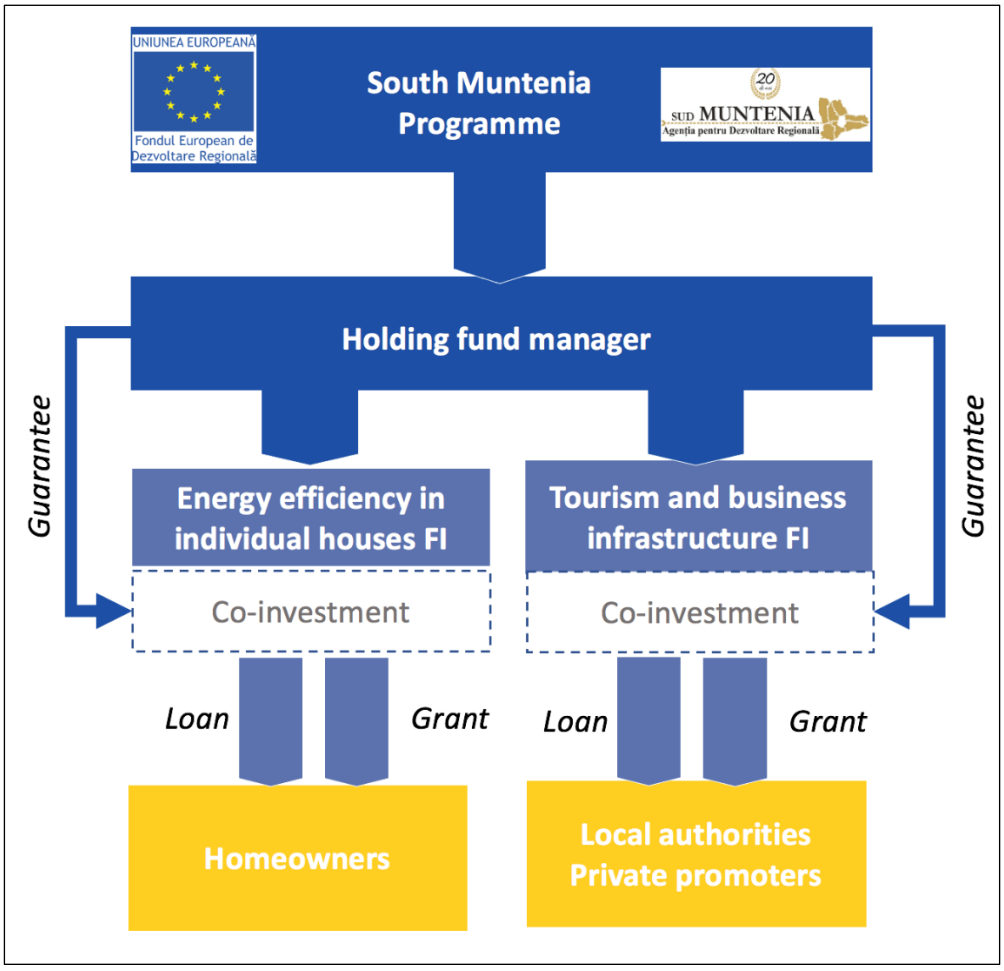
This chapter outlines options for the design of the potential financial instruments in SM. It includes the use of a guarantee instrument that is proposed within the structure to support financial intermediaries would be taking by from providing co-investment.

5.1 Overview: implementation structure

It is proposed that the region establishes two risk sharing loan financial instruments, separately targeting the tourism/business infrastructure sector and energy efficiency in single family homes. ERDF programme resources would be committed to financial intermediaries to be invested, alongside their own resources, into eligble projects.

In addition to the loan product a guarantee instrument may also contribute to the implementation of the loan instruments, through providing additional support to mobilise private co-investment. Grant support may be combined with the financial instruments to meet part of the investment cost and to establish a one stop shop to provide technical support to final recipients. A two tier Holding Fund (HF) structure may also be considered to support the implementation of the financial instruments. Figure 5.1 shows a possible implementation structure that could be adopted for the financial instruments in SM.

Figure 5.1: Proposed implementation structure



The governance model would involve an **advisory committee** at the level of the HF that can adivice on the general direction and activity of the financial instruments. While the Regional Development Agency would

have the majority of members in the committee, it would be advisable for it to also include some specific expertise providing strategic insight into energy efficiency policy development at the national level. In addition, local ownership of the initiative might be improved by some of members representing the counties and their capital cities.

5.2 Implementation structure: single tier, Holding Fund or multi-region fund

Based on similar experience in other Member States and taking into account the specificities of financial instruments being considered in SM, **it is proposed that the financial instruments are implemented under a HF structure**.

This implementation structure allows for separate financial instruments in the targeted sectors, which should reflect the different nature of the support being provided as well as their specific implementation requirements. It also satisfies the need to involve an institution which, working as HF manager in close cooperation with the managing authority, can bridge the gap between their needs and capacities and those of the financial intermediaries. Such institution should have specific expertise in both financial matters as well as public contracts, EU Funds under shared management and State aid. It should also provide the flexibility required to adapt to unpredictable events that might happen during implementation e.g., market changes, other public interventions, change of State aid rules. For these reasons, an International Financial Institution (IFI) or National Promotional Bank (NPB) may be an appropriate candidate for the role of HF manager.

Additionally, **a single tier structure should be explored as an alternative option**. This would require the managing authority to build its own capacity to finalise the set up of the financial instruments. Hence, advisory support to help the Regional Development Agency take on this investment strategy, complete the ex-ante assessment, set up the governance arrangements then carry out the implementation process would be advisable especially in this case.

A further option to be considered for the implementation structure is **a multi-region fund** in which the SM managing authority collaborates with other managing authorities in Romania to set up a single financial instrument to support a specific sector in all participating regions. Either or both of the proposed financial instruments may be suitable, depending on the level of interest across other authorities. A multi-region fund would achieve greater scale, which would deliver economies of scale in relation to set up and implementation costs. A larger operation may also be more attractive to potential financial intermediaries and be able to attract greater leverage, from both public and private investors.

One possible scenario would be that a multi-region fund is set up to finance energy efficiency improvements to single family homes. In such a case, the managing authority should consider whether to adopt an implementation structure that utilises the multi-region fund for the energy efficiency measures and set up under direct implementation a smaller tailored financial instrument to support the tourism and business infrastructure measures.

5.3 Risk sharing loan financial instruments

Risk sharing loan financial instruments combine ERDF resources with private co-investment on terms where the risk of the investments is shared between the public and private investors. Implemented through financial intermediaries selected through an open and transparent procedure, the financial instruments will provide loans on advantageous terms to eligible final recipients

The governance model will need to ensure that the decisions of the financial intermediary about the individual investments are independent and only based on assessing the business plans and financial viability of projects according to market standards. This should apply to project selection and pricing, among others. Equally the governance model will need to ensure the the investment strategy is implemented based on operational efficiency and streamlined decision-making. Risk management procedures adopted by the financial intermediaries will also follow market standards. Depending on the size of the financial instruments that are set up, it is recommended that consideration is given to having **more than one financial intermediary** for each sector to mitigate the risk of underperformance in terms of deployment of funds. Contract

conditions should allow the managing authority or HF manager to hold back or cancel a portion of the funding commitments to potentially reallocate to other financial intermediaries based on their actual performance. This could be done, for instance, by initially allocating to each financial intermediary only part of the resources, while additional resources could be allocated based on performance, e.g. where agreed milestones are achieved. Similarly the managing authority or HF manager should retain the right to terminate the contracts with the financial intermediaries in case of their negligence or default. In this case, it should also be possible for the HF manager to transfer loan agreements with the final recipients to the HF itself or another financial intermediary.

The risk sharing loan should be used to attract private co-investment through the selected financial intermediaries. Such funds may be combined with the ERDF programme commitment to be on-lent to final recipients. The private co-investment may be invested on a pari-passu basis with the public funds or, subject to compliance with the State aid rules (in particular Article 16 of the General Block Exemption Regulation (GBER)[42], where applicable) on terms where the private co-investment is repaid before the public resources. This latter approach may be considered as a means of attracting greater private investment as an alternative to the guarantee arrangements described below. It should be noted, however, that Article 16 GBER relates to urban development and therefore will not be applicable in the rural areas that represent the majority of the SM region.

5.4 Guarantee support

As indicated in the market assessment, there is a need to stimulate bank interest to lend to local authorities. This can be achieved by using part of the financial instrument resources to guarantee the commercial loan exposures invested into final recipients. This should ensure more support for final recipients having difficulties accessing market finance. Under the envisaged option, SM programme resources are blended with financial intermediary co-investment and invested into final recipients. Guarantees are provided to financial intermediaries and other investors for eligible projects funded through loans from the financial instrument. The guarantee product could be managed by the HF manager or a specialised body with the necessary capacity and the resources would be callable by the financial intermediaries to cover losses incurred on their own funding contributions.

Decision on the guarantee could be taken by the guarantor on a **loan by loan** basis or a **portfolio guarantee** based on agreed criteria could be provided. Especially in the case of the energy efficiency in individual houses financial instrument, it is recommended that a portfolio guarantee approach is adopted. This should ensure smooth implementation and avoid duplication of time and effort for project due diligence, which would only be performed by the financial intermediaries. The guarantee would cover up to 80% of each individual loan exposure, thus ensuring that improved financing conditions are offered to final recipients (see section 6). In this case, the guarantee facility would be limited to a maximum percentage of the financial intermediary / investor own funding i.e., capped guarantee. This should ensure alignment of interests and diligence when assessing the credit risk of final recipients. For the purposes of this investment strategy, the indicative cap rate is assumed to be up to 15%, but further market testing or the financial intermediary selection process should determine the specific level more precisely. The guarantee fund manager could be either a national entity known in the local market (e.g. FNGCIMM[43]) or an international commercial institution or IFI. However, potential issues in case a national entity is appointed to manage the guarantee would need to be considered:

- A guarantee issued by a national public body is unlikely to obtain a higher rating than sovereign (BBB-), implying that banks may not benefit from reduced capital relief. This might reduce their interest in the product and/or reduced pricing and/or tenor benefits for the final recipients;

[42] COMMISSION REGULATION (EU) No 651/2014 of 17 June 2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty.

[43] The National Credit Guarantee Fund for Small and Medium Enterprises SA (FNGCIMM) is a non-bank financial institution established to facilitate the access of SMEs to financing, by providing guarantees for finance contracted from commercial banks or from other sources. FNGCIMM implements government programmes aimed at economic recovery, business development, as well as job creation and support, operating as a joint stock company, with sole shareholder the Romanian state, under the prudential supervision of the National Bank of Romania.

- As concerns the business and tourism infrastructure financial instrument, a guarantee issued by a national public body, especially if on a loan by loan basis, could increase the political risk perceived by banks, reducing their incentives to provide co-financing.

FNGCIMM has experience with guaranteeing energy efficiency projects in the residential sector as well as tourism infrastructure investments.

As concerns **energy efficiency in the residential** sector, FNGCIMM has been working under GEO no. 69/2010 2010 regarding the thermal rehabilitation of residential buildings financed by bank loans with government guarantee and according to the Application Norms approved by GD no. 736/2010. FNGCIMM was empowered to provide government guarantees to homeowners' associations that contracted loans from banks for the thermal rehabilitation of residential buildings, including the replacement of related facilities, as well as for the installation of new heating, light and water systems.

Moreover, between 2010 and 2015, the Government allocated annual ceilings for this national programme. The programme was not as successful as immediately after its launch the ROP 2007-2013 funding for this type of projects was made available on much more favorable financial terms for the beneficiaries as it included a significant grant.

Also as concerns **support to natural persons** for investment in their residential premises, it is worth mentoning that FNGCIMM contributed to the implementation of **Prima Casa**, a government scheme providing loans to young people to buy the first house.

As concerns **tourism infrastructure** projects, starting with PNDR 2007-2013, FNGCIMM has supported all infrastructure projects in rural areas, including those that could be considered as 'tourism infrastructure'. FNGCIMM provided guarantees for the repayment of the advance in support of beneficiaries having financing contracts with the Agency for Financing of Rural Investments based on Measure 313 'Encouraging tourist activities', Axis III 'Improving the quality of life in rural areas and diversifying the rural economy'. The measure had as general objective the development of tourist activities in rural areas to increase their attractiveness as well as job and income in the relevant territories. Under this scheme, FNGCIMM also provided State guarantees supporting commercial lending for final recipients co-financing.

The extensive experience of FNGCIMM with working with central and local public authorities could make up for the lack of experience in supporting **business infrastructure** project.

It is also worth mentioning that FNGCIMM has experience with **providing grant support** as part of previous government schemes it has delivered.

5.5 Technical support: a one stop shop

Based on feedback from various stakeholders, the market assessment demand side analysis identified the need for a technical support for potential final recipients for both financial instruments. With regard to tourism and business infrastructure, the market assessment showed that the level of preparedeness of projects in the potential pipeline is uneven. In particular, feasibility studies have been already conducted or are being carried out only for some of the projects potentially to supported under the financial instrument. It should also be noted that currently local authorities already benefit in many cases from technical assistance based on national resources. Against this background, the market assessment identified the need for **hands-on support to facilitate the development of the pipeline**. This might include upstream advice and review of individual projects with regard to:

- verification of project affordability in relation to local authorities/other final recipients budgeting;
- verification of project expected revenue streams;
- technical due diligence, i.e. verification of technical solutions proposed by the technical design;
- legal due diligence and compliance with regulatory requirements e.g., environmental permits;
- financial structuring and risk mitigation;
- compliance of procurement procedures;
- state aid implications.

This technical support could be provided by financial intermediaries as part of their normal operation, and covered with their management fees. Another options would be for technical support to be organised as a separate operation using programme resources for technical assistance. In the longer term, the managing authority might consider setting up a specialist agency to provide potential final recipients with advisory services going beyond project-specific support. In particular, these could be aimed at improving project promoters' capacity (i.e. financial structuring expertise) to develop **project finance approaches for their business/tourism infrastructure projects**, as this type of financial structure might be able to attract additional private co-financing. Synergies with other technical support programmes active in the country such as JASPERs[44] and ELENA[45] may also be explored, for example in relation to potential tourism and business infrastructure projects.

As concerns the energy efficiency financial instrument, **technical support would need to be provided to final recipients throughout project implementation**, from application to implementation and settlement. This could take the form of a virtual and/or physical one **one-stop-shop,** which could be delivered by one or more of the Regional Development Agency, local authorities, specialist agencies and financial intermediaries, where homeowners can get information and direct access to all services. The suitability of more ambitious business models to the local context could be assessed in the first place, as that would help achieve more ambitious renovation objectives. In addition, given the rate at which approached homeowners can be expected to decide to proceed with their renovation, it should be considered for the one-stop-shop to **target a very high proportion of the regional population[46]**.

It is expected that **local authorities can also play a role in actively promoting the energy efficiency in in individual houses financial instrument**, such as through facilitating the identification of needs, presenting the financial instrument at local public events, contacting final recipients directly to explain the benefits and types of works involved, especially in rural areas[47]. This could complement communication activities carried out by the financial intermediaries e.g., leaflets about financial support, publishing information and data in the local press.

As concerns the energy efficiency renovations in individual houses, the market assessment identified a need to raise the awareness of homeowners about the benefits of energy efficiency renovations and provide stepwise support throughout renovations.

Information measures should:

- improve owners awareness of the benefits of energy efficiency with reducing bills and increasing comfort in houses;
- inform them about the availability of financial instrument support and the steps needed to receive and manage support.

Stakeholders consulted by this study recommended to consider **full grant support for project preparation** to all homeowners regardless of their level of income and including fully reimbursable energy audits, as this could help promoting demand. Additionally, the possibility that the HF manager becomes responsible to bear some of the fixed costs related to the set up of the one-stop-shop, e.g. IT costs, could be explored. That would improve the viability of the one-stop-shop and if a multi-region fund is established secure economies of scale.

[44] JASPERs (Joint Assistance to Support Projects in European Regions) is an initiative of the European Commission and the EIB to accelerate abosorption of EU funds under shared management through provision of technical support for top quality projects

[45] ELENA (European Local ENergy Assistance) is a joint initiative of ther European Comission and the EIB under the Horizon programme and provides technical assistance for energy efficiency and renewable energy investments targeting buildings and innovative urban transport.

[46] As reported by the Horizon 2020 'innovate' project, experience shows that on average, the ratio at which approached homeowner decide to proceed with actual renovation is between 1 in 10 and 1 in 200. However, it is not clear how that conversion rates relate to the financial incentives being provided through the one-stop-shops.

[47] Only larger urban centres would have the capacity to take a more active role in implementation, such as through prioritising investments, supporting the preparation of terms of reference for works or launching competitive programmes for renovation. For this reason, it is proposed for local authorities to only take the role of supporting the promotion of the financial instrument.

The **Horizon 2020 'innovate' project identified types of one-stop-shop business models that could be used to facilitate the renovation of individual houses**. The main difference between the models is the responsibility the one-stop-shop bears for the results of the renovation works and the overall customer journey (see below figure). Depending on their business model, one-stop shops can offer different services, including: marketing and communication; development of products adapted to consumers' concerns; independent technical assistance; tailor-made financial advice; coordination of renovation works; long-term and affordable financing; guaranteed results and post-work monitoring.

Local approaches in immature markets will use a **facilitation or coordination model**. These models are also relevant in cases where the authority does not have any experience in providing one-stop-shop services or has limited political support, financial and human resources. Starting lighter will also be an opportunity to learn more about the market, test the approach and the demand for the services before further development.

Business model	Roles & responsibilities	Practical example of what the one-stop-shop offers to homeowners
1 **Facilitation model**	• Raise awareness on energy renovation benefits • Provide general information on optimal renovation works • First advice at the 'orientation stage'	It advises on how to renovate your house and can provide you with the list of suppliers.
2 **Coordination model**	• Coordinate existing market actors (suppliers) • Make sure all one-stop-shop services are offered to homeowners • No responsibility for the result of renovation works (only overlooking the whole process) • No responsibility for the overall customer journey (just the first part)	It advises on how to renovate your house and will push suppliers to comply with their promises. Suppliers remain responsible for the final result.
3 **All-inclusive model**	• Offer a full renovation package to homeowners • Bear responsibility for the result of renovation works • Bear responsibility for the overall customer journey	The one-stop-shop is a contractor that sells you the whole service package and is your main contact point in case something goes wrong with suppliers.

6. Investment strategy

This section describes the support provided to final recipients as well as State aid considerations at the level of the HF, financial intermediaries, private investors, and final recipients. It also describes eligible final recipients.

6.1 Loan terms and conditions

It is proposed that both financial instruments would provide final recipients with a combination of loan and grant support. The commitment of ERDF resources at zero cost would enable low cost loans to be made to final recipients on advantageous terms adapted to the needs of the different final recipients.

It is proposed that the financial instruments do not include minimum requirements in terms of own contribution provided by the final recipients, as this should facilitate the financing of projects and ensure access to support for lower income households. Additionally, the state aid option proposed for the tourism and business infrastructure financial instrument does not require that a minimum own contribution is provided.

Given that the guarantee provided under the financial instrument should reduce investor risk and capital requirements, financial intermediaries would be expected to provide **longer-term preferential rate funding**. This approach could also facilitate loan absorption, as the financial intermediaries might provide loans to more risky final recipients they would not finance in the absence of a guarantee.

Interest rate and **tenor** of loans to be provided by the financial instruments should be subject to a competitive procedure as part of the financial intermediary selection. As part of the process, the applicants would propose improvements with respect to their normal practice based on the use of guarantees. These should ensure better pricing conditions and allow for tenors to better match the longer-term potentially required for returns of some of investment projects. The use of a guarantee cover could also help address potential restrictions on pledge of assets owned by the local authorities in the case of the business/toursm financial instrument. However, potential benefits in terms of **reduced collateral requirements** should be subject to verification at further stages of the financial instrument implementation.

As concerns other indicative loan key parameters, **commitment fees** could also be subject to the financial intermediary selection procedure up to a minimum fee, which should promote efficient project development and mitigate the risk that committed loan resources are not disbursed. An initial period of time where these fees are waived could also be considered to allow for loan drawdown in stages.

Grace periods should reflect the development and construction periods of specific projects. Based on experience with other financial instruments, indicative grace periods of up to 3 and 1.5 years for the tourism and business infrastructure and energy efficiency financial instrument respectively should be sufficent.

As part of the competitive process, selection criteria could also require that **more favourable conditions are be offered to the final recipients from the less developed counties**. Any agreed preferential treatment would need to be reflected in the funding agreements with the financial intermediaries.

6.2 Use of grants

Feedback received from stakeholders clarified that, in addition to technical support, grants would need to be provided together with loans to final recipients under both the tourism and business infrastructure and the energy efficiency in individual houses financial instruments.

As concerns the tourism and business infrastructure financial instrument, **capital grants would cover the non-revenue generating part of the investments**. The proportion of capital grant to be provided would be decided on a case by case basis, considering the viability gap of the individual projects.

Additionally, **interest rate subsidies** may also need to be considered, in case a need to further improve the conditions of access to private capital is identified. This might be the case, for instance, where there are

indications that there might be affordability issues for some local authorities to pay the interest rate charged on the loans by the financial intermediaries.

In the case of the energy efficiency in individual houses financial instrument, the market assessment identified that the disposable income of homeowners represents a barrier for renovation of individual houses. In order to provide suitable incentives to renovation, the proportion of grant support would thus need to reflect the **level of income of the homeowners** with additional grant support for lower income homeowners. It should be noted that the submission of documents proving the level of income is normally required as part of the creditworthiness assessment process of individual borrowers in Romania. Therefore, this is not expected to place an additional burden on the side of financial intermediaries and final recipients compared to standard market practice.

In addition to homeowner income level, the proportion of grant support would also need to reflect the **energy performance achieved** after rehabilitation. This would be needed to encourage deep renovations, considering the longer payback periods required by such renovations, as also identified in Romania by the Long Term Renovation Strategy (see the following box).

The Romanian Long Term Renovation Strategy considers two types of generic single family buildings for the modelling - single family buildings of average size (60 sqm, brick, windows with wooden frames etc, consumption of 450-522 kWh/sqm per year depending on climate zone etc.). The difference between the two types lies in the heating source - gas versus biomass (wood stoves).

While three different renovation package options are considered (see table below), the Long Term Renovation Strategy recommends for all single family buildings the minimum renovation scope package (P1), which is considered cost-optimal and achieves at least Class C.

Building type and renovation packages	WALLS insulation, cm	WALLS R' m^2K/W	ROOF insulation, cm	ROOF R' m^2K/W	BASEMENT insulation, cm	BASEMENT R' m^2K/W	WINDOWS R' m^2K/W	HEATING SYSTEM improvements	RES Installation
B.1 SFB_Gas									
P1	**8**	**1.915**	**20**	**5.36**			**0.83**	**TRV**	**-**
P2	15	2.935	25	6.25			0.91	TRV	GHP
P3	15	2.935	25	6.25			0.91	TRV	GHP, PV, SP
B.2 SFB_Wood									
P1	**8**	**1.915**	**22**	**5.70**			**0.83**		**-**
P2	15	2.935	25	6.25			0.91	radiators & TRV	HP air-water
P2	15	2.935	25	6.25			0.91	radiators & TRV	HP air-water, SP, PV
Requirements									
Climatic zone I-V		1.785		5.00			0.769		

P2, P3 (for Class B and A) have longer payback periods, as shown in the table below maximum scope renovations (P3)[48] under climatic zones II and III i.e., the relevant ones for SM. However, complementary measures to P1 can bridge the gap and achieve Class B or A for at least some of the buildings. In particular, the measures complementary to P1 which, according to the Long Term Renovation Strategy, could be considered on a case-by-case or added later are for:

[48] Deep or nearly zero energy building renovation standard including all renewable energy options such as rooftop photovoltaic, solar hot water, or geothermal heat pumps.

- Gas heated single family buildings: install a gas-engine heat pump (GHP) or air-water heat pump (HP) with solar domestic hot water (DHW) and photovoltaic (PV) panels depending on the cost-effectiveness and affordability case-by-case.
- Wood heated single family buildings: separate programmes for efficient use of firewood in parallel with thermal renovation[49].

Building type & Climatic Zone	Package code	Initial cost investment, lei/m2	Global Cost, lei/m2	Specific final energy consumption, kWh/m2 year	Reduction of final energy kWh/m2 year	Global cost for final energy reduction, lei/m2	Investment cost for final energy reduction, Lei for kWh/m	Simple payback from saved energy
SFH_Gas_II	P1	951	2829	207.71	278.58	10.15	3.41	21
SFH_Gas_III	P1	951	2910	220	301.9	9.64	3.15	19
SFH_Wood_II	P1	932	3064	180.61	342.86	8.94	2.72	10
SFH_Wood_III	P1	932	3483	195.67	371.57	9.37	2.51	10
SFH_Gas_II	P3	3164	4784	135.43	350.86	13.64	9.02	44
SFH_Gas_III	P3	3164	4918	137.75	384.15	12.8	8.24	43
SFH_Wood_II	P3	2977	4269	84.48	438.99	9.72	6.78	24
SFH_Wood_III	P3	2977	4389	87.31	479.93	9.14	6.2	22

Notwithstanding in the current market context both construction[50] and energy prices are rapidly increasing, assessment of the viability of energy efficiency renovations in individual houses in the Long Term Renovation Strategy remains sufficiently accurate, as confirmed during consultation with professional associations.

On this basis, the following indicative combination of support is proposed for energy efficiency renovations in individual houses[51], where a higher grant proportion would reduce the perceived level of risk of lower income individuals while also incentivising more homeowners to submit investment projects with a higher policy impact.

Table 6.1: Indicative combination of support for energy efficiency in individual houses

Familiy income	**Up to EUR 15 000**		**Over EUR 15 000**	
Personal income	**Up to EUR 10 000**		**Over EUR 10 000**	
Renovation type	*Minimum*	*Deep**	*Minimum*	*Deep**
Combination of support	70% grant 30% preferential loan	80% grant 20% preferential loan	35% grant 65% preferential loan	45% grant 55% preferential loan

*Note: * Deep renovation would typically generate over 60 percent reduction in energy use*

[49] This should consider that the Long Term Renovation Strategy was prepared before the recent Government plans to extend gas networks to rural single family buildings.

[50] See Ordonanța nr. 15 din 30 august 2021.

[51] By way of comparison, the 'Energy-Efficient House' programme launched in September 2020 by the Ministry of Environment, Waters and Forests provides up to RON 70 000 grant (about EUR 14 000) but no more than 60% of the investment value, to implement measures to enhance the energy efficiency of individual houses, including energy efficiency renovation and upgrade of heating source.

Under the energy efficiency in individual houses financial instruments, grant support could take the form of either or both of the following:

- **Capital grant** to reduce the investment costs for homeowners in line with their loan repayment capacity, which would help attracting private finance.
- **Capital rebate** to create incentives to achieve higher energy efficiency standards. Achievement of the expected energy savings would be confirmed by an energy audit to be performed at project's commissioning, which would trigger a specific capital rebate close included in the contract with the final recipient.

Given this indicative combination of support, there is a need for a close monitoring of implementation so the grant proportion can be modified to fit the actual demand for renovations as well as in response to any further changes in construction and energy prices. It would also be important for the financial intermediary to manage the investment portfolio to ensure that at the end of the investment period the requirements of Article 58(5) of Regulation (EU) 2021/1060[52], are met, regarding ratio of grants and loans.

Combination of grant and loan support would take place in one operation for both the business infrastructure and the energy efficiency in individual houses financial instruments. This would make both the application process for for financial support and project assessment easier. Disbursement of funds to final recipients in advance would be another key benefit. Additionally, application of financial instrument rules to co-financing, audit, control and reporting of the operation would also allow for smoother implementation.

As stipulated in the above-mentioned Article 58(5) combination of financial instruments and grants in one operation implies that the programme support in the form of grants shall not exceed the value of the investments supported by the financial product. In the case of both the business infrastructure and the energy efficiency in individual houses financial instruments, some of the investment projects can be expected to require a larger grant than the value of the investments supported by the loan support. As the condition established under Article 58(5) cannot be expected to be verified systematically at project level, a specific clause in the agreements with individual financial intermediaries should ensure that the ceiling is not exceeeded at each financial instrument level.

[52] Regulation (EU) 2021/1060 of the European Parliament and of the Council of 24 June 2021 laying down common provisions on the European Regional Development Fund, the European Social Fund Plus, the Cohesion Fund, the Just Transition Fund and the European Maritime, Fisheries and Aquaculture Fund and financial rules for those and for the Asylum, Migration and Integration Fund, the Internal Security Fund and the Instrument for Financial Support for Border Management and Visa Policy.

6.3 State aid options

Based on a preliminary analysis, there is the potential for State aid to be present in the proposed implementation structure. The design of the financial instruments should ensure that State aid is addressed at all levels:

- Holding Fund;
- Financial intermediaries;
- Private investor(s); and
- final recipients.

The **HF** is treated as an intermediary vehicle for transfers of the resources of the South Muntenian ERDF programme to financial intermediaries, thus there should be no State aid for the HF. As long as the HF manager is remunerated within the caps for management cost and fees prescribed in Article 68(4) of Regulation (EU) 2021/1060, there would be no aid to holding fund manager.With regard to **financial intermediaries**, as long as they perform their role of fund managers of the financial instruments, have been selected in a competitive, open, transparent and non-discriminatory procedure (which implies that their remuneration is on a market level) and they pass on the full benefit of the programme contribution to the final recipients (as evidenced through the selection process), there would be no State aid being provided to them.It is foreseen that the programme contributions might leverage additional private funding, thus increasing the overall amount of financial resources available to achieve the programme objectives. In this case, potential State aid for **private investor(s)** should also be assessed. This includes situations when the financial intermediary commits its own funds, acting in a dual role of fund manager and private investor.

If the investment is arranged on a pari passu basis between public and private investors, no State aid for private investors would normally occur. Financial intermediaries, when providing their resources in form of loan, could also be supported with aid in the form of a guarantee granted in compliance with the provisions of Article 4(6) Commission Regulation (EU) 1407/2013. The aid in the form of a guarantee may also be granted to other private investors at the level of the financial intermediary. Finally, State aid presence and its compatibility must be verified at the level of **final recipients**. In general, in the case of a lack of economic activity of final recipients or no impact of the projects supported on the EU trade, no State aid is granted. This is the case with the energy efficiencty in individual houses financial instrument, given that the final recipients are identified as the owners of individual residential buildings. In the case of the tourism and business infrastructure financial instrument, final recipients are local authorities and potentially private project promoters. Because of the nature of the expected investments, the presence of economic activities cannot be excluded.

SM is an assisted area within the meaning of the EU's Regional Aid map and as such the loan element of the financial instrument may be structured to take advantage of Article 16 GBER. This flexibility, which may be relied on in the event of 'non-transparent' aid to financial intermediaries and co-investors, is only available for the loan element of the support. It is further restricted to those investments that support an integrated sustainable urban development strategy. This is likely to limit its application in SM which is mostly rural in character, although could be considered for projects located in urban centres. Where Article 16 GBER is used, the grant component may be supported through a range of different options include the de-minimis rules and Art 14/Art 56/Art 59 GBER.

Based on the analysis of possible alternatives that exclude the necessity to notify aid to the Commission under Article 108 (3) TFEU[53], the following options presented in the table below can be considered.

Tourism and business infrastructure

In the case of the recommended solutions:

- In the case of **private investors (including financial intermediaries providing their own funds)**, these could be granted aid in the form of a guarantee, in compliance with the of Article 4(6)

[53] Consolidated versions of the Treaty on European Union and the Treaty on the Functioning of the European Union 2012/C 326/01.

Commission Regulation (EU) 1407/2013[54];

- Aid amounts, in the case of **final recipients** cannot exceed thresholds[55] established in Article 4 GBER. If the threshold is to be exceeded, individual notification under Art. 108 (3) TFEU is required: such an eventuality could be excluded with specific provisions in the funding agreement and/or by the rules for the access of final recipients to the financial instrument resources. In the case of Article 56 GBER, the aid amount 'shall not exceed the difference between the eligible costs and the operating profit of the investment. The operating profit shall be deducted from the eligible costs ex ante, on the basis of reasonable projections, or through a claw-back mechanism'. About cumulation, Article 3(a, b) should apply, although, in order to increase the capacity of the financial instrument to pursue the desired objectives, exclusion of cumulating aid on the same eligible costs could be considered;
- The aid could be granted, as an alternative to the above mentioned Article 56 GBER, on the basis of the provisions of Article 14 GBER. In this case, the aid intensities applicable to eligible expenses (investment costs in tangible and intangible assets) will be those defined in the regional aid map approved by the EC[56].

Energy efficiency in individual houses

Also in this case:

- **private investors (including financial intermediaries providing their own funds)** could be granted aid in form of guarantee;
- Considering the nature of the **final recipients**, it is considered that the application of State aid rules can be excluded.

In both cases, on the basis of Article 58(5) Regulation (EU) 2021/1060, support in form of loans would be combined with support in form of grant.

Moreover,

- in the case of the tourism and business infrastructure financial instrument, an aid could be granted in form of **grant** for technical support for project preparation and implementation costs **based on Regulation 1407/2013** or **Article 18 GBER**. Indeed, this type of costs cannot be supported on the basis of Article 14 or 56 GBER;
- in the case of the energy efficiency in individual houses financial instrument, a grant could cover part of the cost of the work as well as in-kind technical support to homeowners.

The managing authority will select the HF manager with an open and non-discriminatory procedure and sign a funding agreement in compliance with Annex X Regulation (EU) 2021/1060. The manager will proceed in the same way for the selection of financial intermediaries. In case the HF manager is also in charge of providing guarantees to the financial intermediaries, the provisions relating to the selection of financial intermediaries clearly define the applicable rules for granting aid in the form of guarantees, on the basis of guidelines provided by the managing authority.The HF manager also defines schemes ruling:

- the support by financial intermediaries to final recipients in compliance with the guidelines defined by the managing authority in accordance with the applicable State aid rules;
- the aid that can be granted to potential private investors, other than financial intermediaries,

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54 This solution is precluded in the case of application of Art. 14 GBER, if financial intermediary resources are intended to contribute to compliance with the threshold referred to in Art. 14 (14) GBER ("The aid beneficiary must provide a financial contribution of at least 25% of the eligible costs, either through its own resources or by external financing, in a form, which is free of any public support").

55 Article 4(1)(cc) GBER: 'EUR 10 million or the total costs exceeding EUR 20 million for the same infrastructure.'

56 Application of Article 14 could represent a useful alternative in the case of operations that exceed the notification thresholds applicable under Article 56 GBER. If Article 14 will apply, where financial intermediaries and/or private investors invest own resources in final recipients, these resources are lent on commercial terms.

investing own financial resources at the level of the financial intermediaries.

The HF manager is responsible for signing the funding agreements with financial intermediaries (Annex X Regulation (EU) 2021/1060), which include responsibility for the definition and implementation of the management and control system and procedures for State aid assessment. The financial intermediary, according to its internal rules, should document the eligibility check on the State aid granted. The control functions of the HF manager towards financial intermediaries on State aid compliance at project level should also be envisaged in the funding agreements.Information with respect to the aid granted and its compatibility with the rules on State aid has to be included in the regular monitoring reports submitted by the financial intermediary. This information will be made available to the managing authority in order to alllow performing its reporting obligations onState aid.The proposed actions[57] to be undertaken in respect of State aid by the stakeholders are presented in the table below.

Table 6.3: Actions for State Aid compliance

Responsible entity	Action
Managing authority, in cooperation with the HF manager	Preparation of the State aid scheme(s)
Managing authority	Issuing the State aid scheme(s) and framework guidelines on the State aid for the HF / financial intermediaries
	Preparation of the State aid reports
HF manager	Issuing guidelines for preparing financial intermediary procedures on State aid
	Carrying out checks on the State aid issues in financial intermediaries
	Preparation of monitoring reports on the State aid granted by financial intermediaries
Financial intermediary	Execution of tasks on the State aid delegated by the FoF manager as defined in the funding agreement:
	preparation and application of procedures on State aid
	granting State aid to final recipients
	preparation of monitoring reports on State aid granted to final recipients

[57] The list of actions is not exhaustive and may be adjusted/completed by the managing authority.

6.4 Final recipients

Final recipients of the **tourism and business infrastructure** financial instrument would be mainly local authorities in SM. However, sufficient flexibility should be built into the financial instruments procedures to also accommodate potential investments from private project promoters as well as potential public-private partnerships.In addition to the construction/development of new business infrastructure, investment projects would include the renovation of existing business and industrial areas, as well as decontamination to prepare possible brownfield sites for economic activity[58]. In the case of tourism infrastructure, eligible investments would include small-scale investments within the main investment site or directly linked to it within an integrated offer, which could help generating income e.g., trade and food, accommodation, leisure and recreation.

For the **energy efficiency** financial instrument, owners of individual residential buildings would be the eligible final recipients.

Type of eligible investments would include energy audits and construction surveys of existing buildings, implementation of energy efficiency measures[59], renewables installations in buildings subject to energy efficiency renovation.

[58] Although the market assessment did not identify any projects for the regeneration of existing industrial sites, including this type of projects in the investment strategy would allow for more flexibility.

[59] This would include construction works / reinforcement when required in the construction survey.

7. Financial size

7.1 Financial size of the proposed financial instrument

Based on conclusions from the market assessment and further stakeholder consultation carried out to prepare this investment strategy, recommended allocations of programme resources to the financial instruments are the following:

For **tourism and business infrastructure**, an indicative total allocation of programme resources (financial instrument and grant) of up to **EUR 100 million** is proposed. This is considered to be an appropriate allocation, reflecting:

- the overall investment costs of the project pipeline, as identified in the market assessment;
- expected differences in the viability of the projects. This implies the need for a balance between more profitable initiatives and projects that are expected to generate less revenues, in order to meet the requirement of Article 58(5) Regulation (EU) 2021/1060 requirement in terms of maximum grant support allowed;
- the early stage of development of some projects, implying that some of those being at a more initial stage of development might actually not materialise.

A larger scale for the financial instrument might be needed to attract sufficient interest from potential fund managers and investors. However, in the event that there is uncertainty regarding the level of demand the managing authority/HF may commit the resources in a series of tranches. Possible actions that might help clarify the feasibility of a larger scale financial instrument include more in-depth assessment of the expected: (1) profitability of the projects in the pipeline; (2) demand from potential private project promoters. Interim support for local authorities to continue to develop their projects pending the implementation of the financial instrument would also be beneficial. Carrying out such activities before taking a final decision on the financial instrument allocation as part of the final ex-ante assessment would be advisable.

For **energy efficiency in individual houses**, an indicative total allocation of programme resources up to **EUR 100 million** is proposed. This is considered to be a cautious allocation, reflecting the fact that:

- the expected potential demand for individual houses renovation in the region by 2030, as identified in the market assessment, which far outstrips the level of resource available;
- the estimated number of renovations that could be supported by the programme based on the proposed amount would be a tiny share of the stock of individual houses existing in South Muntenia;
- there should be sufficient time for the Regional Development Agency to put in place all the conditions required for the actual demand of renovations to gain traction over the 2021-2027 programming period.

The stimulation of demand amongst owners of Single Family Homes will be critical to the success of this financial instrument. The market assessment has identified the mixed experience of financial instruments set up in this sector in Romania in the past. This experience highlights the challenges at multiple levels that will need to be tackled as part of the financial instrument operation. Nevertheless, case studies such as the Residential energy efficiency financial instruments in Lithuania demonstrate how the combination financial instrument/grant operation can be at the heart of a comprehensive initiative to modernise housing in a region. However, in the event that there is uncertainty regarding the level of demand the managing authority/HF may commit the resources in a series of tranches.

The managing authority should consider as part of its ex-ante assessment the appropriate allocation of the resources for each financial instrument between the different types of support.

7.2 Potential for private sector cofinancing

Feedback received from financial intermediaries by this study shows their interest to provide own funds for co-investment along with programme resources. As previously discussed in more detail, their contribution would be partly covered by a guarantee using programme resources. This should reduce their risk and lead to improved capitale requirements. Moreover, it is proposed for the guarantee to comprise an aid element to encourage financial intermediaries to provide co-financing while also potentially promoting better lending conditions for final recipients. Within this framework, it is additionally recommended that criteria to select financial intermediaries consider their ability to provide co-financing. This would be according to similar experience in implementing similar financial instruments in other EU Member States and it should ensure that the capacity to attract private resources is maximised .While financial intermediaries could provide co-investment from own resources, IFIs may also provide a long-term funding line to financial intermediaries to fund their own contributions to the financial instruments. IFI financing can be expected to involve lower cost and/or longer term funding, for the benefit of final recipients. In addition, IFIs would expect repayment of their loans by the financial intermediaries regardless of the performance of the underlying projects, implying that the loans will still be at the risk of the financial intermediaries. Hence, the financial intermediaries would carefully manage their exposure towards the final recipients - although partly covered by a first loss piece from ERDF programme resources or guarantee - and this should align interests with regard to the credit risk of the final recipients.

Alternatively, IFIs may provide additional resources through a public sector loan to a suitable public sector counterparty, such as the national government. Other factors that would impact upon the potential to attract investment from IFIs would include the scale of the operation, the alignment of the projects with the institution's own strategic priorities, the availability of a suitable counterparty for lending and the risks identified for the operation concerned.

At the level of the final recipients, it is proposed that the financial instruments do not include minimum requirements in terms of own contribution as this should facilitate the financing of projects under both financial instruments. Additionally, this also complies with proposed the state aid option for the tourism and business infrastructure financial instrument as this does not require that a minimum own contribution is provided.

8. Recommendations and next steps

This report has presented the market assessment and the implementation options for two financial instruments under ERDF 2021-2027 in SM, the first for tourism and business infrastructure, the second for energy efficiency in individual houses.

The analysis of the market has shown that the region has significant potential for stimulating investments in tourist facilities, both to modernise existing structures and promote new development trajectories. New sources and types of financing can support the region to exploit its great natural and historical attractiveness, create new business opportunities, and revitalize the job market in a territory which ranks second in Romania in terms of negative net migration. Furthermore, the business infrastructure, which is still poorly developed (even though SM has the highest number of industrial parks at national level), can benefit from resources delivered through a financial instrument harnessing the sector's potential for economic development. The region is gradually moving towards a more diversified industrial profile and the proximity to Bucharest is an opportunity still to be exploited. Moreover, a financial instrument supporting these two sectors is a significant opportunity to fulfil the lack of public resources made available in the last programming periods, unable to meet the investment needs of local authorities.

The energy efficiency sector presents similar characteristics. As for the rest Romania, only a small fraction of the individual houses has been renovated In the region and there is, since the past, no coherent programme to support energy efficiency renovation projects. The potential for improvement and further investments is therefore remarkable. For instance, an incremental 10-30% building renovation rate is expected by 2030 as indicated in the Long-term Renovation Strategy to scale-up the pace of the building stock renovations in Romania.

A more in-depth analysis of the demand side has revealed that there are some obstacles faced in accessing finance in the three target sectors. Different rules concerning permits, yearly changes to the state budget rules, repeatedly modified VAT-related laws, and other increasing costs make the regulatory framework a key challenge for projects related to tourisms and/or business infrastructure. The cost of the loans is another important difficulty in accessing finance. For projects concerning energy efficiency in individual houses, the main problem is related to the lack of financial intermediaries and of specific products targeting these investments. The lack of administrative capacity is also perceived as a main challenge, as often there is lack of local capacities for collaboration between specialists for the successful implementation of energy modernisation financing schemes. Similarly to the other two sectors, also the cost of the loans is a key barrier.

Additional problems derive from the supply side. The main challenges are related to the bankability of the projects and/or the project owners, mainly due to the degree of indebtedness of local authorities (subject to the limits regulated by national laws). Moreover, financial intermediaries perceive a lack of mature projects from local authorities and consequent scale chalelnges for potential financiers. Concerning the financing of energy efficiency projects, the absence of a full inventory of buildings is a key obstacle. The sector is also characterised by the scarce availability and involvement of specialised technical companies. Finally, financial intermediaries report that regional financial instruments can create potential issues in administrating as well in promoting and leveraging resources on them unless sufficient critical mass can be achieved.

It therefore must be acknowledged that, despite the potential for investment in the region, the financial instruments wil be launched into a challenging environment. As a result the sustained long-term support of the managing authority to the implementing bodies will be a crucial factor in ensuring the success of the financial instruments which will, in turn help achieve the ambitions for the target sectors both during and after the 2021-2027 programming period. The active engagement of the managing authority will also lead to the development of the capacity within the region to manage and implement financial instruments. This will deliver long term benefits to SM as the skills and experience built up within the managing authority may, in turn, result in further development of financial instruments supporting other sectors benefiting from the leverage, reflows and impact of such sustainable financing tools.

Taking into account the analysed context, the study key findings suggest that the region should consider further:

- Setting up **two risk sharing loan financial instruments**, separately targeting the tourism/business infrastructure sector and energy efficiency in single family homes. Financed though ERDF programme resources, financial intermediaries are expected to provide longer-term preferential rate funding, possibly considering reduced collateral requirements and longer grace periods (up to 3 years for the tourism and business infrastructure and 1.5 years for energy efficiency). Having **more than one financial intermediary** for each sector is essential to mitigate the risk of underperformance in terms of deployment of funds.
- An indicative total allocation of programme resources of up to **EUR 100 million** is proposed for each the **tourism and business infrastructure** and the **energy efficiency in individual houses** financial instruments.
- These instruments can be supported with the contribution of **a guarantee instrument** to further mobilise private co-investment. This can be taken by the guarantor on a loan-by-loan basis or a portfolio guarantee (in the case of the energy efficiency) based on agreed criteria. The guarantee would cover up to 80% of each individual loan exposure and the indicative cap rate is assumed to be up to 15%. The guarantee fund manager could be either a national entity, such as FNGCIMM, or an international commercial institution or IFI.
- A **grant component** is also highly recommended. Capital grants, decided on a case by case basis, would cover the non-revenue generating part of the investments in tourism and business infrastructure. Interest rate subsidies may also need to be considered here. For the energy efficiency in individual houses financial instrument, the proportion of grant support should depend on the level of income of the homeowners and should also reflect the energy performance achieved after rehabilitation.
- **Technical support** for potential final recipients for both financial instruments is also recommended, to support to facilitate the development of the pipeline. This should be provided to final recipients throughout project implementation, from application to implementation and settlement and could take the form of a virtual and/or physical one one-stop-shop to target a very high proportion of the regional population.
- A **two-tier Holding Fund structure** may be considered to support the implementation of the financial instruments. An IFI or an NPB may be an appropriate candidate for the role of the manager. A single tier structure should be explored as an alternative option but considering that this requires the managing authority to build its own capacity to finalise the set-up of the financial instruments. Moreover, a multi-region fund, especially for energy efficiency improvements, in which the SM managing authority collaborates with other managing authorities in Romania, can be an additional option, appropriate to achieve greater scale.

The next steps foreseen to consolidate the key findings and suggestions proposed in this report include:

- For the tourism and business infrastructure sector, a **detailed analysis of the project pipeline proposed by local authorities**, which, on their turn, should support the local authorities to conclude and finalise the project feasibility studies. Meetings between the Regional Development Agency and local authorities should be organised to further collect elements concerning projects readiness.
- Regarding energy efficiency in individual houses, there is a need to **continue discussions with local authorities, professional associations and other stakeholders on their possible roles and contribution to providing one-stop shop technical support**.
- **Assessment of the internal capacity of the Regional Development Agency** to check for the feasibility of the one-tier governance structure. Additionally, the Regional Development Agency should check for the willingness of other managing authorities to collaborate in a potential multi-region fund.

Moreover, according to the CPR 2021/1060 (Article 58 and Annex X), to proceed with the design and implementation of a financial instruments, and specifically in the preparation of the funding agreements and strategy documentation, the following key elements need to be provided:

- The **ERDF programme** approved by the managing authority and the European Commission shall provide for the use of financial instruments to support tourism/business infrastructure sector and energy efficiency in single family homes. The appropriate priority objectives (PO1, PO2 and PO5) shall be identified.
- **an ex ante assessment** should be undertaken under the responsibility of the managing authority before finalising the design and allocating programme contributions to financial instruments. The ex-ante assessment should include the proposed amount of programme contribution to a financial instrument and the estimated leverage effect accompanied by a short justification; the proposed financial products to be offered; the proposed target group of final recipients; the expected contribution of the financial instrument to the achievement of specific objectives.
- the **investment strategy** or policy including implementation arrangements, financial products to be offered, final recipients targeted, and envisaged combination with grant support (as appropriate). This shoud take account of further feedback from potential financial intermediaries undertaken in the context of the ex-ante assessment;

In developing their business plan or equivalent documents for the financial instrument to be implemented the managing authority should start to identify:

- the **target results** that the financial instrument concerned is expected to achieve to contribute to the specific objectives and results of the relevant priority;
- **provisions for monitoring and reporting** of the implementation of investments and audit requirements;
- requirements and procedures for **managing the contribution** provided by the programme, for managing **interest and other gains generated**, as well as provisons regarding the **calculation and payment of management costs** incurred or of the management fees;
- provisions regarding the **re-use of resources**;
- conditions for a possible **total or partial withdrawal** of programme contributions from programmes to financial instruments and provisions for the **winding-up** of the financial instrument;
- **appraisal and selection of bodies implementing the financial instruments**, including calls for expression of interest or public procurement procedures.

ANNEX I - QUESTIONNAIRES

Interview guide for potential final beneficiaries

Sector: tourism infrastructure and business infrastructure (local authorities / project promoters)

(Note: Depending on their activities, interviewees will possibly answer each question separately for tourism infrastructure and business infrastructure)

Organisation details:

- Name_____
- Address_____
- Type_____
- Short description of your organisation (please also indicate your interest/activity in the tourism infrastructure and business infrastructure sectors)
  _____

Q.1- Could you please describe the current situation with tourism and business infrastructure in your place/territory? Please include underutilised local resources and the main reasons that current restrict their use and development.

_____
_____
_____

Q.2. - Please describe the tourism and business infrastructure projects you are developing or intend to develop using the template in the template below.

_____
_____
_____

Q.3 - How do you propose financing the projects? In the case of grant support please indicate, if possible, the proposed grant programmes including ERDF and national programmes

_____
_____
_____

Q.4. – How confident are you that the private market (at local, regional, or national level) able to satisfy the financial needs? Has the situation improved or worsened in recent years?

_____
_____
_____

Please also fill the table with 'x' (1=Not confident; 5=very confident)

	1	2	3	4	5
Tourism infrastructure					
Business infrastructure					

Q.5 - What are the main challenges in accessing finance to support tourism and business infrastructure projects?

(multiple choice allowed)

- regulatory framework
- lack of financial intermediaries
- lack of administrative capacity
- lack of collateral
- cost of loans
- project delivery capacity
- other (please specify)**:_____**

*(explanation)*_____
_____
_____

Q.6 - What types of public support (including non-financial services) are available at local level for the financial needs of the local actors in the two sectors?

_____
_____
_____

Q.7 - Looking at the next years, do you see an increase/decrease of demand for finance for tourism and business infrastructure projects in your place/territory?

_____
_____
_____

Please also fill the table with 'x' (1= No increase; 5 = significant increase)

	1	**2**	**3**	**4**	**5**
Tourism infrastructure					
Business infrastructure					

Q.8 - The Regional Development Agency in South Muntenia is considering providing a combination of grant and loan support for tourism and business infrastructure projects under the ERDF programme 2021-2027:

Q.8a - Would you consider this type of support for any projects that you are developing / intend to develop?

_____
_____
_____

Q.8b - What proportion of grant support would you consider to be necessary given the expected profitability of your project(s)?

_____
_____
_____

Q.8c - To what extent would you be able to contribute your own resources to complement the grant and loan provided?

_____
_____
_____

Q.9 – Do you have any further comments?

_____
_____

_____

(Note: Questions 1 to 5 are only relevant to public authorities)

Organisation details:

- Name_____
- Address_____
- Type_____
- Short description of your organisation (please also indicate your interest/activity in the energy efficiency in single-family houses sector) _____

Q.1- What is your estimate of SFH buildings stock in rural / urban / South Muntenia?

- *Total number and types*_____
- *Age of buildings*_____
- *Types of construction material*_____
- *Source of heating / other energy*_____

Q.2 - How much of the SFH in urban / rural / South Muntenia have been renovated in terms of insulation or change of heating source in recent years through public support programmes (in case, please indicate the specific programme, e.g. AFM programs – Green House, Green House Plus, Energy Efficient House, GEFF, Local authorities' programmes?

_____
_____
_____

Please also fill the table with 'x'

	<10%	**25%**	**50%**	**75%**	**>90%**
Urban					
Rural					
Total					

Q.3 - What is the status of implementation in your area of the Long-Term Renovation Strategy adopted in 2020 in South Muntenia? Is the action plan for the LTRS under development?

_____
_____
_____

Q.4 - Looking at the next seven years, what would you consider to be the level of demand for finance for modernisation of SFHs?

_____
_____
_____

Please also fill the table with 'x' (1= No increase; 5 = significant increase)

1	**2**	**3**	**4**	**5**

Q.5 - What are the main barriers to further SFH EE investment in Romania and South Muntenia?

- ***Policy*** *e.g., energy prices, lack of standards for existing buildings and heaters/boilers, lack of legislation on dirty fuels, permits*_____

- ***Financial*** *e.g., low disposable income of homeowners, high upfront costs and long payback periods, higher cost for cleaner fuels*_____
- ***Institutional and informational*** *e.g., lack of appropriate building and energy use data, existing public support unable to attract sufficient demand, , lack of awareness about EE opportunities and benefits*_____
- ***Other obstacles*** *e.g., regulatory*_____

Please also fill the table with 'x' (1= not important; 5 = very important)

	1	2	3	4	5
Policy					
Financial					
Institutional and informational					
Other obstacles_____					

Q.6 - How confident are you that the private market (at local, regional, or national level) able to satisfy the financial needs? Has the situation improved or worsened in recent years?

_____
_____
_____

Please also fill the table with 'x' (1=Not confident; 5=very confident)

1	2	3	4	5

Q.7 - What are the main challenges in accessing finance to support energy efficiency modernisation in SFHs projects?

(multiple choice allowed)

- regulatory framework
- lack of financial intermediaries
- lack of administrative capacity
- lack of collateral
- cost of loans
- project delivery capacity
- other (please specify)**: _____**

*(explanation)*_____
_____
_____

Q.8 - What are the net revenues e.g., payback period of typical EE investments in SFH and how do they vary across different types of investments? What factors could be expected to affect the balance of costs and returns in the future?

_____
_____
_____

Q.9 - The Regional Development Agency in South Muntenia is considering to provide a combination of grants and loans for SFH EE investments under the ERDF 2021-2027. To your opinion: what proportion of grant support would you consider to be necessary for support to attract sufficient demand?

_____
_____
_____

Q.10 - What measures could be taken to ensure the financial instrument can attract sufficient demand from households including those with a lower disposable income?

_____
_____
_____

Q.11 - In addition to financial resources, what other type of support would be needed to ensure sufficient attractiveness of the financial instrument and support the implementation of a programme of home improvements in the region e.g., facilities for owners to prepare renovation plans, one-stop shop for authorisations?

_____
_____
_____

Q.12 – In your opinion, what measures would be needed to promote the financial instrument, which could increase awareness and ensure sufficient demand?

_____
_____
_____

Interview guide for financial intermediaries

(Note: Depending on their activities, interviewees will possibly answer each question separately for tourism infrastructure, business infrastructure and energy efficiency in single-family houses)

Organisation details:

- Name_____
- Address_____
- Type_____
- Short description of your organisation (please also indicate your interest/activity in the tourism infrastructure, business infrastructure and energy efficiency in single-family houses sectors)
  _____

Q.1- What products do you offer for:

- *Local authorities*_____
- *Other organisations investing in tourism or business infrastructure*___
- *Individuals investing in energy efficiency for single-family houses*_____

For each product, please provide an indication of activity in South Muntenia in the last five years (such as how many loans and total volume of lending)

- Tourism infrastructure_____
- Business infrastructure_____
- Energy efficiency in single-family houses_____

Q.2 - What are the key challenges (for instance, regulatory barriers, indebtedness levels, credit risk, transaction costs, lack of collateral, payback periods longer than acceptable, repayment rate, …) in working with these sectors/clients?

_____
_____
_____

Q.3 - In South Muntenia, do you think that the market demand for financing for these sectors is higher than the supply provided? If yes, can you provide any quantification for each sector?

- *Local authorities*_____
- *Other organisations investing in tourism or business infrastructure*___
- *Individuals investing in energy efficiency for single-family houses*_____

Q.4 - Looking at the next seven years, do you see an increase/decrease of demand for finance in these sectors in South Muntenia?

_____
_____
_____

Please also fill the table with 'x' (1= No increase; 5 = significant increase)

	1	2	3	4	5
Tourism infrastructure					
Business infrastructure					
Energy efficiency in single-family houses					

Q.5 - The Regional Development Agency in South Muntenia is considering providing a combination of loans and grants to support investments in these sectors under the ERDF 2021-2027. To your opinion, which characteristics these financial instruments should have? In particular:

Q.5a - In your view, what would be the total amount of the financial instrument to ensure sufficient critical mass while also ensuring a reasonable investment period for origination of a new loan portfolio in South Muntenia?

_____
_____
_____

Q.5b - What proportion of grant support would you consider to be necessary given the expected profitability of the projects in the different sectors? [only for energy efficiency in single-family houses]

_____
_____
_____

Q.6 - Would you interested in participating as a financial intermediary and/or co-investor in these financial instruments?

Q.7 - In your view, what of the following instruments/approaches would better promote your capacity to contribute own resources to the financial instrument?

(a) Guarantee partially covering investor risk

_____
_____

(b) Asymmetric revenue-sharing in favour of the private investor

_____
_____

(c) Credit enhancement with a first loss tranche covered with public funds

_____
_____

Q.8 – In case part of the public resources provided to the projects come in the form of grants, do you think it would be manageable for your organisation to also provide this type of support i.e., grant? More generally, do you think your organisation has sufficient capacity to

manage the financial instrument or would it need to attract partners or subcontractors in case of involvement?

_____
_____
_____

Q.9 – Do you have previous experience of working with public support programmes, including European Structural and Investment Funds? What have been the challenges/opportunities with being involved?

_____
_____
_____

Q.10 – Do you already have branches and what would be your capacity to deliver this type of support in South Muntenia? How would that differ between local authorities / other organisations investing in tourism or business infrastructure, individuals investing in EE for single-family houses?

_____
_____
_____