

EX-ANTE ASSESSMENT FOR THE IMPLEMENTATION OF FINANCIAL INSTRUMENTS IN THE INVESTMENT AREAS OF ENERGY EFFICIENCY AND USE OF RENEWABLE ENERGY SOURCES FOR THE ISTRIAN COUNTY

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Table of Content

BLOCK 1.....	5
1. Introduction.....	5
1.1. Methodology.....	6
2. Analysis of market failures, suboptimal investment situations and investment needs.....	7
2.1. Istrian County - main information.....	7
2.2. Identification of existing market failures.....	8
2.2.1. Demand side analysis	8
2.2.1.1. Analysis of the Istrian economy	8
2.2.1.2. Energy demand	13
2.2.1.3. Energy Efficiency Plans	15
2.2.2. Supply-side analysis	18
2.2.2.1. Financial instruments in the programming period 2014.-2020.	18
2.2.2.2. Financial instruments for energy efficiency and use of renewable energy sources	20
2.2.2.3. Grants	22
2.2.2.4. ESCO model	25
2.2.2.5. Characteristics of the financial market	26
2.3. Establishing the evidence of market failure and suboptimal investment situations	27
2.3.1. Demand-side market failures.....	27
2.3.2. Supply-side market failures.....	27
2.3.3. Suboptimal investment situations	28
3. Assessment of the added value of the financial instrument.....	29
3.1. Analysis of the quantitative and qualitative dimensions of the value added for the financial instrument	36
3.2. Assessing the consistency with other forms of public intervention addressing the same market	38



3.3. Identifying possible State aid implications	39
4. Additional public and private resources to be potentially raised by the financial instrument ...	41
4.1. Estimating additional public and private resources	41
4.2. Estimating the leverage of the envisaged financial instrument	45
4.3. Attracting additional private resources	46
5. Lessons learnt	49
5.1. Gathering relevant information	49
5.2. Identifying success factors and pitfalls of past experiences	49
5.3. Applying lessons learnt to enhance the performance of the financial instrument	49
BLOCK 2.....	51
6. Proposed investment strategy.....	51
6.1. Process to develop a proposed investment strategy	53
6.2. Defining the scale and focus of the financial instrument.....	55
6.3. Defining the governance structure of the financial instrument.....	59
6.3.1. Preference analysis of FI users in Istrian County	59
6.3.2. Administrative capacity analysis of potential stakeholders	61
6.3.2.1. Ministry of Regional Development and EU Funds	63
6.3.2.2. Ministry of Economy, Entrepreneurship and Crafts	65
6.3.2.3. The Environmental Protection and Energy Efficiency Fund	67
6.3.2.4. HBOR (Croatian Bank for Reconstruction and Development)	70
6.3.2.5. Istrian County	73
6.3.2.6. Istrian Regional Energy Agency (IRENA Ltd.).....	78
6.3.3. Governance structure proposal for the implementation of the innovative financial instrument	80
6.3.3.1. Model 1.....	80
6.3.3.2. Model 2.....	83
6.3.4. The selected model	87



7. Specification of expected results consistent with the relevant Programme	88
7.1. Establishing and quantifying the expected results of the financial instrument	88
7.1.1. Implementation indicators of the innovative financial instrument	88
7.1.2. Results of implementation indicators of the innovative financial instrument	89
7.2. Specification of how the financial instrument will contribute to the strategic objectives	90
7.3. Monitoring and reporting	92
8. Provisions for the update and review of the Ex-Ante assessment methodology.....	93
9. Ex-Ante assessment completeness checklist	94
10. Conclusion	96
11. List of figures, tables and charts	97
12. Annexes	100



BLOCK 1

1. Introduction

The purpose of this Ex-Ante assessment is to identify an innovative financial instrument that should have a positive effect on increasing the demand for financial instruments as a preferable way of financing projects dealing with investments in energy efficiency and/or renewable energy sources. However, the EU consists of 28 Member States, each with its own geographical, economic, social and other specificities. Given that financial instruments are one of the instruments of Cohesion Policy, aiming at the balanced development of all European regions, it is necessary to take into account all the specificities at the national (Republic of Croatia) and regional (Istrian county) levels when making the Ex-Ante assessment. The Republic of Croatia is the youngest EU Member State and formally became a member on 1.7.2013. In addition to being the youngest Member State, the Republic of Croatia, like the countries of the Eastern Bloc, has, since 1990, undergone painful, long-lasting and not-so-successful processes of transforming social ownership and adopting market economy concept. Namely, most large companies, which most often employed hundreds or even thousands of workers, failed to continue operating under market economy conditions. In addition, during the 1990s, the Republic of Croatia also suffered war devastation in its territory, which left a number of devastations and human and material damage. Positive economic and social development began to be recorded in the early 2000s, but the positive trend was stopped in 2008, due to the global financial crisis and recession. The recession lasted for 6 years in Croatia (until the end of 2014) and resulted in a fall in real GDP of 12,6% compared to 2008. In 2018, Croatia's GDP amounted to EUR 51,608 billion and GDP per capita to EUR 12.615, representing 63% of EU GDP per capita.¹ Cohesion policy instruments contributed significantly to the recovery of the Croatian economy, primarily grants from EU funds for various projects, which, through their multiplier effect (new investments, increased employment, etc.), contributed to strong growth in domestic demand.² Namely, from the beginning of 2015 to the end of November 2019, € 3,45 billion was paid to users in the Republic of Croatia out of the total planned € 12,65 billion for the current programming period.³ With regard to progress towards the Europe 2020 targets, Croatia has achieved its national targets related to renewable energy (except transport), energy efficiency, employment rates, early school leaving and poverty and social exclusion. Croatia is also well on its way to achieve its goal of reducing greenhouse gas emissions. However, investment in transport, energy and environmental infrastructure, as well as in skills, research and innovation, is needed to boost the growth potential of the economy. Croatia's growth potential is influenced by the low level of capital investment in equipment and infrastructure. The quality of services and the connectivity of transport infrastructure are low, especially in the rail sector. Investments in infrastructure are also necessary to improve energy efficiency, water supply and facilitate the transition to a circular economy.⁴ Nevertheless, the approach to the preparation of the Ex-Ante assessment of the financial instrument for the next programming period implies the application of the principle of coherence to the specificities of the Republic of Croatia and the achievement of the objectives of the next programming period cohesion policy in the field of energy efficiency, use of renewable energy sources and reduction of greenhouse gas emissions.

¹ Eurostat, 2019. (http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=nama_10_gdp&lang=en)

² European Commission, Report for Croatia 2019 with a Detailed Review on the Prevention and Removal of Macroeconomic Imbalances, 2019.

³ European Commission, 2019. (<https://cohesiondata.ec.europa.eu/countries/HR>)

⁴ European Commission, Report for Croatia 2019 with a Detailed Review on the Prevention and Removal of Macroeconomic Imbalances, 2019.

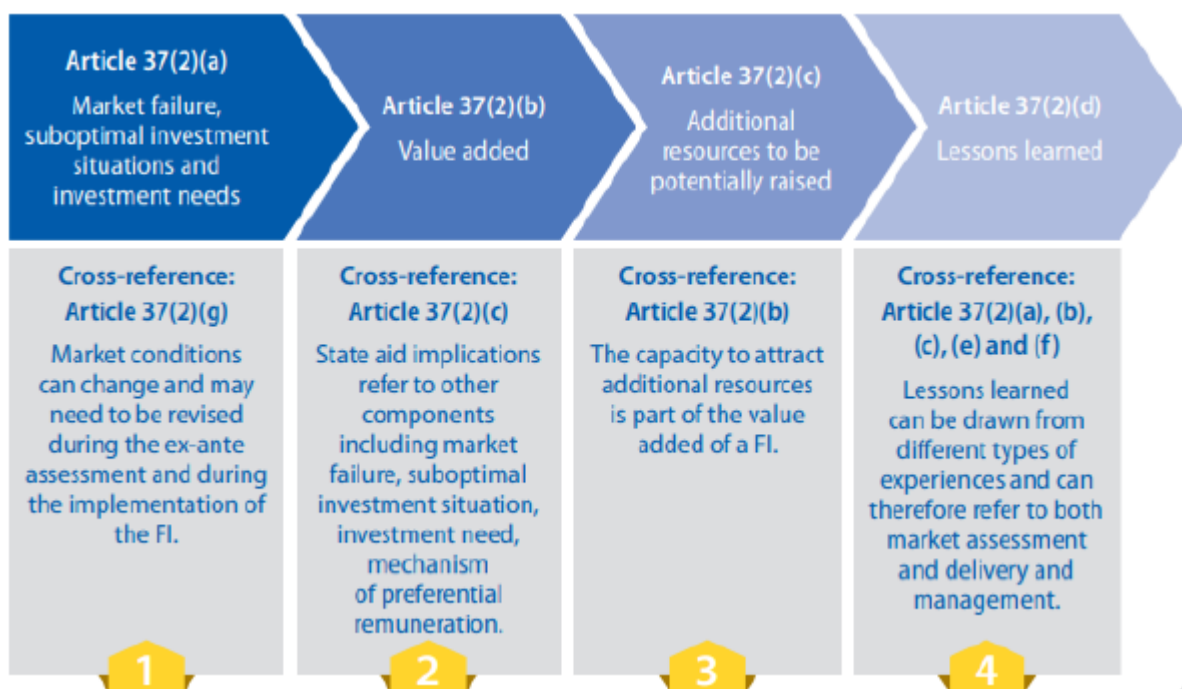
1.1. Methodology

The methodology of this Ex-Ante assessment is based on the guidance provided by the European Commission for the preparation of Ex-Ante assessment of financial instruments for Member States referred to the Article 37 (2) of the CPR - Ex-ante assessment. The Ex-Ante evaluation of an innovative financial instrument is divided into two basic chapters; Block 1 (Market Assessment) and Block 2 (Delivery and Management). The purposes of Block 1 are as follows:

- ✓ Identification of market failures and potentials from the perspective of an innovative financial instrument
- ✓ Assessment of the the added value of an innovative financial instrument, its consistency with other incentive models, and evaluation of its impact from the aspect of state aid regulation
- ✓ Identification of possible additional sources and models of financing (public and private), and the possibility of combining them with a financial instrument
- ✓ Presentation of at least two examples of good practice of using financial instruments in the scope of implementation of an innovative financial instrument⁵

Figure 1 shows the process for the development of the Block 1 with all its key features.

Figure 1: Development of the Block 1 (Market assessment)



Source: fi-compas; Ex-ante assessment for ESIF financial instruments - Quick reference guide, 2014.

⁵ Due to the lack of implemented investments in Energy Efficiency and Renewable Energy Sources through the financing model of a financial instrument exclusively for SMEs in the Istrian County, it is not possible to identify examples of good practice. Therefore, in a thematic and substantive, comprehensive approach, an example of good practice is elaborated and presented in chapter 5, identification of lessons learned, according to the classic Ex-Ante assessment approach used to predict the effects of defined measures and activities, taking into account available and future resources, potentials and market trend.

Relevant and verified data from secondary (Istrian County, IRENA-Istrian Regional Energy Agency, Croatian bureau of statistics (DZS), Croatian National Bank (HNB), Ministry of Regional Development and EU Funds (MRRFEU), Croatian Bank for Reconstruction and Development (HBOR), etc.) and tertiary sources (fi-compass, EIB) were used to create Block 1. For the purpose of development of the Block 2, a survey was conducted among key stakeholder groups (Regional and local authorities, SMEs and Banks).

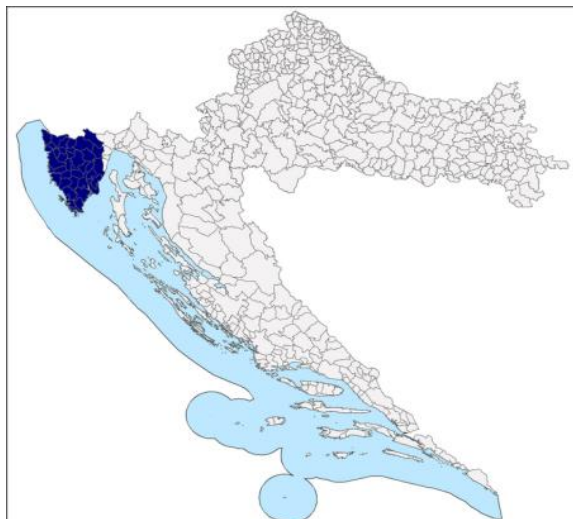
2. Analysis of market failures, suboptimal investment situations and investment needs

This chapter is based on a detailed analysis of all relevant factors of demand and current supply.

2.1. Istrian County - main information

Istarska županija obuhvaća veći dio Istre - najvećeg jadranskog poluotoka. Najzapadnija točka Republike Hrvatske je u Istarskoj županiji (Bašanija, rt Lako) na 45° sjeverne zemljopisne širine. Smještena u sjeveroistočnom dijelu Jadranskog mora, Istra je s tri strane okružena morem, a sjevernu granicu prema kopnu čini linija između Miljskog zaljeva (Muggia) u neposrednoj blizini Trsta i Prelučkog zaljeva, u neposrednoj blizini Rijeke. Tako povoljnim zemljopisnim položajem, gotovo u srcu Europe, na pola puta između ekvatora i sjevernog pola, Istra je oduvijek predstavljala most koji je povezivao srednjoeuropski kontinentalni prostor s mediteranskim.

Figure 2: Geographical position of the Istrian County



Source: www.istra-istria.hr/index.php?id=263

The Istrian peninsula covers an area of 3.476 square kilometres. The area is shared by three countries: Croatia, Slovenia and Italy. A very small part of Istria, just north of the Mile Peninsula, belongs to the Republic of Italy. The Slovenian coast with the bay of Koper and part of the bay of Piran to the river bay of the Dragonja River is part of the Republic of Slovenia. The largest part, or 3.130 square kilometers (90% of the area), belongs to the Republic of Croatia. Most of the Croatian part of the peninsula is located in



the Istrian County, covering an area of 2.820 km², which is 4,98% of the total area of the Republic of Croatia. The rest of the administrative-territorial part belongs to the Primorje-Gorski Kotar County.⁶ Administratively, the Istrian County is divided into 41 local self-government units, i.e. 10 cities and 31 municipalities. The Istrian County has a population of 208,055, which makes 4.85% of the total population of the Republic of Croatia.⁷ Administratively, the Istrian County is divided into 41 local self-government units, ie 10 cities and 31 municipalities. The Istrian County has a population of 208,055, which makes 4.85% of the total population of the Republic of Croatia. The coastal area is 445.1 km long (the indented coast is twice as long as the road). The administrative center of the Istrian County is the City of Pazin (8,638 inhabitants); and the economic, social and cultural center is the City of Pula (57,460 inhabitants).

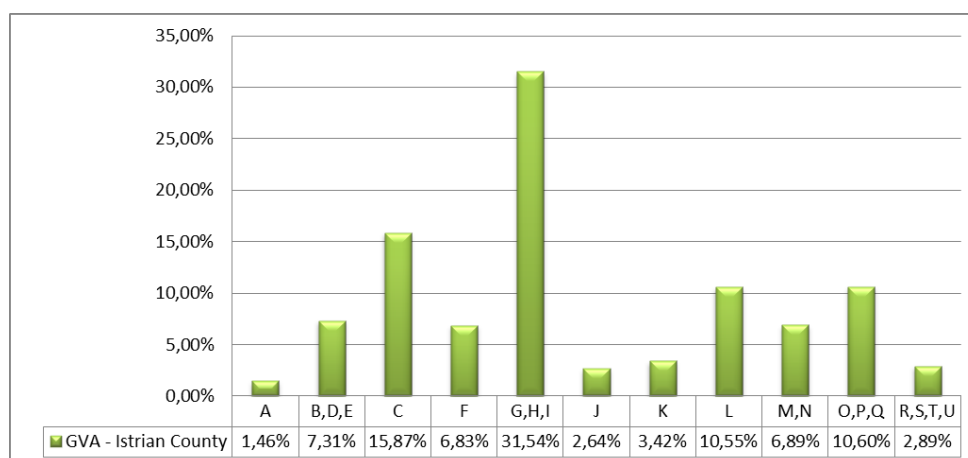
2.2. Identification of existing market failures

2.2.1. Demand side analysis

2.2.1.1. Analysis of the Istrian economy

According to the data from the Croatian bureau of statistics (DZS), the largest share in the Gross Value Added (GVA) structure of the Istrian County is made up of activities G, H, I (wholesale and retail trade, transport and storage, accommodation, preparation and serving of food) with 31,54%. This is followed by C (manufacturing) with 15,87%, O, P, Q (public administration and defense, education, health care and social work) with 10,60%, L (real estate business) with 10,55%. B, D, E (mining and quarrying, electricity, gas, steam and air conditioning supply, eater supply, sewage disposal, waste management and environmental remediation) with 7,31%, M, N (professional, scientific, technical, administrative) and support service activities) with 6,89% and F (construction) with 6,83%. Other activities generate a total of 10,40% of the GVA of the Istrian County.

Chart 1: Structure of the GVA of the Istrian County, divided by the type of activity for the year 2016



Source: DZS, 2019, Author

⁶ Available at: www.istra-istria.hr/index.php?id=263 (30.10.2019)

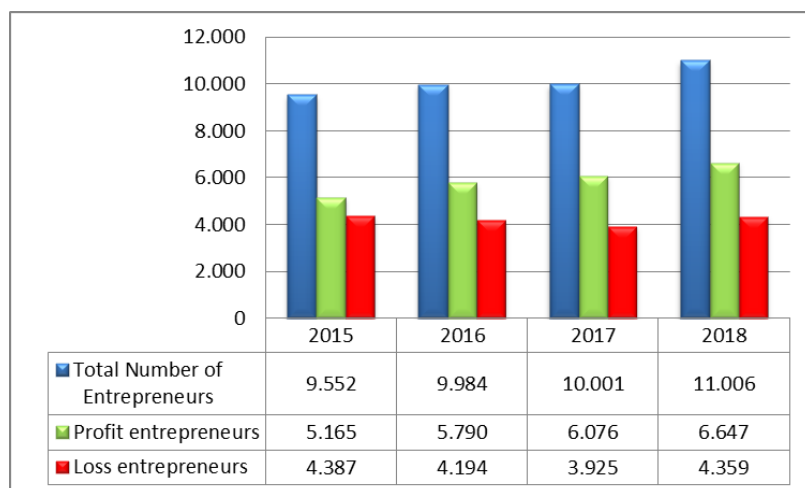
⁷ Population census of the Republic of Croatia on 2011, DZS, 2019.



Istrian entrepreneurs in 2018 (11.006 of them) were employing 53.948 workers (by number of working hours). In the period from 2015 to 2018, there was a continuous increase in the number of entrepreneurs in the Istrian County. In 2018, there were 11.006 entrepreneurs operating in the Istrian County, with an increase of 15,22% compared to 2015.

The number of entrepreneurs who have made an operating profit also had a positive trend over the observed period, so the share of profit-makers in 2018 was 60,39%, which is an increase of 6,32% compared to 2015 when 54,07% of entrepreneurs made an operating profit. In the observed period, a high proportion of non-profit-entrepreneurs was expressed, despite the strengthening of economic activities and other positive economic trends; almost 40% of entrepreneurs didn't made an operating profit.⁸

Chart 2: Number and structure of entrepreneurs (profits and losses) in the area of Istrian County from 2015 to 2018



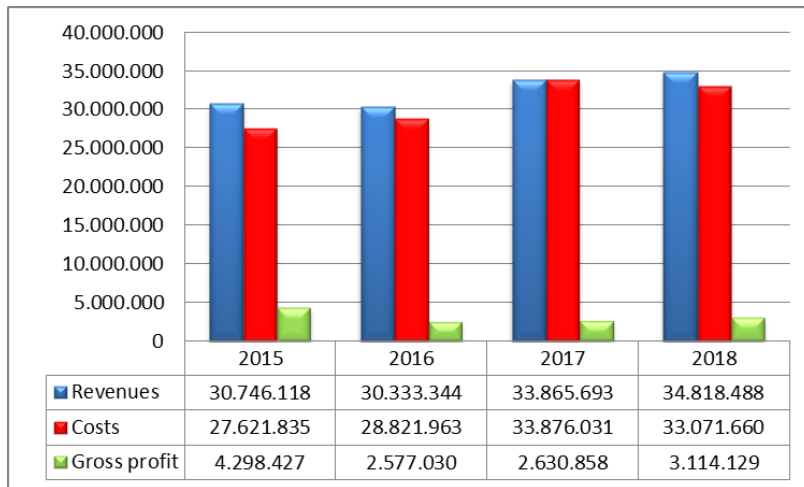
Source: Financial Agency (FINA), 2019, Author

In 2018, Istrian entrepreneurs generated HRK 34,8 billion in revenue, which is an increase of 13,24% compared to the reference year 2015 (Chart 3). Despite the increase in operating income, there was a significantly higher increase in expenses (19,73%) and a decrease in gross profit (-27,55%) over the same period.

⁸ It refers to entrepreneurs who have submitted annual financial statements. Crafts and local family farms are not included.



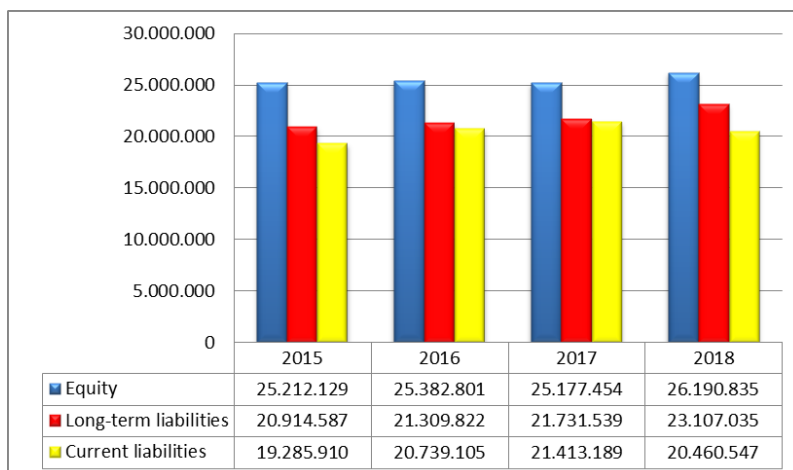
Chart 3: Revenues, costs and gross profit of Istrian entrepreneurs from 2015 to 2018



Source: Financial Agency (FINA), 2019, Author

In the balance sheets of Istrian entrepreneurs, during the observed period, there was a minimal increase in capital and reserves (+3,88%), with average amount of HRK 25,49 billion. Short-term liabilities of Istrian entrepreneurs averaged HRK 20,47 billion annually and long-term liabilities averaged HRK 21,76 billion. We emphasize that the trend of increase in long-term liabilities amounted to HRK 23,1 billion in 2018, which represents an increase of 10,48% compared to 2015. The movement of the key liability position during the reference period is shown in figure 4.

Chart 4: Key liabilities positions of Istrian entrepreneurs from 2015 to 2018

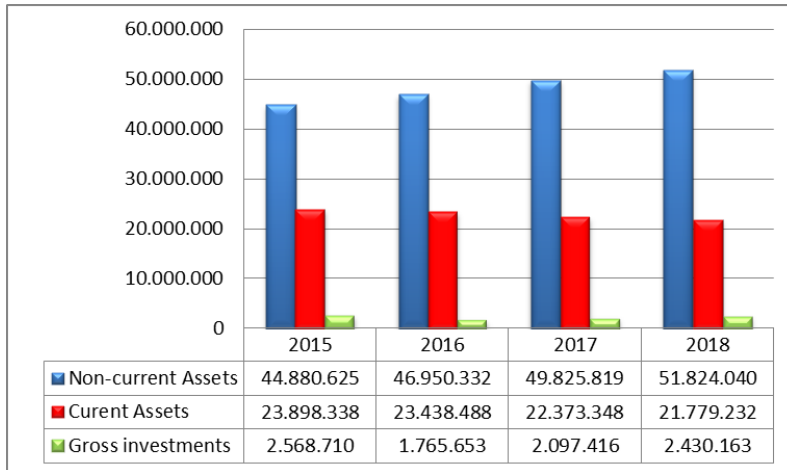


Source: Financial Agency (FINA), 2019, Author

In the observed period, there was a continuous increase in the value of non-current assets and a simultaneous decrease in the value of current assets of Istrian entrepreneurs (Chart 4). In 2018, the value of non-current assets was HRK 51,82 billion (+ 15,47% compared to 2015), and the value of current assets was HRK 21,78 billion (-8,87% compared to 2015). During the same period, Istrian entrepreneurs invested in total of HRK 8,86 billion, representing an annual average of HRK 2,21 billion in fixed assets. We

emphasize that the realized HRK 2,43 billion in 2018 represents an increase of 15,86% compared to 2017, but also a decrease of 5,39% compared to the record year 2015 (recorded HRK 2,57 billion of investments).

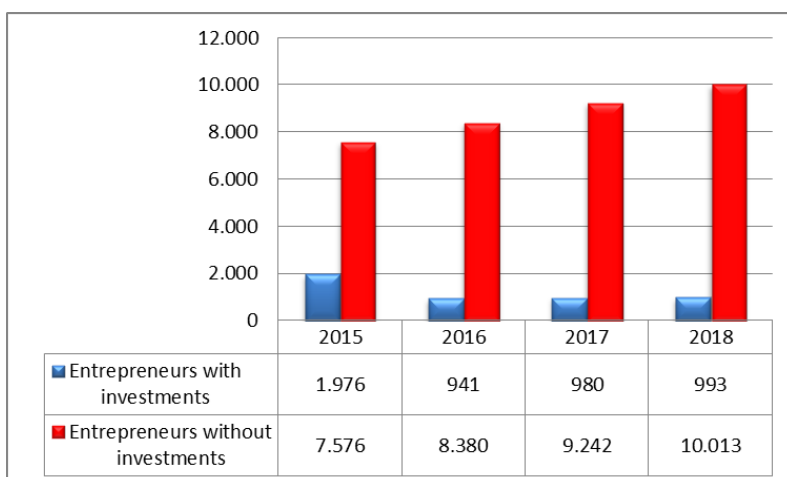
Chart 5: The assets and investments of Istrian entrepreneurs from 2015 to 2018



Source: Financial Agency (FINA), 2019, Author

The decrease in total investments compared to 2015 is correlated with the decrease in the number of entrepreneurs who have invested. Namely, if we look at the structure of entrepreneurs who invested during the observed period, it is evident that in 2015, 1.976 entrepreneurs, or 20,68% of Istrian entrepreneurs, invested (Chart 6). The following year, the number of investors decreased by 52,38% and only 941 entrepreneurs invested. The next two years show a minimal increase in the number of investors (+52 entrepreneurs). However, in terms of share in the total number of entrepreneurs from 2016 to 2018, there is a trend of decreasing share of investors in the total number of entrepreneurs (in 2018 only 9,02% of entrepreneurs invested).

Chart 6: Trends in the number of investors in the Istria County from 2015 to 2018

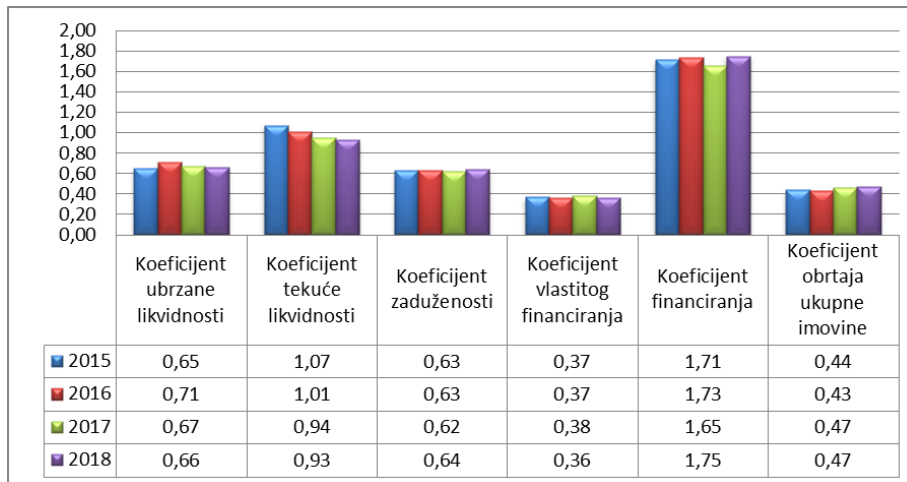


Source: Financial Agency (FINA), 2019, Author

Chart 7 shows selected indicators of business performance of entrepreneurs in the Istria County in the period from 2015 to 2018.



Chart 7: Selected indicators of business performance of Istrian entrepreneurs from 2015 to 2018



Source: Financial Agency (FINA), 2019, Author

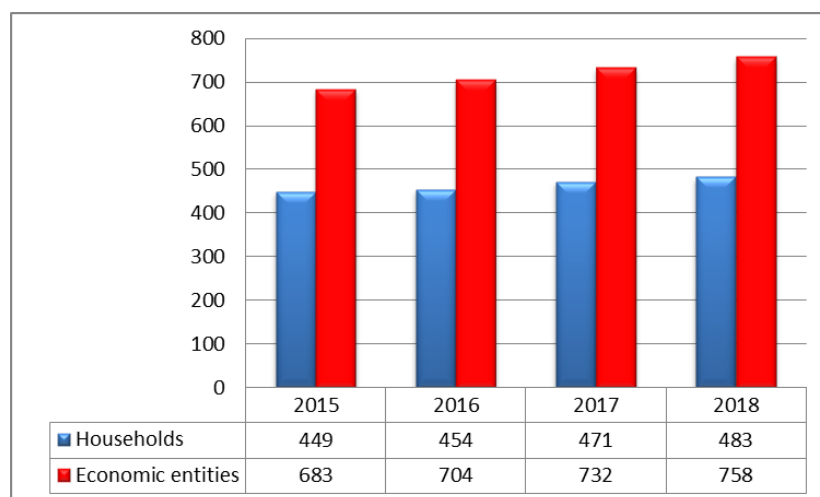
As shown in Chart 7, the value of the current ratio, which measures an entity's ability to settle its short-term liabilities over the observed period, continues to decline. The value of this coefficient should be 2 and not less than 1,5, therefore, taking into account the reported values of Istrian entrepreneurs whose average value in the observed period is 0,98 (with decreasing trend), it can be concluded that there is a significant risk of Istrian entrepreneurs inability to settle current liabilities. The value of the Quick Ratio indicates the ability of an entity to settle its liabilities without selling the stock and its value should not be less than 0,9. Considering that the value of this coefficient averages 0,67 (with a downward trend in the observed period), it can be concluded that Istrian entrepreneurs are at high risk of the inability to settle their current liabilities with highly liquid assets. The trend of indebtedness of Istrian entrepreneurs has been shown previously, with a trend of increasing long-term liabilities. Therefore, the high value of the debt ratio of Istrian entrepreneurs is not surprising. Namely, in the observed period, the debt ratio averages 0,63 (the highest value is recorded in 2018) and should not exceed 0,5. The above value indicates that entrepreneurs in Istria have acquired a high proportion of their assets through borrowing and that there is a significant financial risk with possible future borrowings. In line with developments in high values of the debt ratio, the low value of the own financing coefficient, whose value should not be less than 0,5, is also recorded during the observed period. An average value of the own financing ratio of 0,37 indicates that less than 50,0% of the assets were financed from their own sources. Considering the two above indicators, it is evident that financial risk is higher than average for Istrian entrepreneurs, which will affect the availability and price of capital in the future for new investments and/or working capital. The financing ratio shows the ratio of debt to equity. The acceptable value of this coefficient ranges from 1 to 2, depending on the measure to which the entity uses financial leverage. However, even values not exceeding the upper limit of 2 but for example 1,7 or 1,8 indicate that there is a risk that the entrepreneur will not be able to service credit obligations on a regular basis. Especially if the liquidity ratios are below acceptable values. The average value of the financing ratio of 1,71 for Istrian entrepreneurs, and considering the low values of the liquidity indicators, indicate that there is a significant risk of inability to finance credit obligations in the future. Additional analysis of indebtedness indicators (indebtedness factors) revealed that the liabilities of Istrian entrepreneurs are significantly higher than the cash flows and acceptable values of the indebtedness factors. Namely, the value of the indebtedness factor in the observed period was 6,29, which is significantly higher than the recommended value of 3,5. This is another indicator that confirms the aforementioned assessment of the expressed financial risk of Istrian entrepreneurs.

The coefficient of turnover of the total assets was selected to evaluate the activity/efficiency of the Istrian entrepreneurs. Its average value over the observed period was 0,45, which indicates that Istrian entrepreneurs create 0,45 units of money per unit of asset.

2.2.1.2. Energy demand

U razdoblju od 2015. do 2018. godine na području Istarske županije utrošeno je 4.734 GWh električne energije. Promatrano prema godinama u 2015. godini utrošeno je 1.132 GWh, naredne 2016. godine 1.158 GWh, 2017. godine 1.203 GWh, a 2018. godine 1.241 GWh električne energije. Tako je u 2018. godini zabilježen rast potrošnje električne energije od 9,63% u odnosu na 2015. godinu, pri čemu prosječni godišnji rast potrošnje električne energije iznosi 3,11%.

Chart 8: Electricity consumption in the Istrian County from 2015 to 2018 (in GWh)



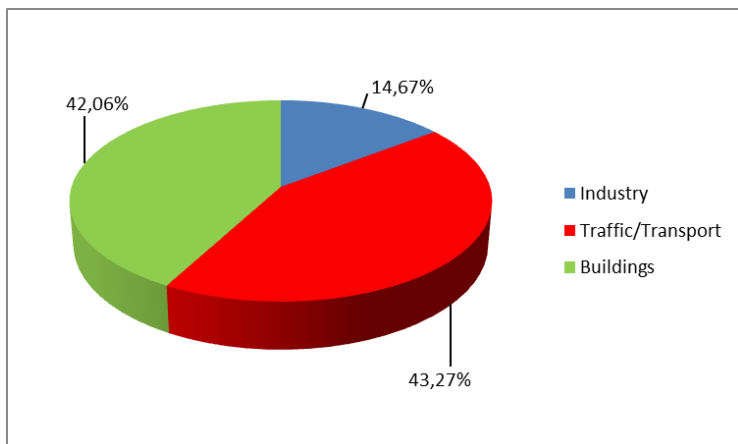
Source: HEP ODS, Elektroistra Pula, 2019, Author

According to the sources of consumption, from 2015 to 2018, the economy consumed 2.877 GWh of electricity (60,77% of total electricity consumed), while households consumed 1.857 GWh of electricity in the same period (39,23% of consumed electricity). The trend of increasing electricity consumption has been recorded both in the economy and in households. Electricity consumption in the observed period recorded faster growth in the economy than in households. The growth of electricity consumption in the economy averages 3,53% annually and in households 2,47% annually.

Since HEP-Distribution System Operator d.o.o.(HEP ODS) doesn't have data on electricity consumption by economic activities available, the data from the Energy Efficiency Action Plan of the Istrian County 2017-2019 will be used for further analysis.⁹ The Istrian County consumes on average about 13,63 PJ of energy per year, or 3.787 GWh of energy, which is 5,51% of direct energy consumption in the Republic of Croatia in 2012. The total energy consumption in Istria is higher in reality due to the consumed coal in thermal power plant (TPP) Plomin and by the producers of building materials Holcim Koromačno, Calucem Pula and the lime factory in Raša, which consumes about 29 PJ of coal per year on average. Chart 9 shows the shares of direct energy consumption by sectors in the Istrian County.

⁹ The consumption methodology and the document are available at the following link: https://www.istra-istria.hr/fileadmin/dokumenti/novosti/sjednice_skupstine_2013/38/38-25-En_ucinkovitost_IZ_2017_2019.pdf

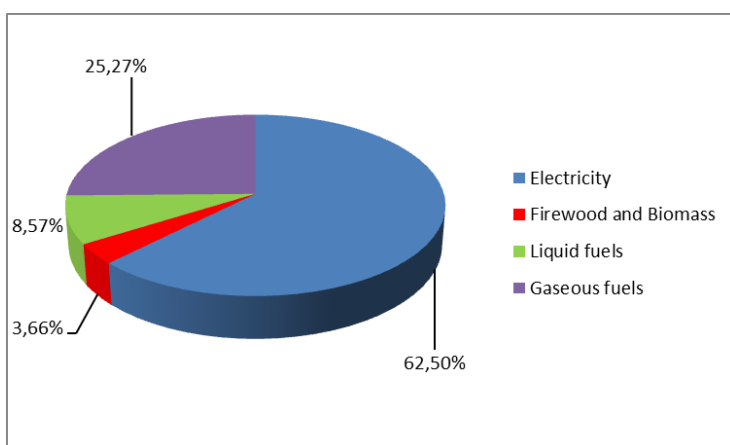
Chart 9: Direct energy consumption in Istrian County



Source: Energy Efficiency Action Plan of the Istrian County 2017-2019, Author

The highest energy consumption of 1.639 GWh is generated by traffic (43,27%), followed by the construction sector, which consumes 1.593 GWh. The industry has the lowest share of 14,67%, or 556 GWh. Chart 10 shows the share of energy consumption in the industrial sector by source.

Chart 10: Shares of energy consumption in industry by sources in the Istrian County

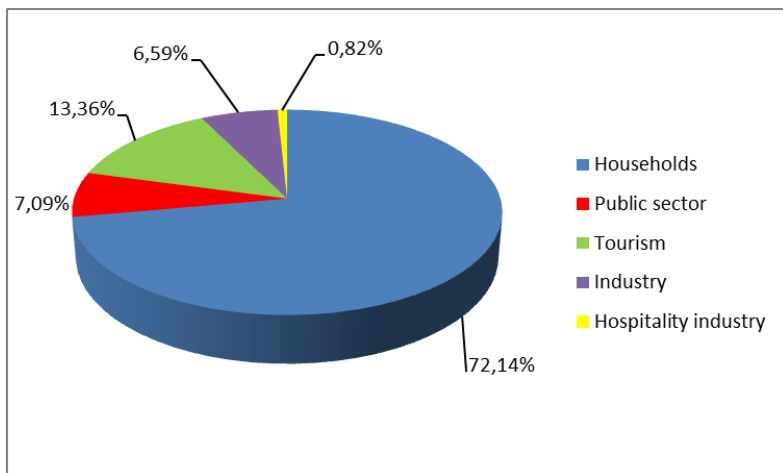


Source: Energy Efficiency Action Plan of the Istrian County 2017-2019, Author

Electricity consumption accounts for the largest share of industrial energy consumption with 62,50%, followed by gaseous fuels with 25,27%, liquid fuels with 8,57%, and firewood and biomass with 3,66%.

The total consumption of the building sector is 1.593 GWh, with the most consumed by subsectors in households (72,14%). The tourism sector is second in consumption with a share of 13,36% and its consumption is 212,85 GWh, followed by the public sector with consumption of 7,09% and industry and SMEs with consumption of 6,59%. The lowest energy consumption is recorded in the hospitality and commercial sectors and does not exceed 1% (Chart 11).

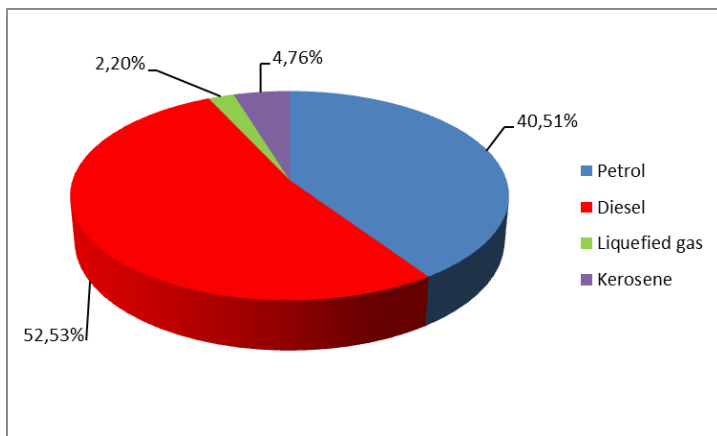
Chart 11: Energy consumption by subsectors in the building sector in the Istrian County



Source: Energy Efficiency Action Plan of the Istrian County 2017-2019, Author

In the transport sector, 5,9 PJ or 1.639 GWh is consumed annually. The sector is dominated by inland road transport, where about 95% of energy is consumed, and only 5% is consumed in the remaining modes of transport (air, sea and rail). Consumption in the transport sector by energy sources is shown in Chart 12.

Chart 12: Consumption in the transport sector by energy sources in the Istrian County



Source: Energy Efficiency Action Plan of the Istrian County 2017-2019, Author

2.2.1.3. Energy Efficiency Plans

In terms of content, Action and Annual energy efficiency plans of counties, cities and municipalities are a relevant indicator of energy demand in the Istrian County. Most of the measures defined in the Energy Efficiency Action and Annual Plans relate to:

- ✓ replacement of the joinery,
- ✓ buildings insulation,
- ✓ new installations and/or replacement of the heating/cooling system and preparation of hot water,



- ✓ replacement, improvement or installation of new lighting systems,
- ✓ transport sector (public),
- ✓ education of citizens, etc.

The implementation of these measures is carried out through the regular budget allocations of Local authorities, with a combination of grants from the Community and relevant institutions.

In 2016, the Istrian County spent HRK 11,37 million to implement energy efficiency measures. In 2017, HRK 6,55 million was planned for the implementation of energy efficiency measures, and HRK 9,39 million was spent or 43,46% more funds. In 2018, the Istrian County planned to spend HRK 8,92 million in energy efficiency measures, and by the end of the year HRK 5,76 million was spent. For 2019, the Istrian County planned to spend HRK 50,45 million, and by the end of November 2019, HRK 7,29 million was spent, or only 14,45% of the planned funds for energy efficiency measures. Table 1 shows the expected and achieved results of the annual energy efficiency plans in the Istrian County in the period 2016-2019.

Table 1: Expected and achieved results of annual energy efficiency plans in the Istrian County in the period 2016-2019

Year/Position	Planned	Achieved	Index(Achieved/Planned)
2016.			
Number of projects/measures implemented	/	48	/
Emission reduction CO ₂ /t	/	289,17	/
Energy savings (KWh)	/	589.235,11	/
2017.			
Number of projects/measures implemented	17	44	2,588235
Emission reduction CO ₂ /t	82,98	149,86	1,805977
Energy savings (KWh)	305.309,30	561.718,39	1,839834
2018.			
Number of projects/measures implemented	32	69	2,15625
Emission reduction CO ₂ /t	177,6	75,20	0,423423
Energy savings (KWh)	655.802,87	226.209,00	0,344934
2019.			
Number of projects/measures implemented	80	33	0,4125
Emission reduction CO ₂ /t	3.058,30	370,61	0,121182
Energy savings (KWh)	133.238	1.383.940,07	10,38698

Source: Annual Energy Efficiency plans of the Istrian County 2016.-2019.; Author



Table 1 shows that as from 2016, the Istrian County has implemented 194 energy efficiency projects/ measures, which resulted in energy savings of 2.761.102.57 KWh with an reduction in CO₂ emissions of 884,84 t. Considering that HRK 34.338.495,52 was spent for the mentioned effects during the observed period, the average cost of reducing 1 t of CO₂ in the territory of the Istrian County is HRK 38.807,58, and the cost of reducing 1 KWh of energy is an average of HRK 12,43. In addition, we emphasize the significant mismatch between the planned annual measures, the amount of implementation costs, energy savings and CO₂ emissions, with the realized values. Better planning and forecasting can certainly contribute to a more efficient implementation of energy efficiency measures and the achievement of the desired energy, climate and environmental goals.

According to the current Action Plans for Sustainable Development of Cities and Municipalities in the Istrian County, significant investments are planned for the implementation of energy efficiency measures, i.e. energy savings, climate and environmental goals, by the end of 2020. Table 2 shows the expected values of investments and savings mentioned.¹⁰

Table 2: Planned investments, expected energy savings, and climate and environmental impacts by 2020 according to measures from current local SEAPs

Position	Period 2011/2013-2020
Energy Efficiency Investments (HRK)	466.427.489,37
Emission reduction CO ₂ /t	182.645,33
Energy savings (KWh)	461.870,41

Source: Local SEAPs, IRENA d.o.o., Author

According to the table 2, in the period 2011/2013 till 2020, only in the area of 11 cities and municipalities in the Istrian County, energy efficiency investments were planned in the amount of HRK 466,43 million, which will result in energy savings of 461.870,41 MWh and reducing CO₂ emissions by 182.645,33 tonnes.

Data for the remaining 30 local government units are not available, but it is estimated that they have planned at least HRK 500 million to increase energy efficiency by 2020. Therefore, the Istrian Local authorities plan to spend almost HRK 1 billion in energy efficiency measures in the mentioned period.

We point out that no data are currently available on the results of the implementation of the energy efficiency measure of the monitored local authorities from the applicable SEAPs. Therefore, for the purpose of making this Ex-Ante assessment, a thematic workshop was held on 27.11.2019. in Pula, attended by representatives of the Istrian County and several Istrian cities and municipalities. Representatives from counties, cities and municipalities stated that the implementation of measures under the current SEAPs were not implemented due to lack of funds, indicating that energy, climate and environmental goals related to energy efficiency increase will not be achieved by the end of 2020.

¹⁰ The values relate to the cities of Pula, Buzet, Buje, Rovinj, Umag, Labin, Novigrad and Pazin, and the municipalities of Barban, Groznanj and Oprtalj.



2.2.2. Supply-side analysis

2.2.2.1. Financial instruments in the programming period 2014.-2020.

In the Republic of Croatia, currently, 10 financial instruments are in operation, within the OP "Competitiveness and Cohesion 2014-2020"(OPKK). The Financial Instruments are implemented by:

- ✓ Croatian Bank for Reconstruction and Development (HBOR),
- ✓ Croatian Agency for SMEs, Innovations and Investments (HAMAG-BICRO),
- ✓ European investment fund (EIF).

HBOR currently implements the following four financial instruments:

- ✓ ESIF Loans for growth and development under Priority Axis 3 "Business Competitiveness" of OPKK - larger investment loans with low interest rate and no regular charges charged for approval and use of loans.
- ✓ ESIF loans for energy efficiency in public buildings under Priority Axis 4 "Promoting Energy Efficiency and Renewable Energy" by OPKK. These ESIF loans are intended to finance energy efficiency investments in public sector buildings for the purpose of achieving energy savings of at least 50% over annual heating/cooling energy consumption.
- ✓ ESIF loans for public lighting under Priority Axis 4 "Promoting Energy Efficiency and Renewable Energy" by OPKK. ESIF loans for public lighting have been formed to support the achievement of energy savings in public lighting systems that will result in a minimum 50% reduction in electricity consumption.
- ✓ ESIF loans for energy efficiency for entrepreneurs under Priority Axis 4 "Promotion of Energy Efficiency and Renewable Energy" by OPKK. The objective of this financial instrument is to reduce the consumption of supplied energy by at least 20% by increasing energy efficiency in manufacturing industries and in the service sector (tourism and trade), allowing equal amounts of results by using less input energy and reducing the share of conventional (fossil) fuels in total consumption energy by introducing renewable energy sources.

HAMAG-BICRO currently implements the following five financial instruments under Priority Axis 3 „Business Competitiveness“OPKK:

- ✓ ESIF Limited portfolio guarantee,
- ✓ ESIF Individual guarantee without interest rate subsidy,
- ✓ ESIF Individual guarantee with interest rate subsidy,
- ✓ ESIF Micro loans and
- ✓ ESIF Small loans.

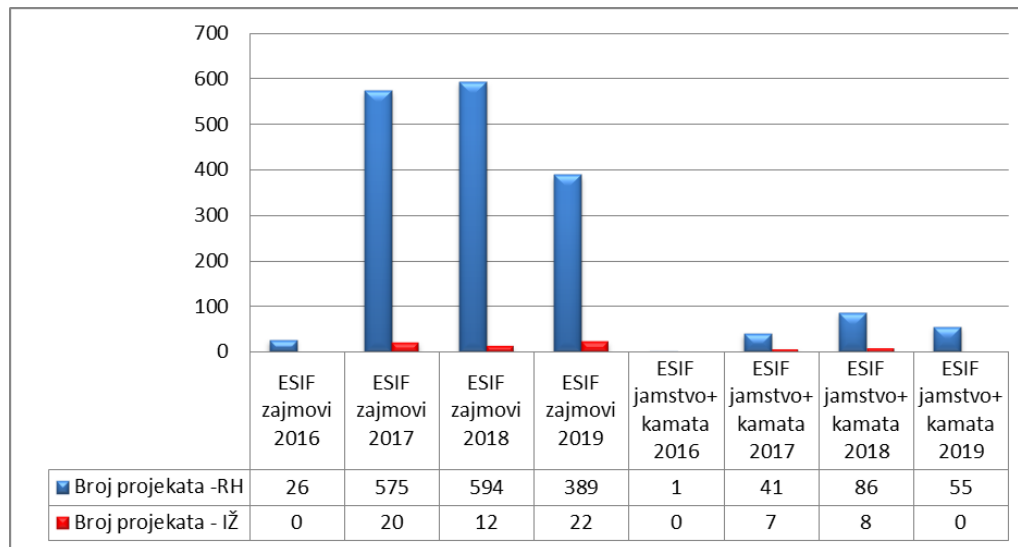
EIF currently implements ESIF Risk capital fund - this financial instrument is focused on the early stages of investments for innovative entrepreneurs in technology sectors with high growth potential, especially in those sectors identified in the Smart Specialization Strategy of the Republic of Croatia.¹¹

¹¹ <https://strukturnifondovi.hr/financijski-instrumenti/>



The biggest demand of entrepreneurs for financial instruments is recorded for the instruments implemented by HAMAG BICRO. Chart 13 shows the movement of demand for financial instruments intended for entrepreneurs in the period 2016-2020.

Chart 13: Demand for financial instruments targeted at entrepreneurs in the period 2016-2020



Source: HAMAG-BICRO, 2019, Author

Chart 13 shows that the highest demand is recorded in ESIF loans for the growth and development of entrepreneurs, in 2017 and 2018. At the end of 2019, there is a 34,51% decrease in the demand of entrepreneurs for this financial instrument compared to the previous year. A similar downward trend in demand is observed with interest-subsidized ESIF guarantees (-36,05% compared to 2018). If we look at the interest of Istrian entrepreneurs in financial instruments, it is evident that 69 entrepreneurs used these financial instruments during the observed period, which represents only 3,90% of the total number of users in Croatia. Compared to the total number of Istrian entrepreneurs (on average 10.135 entrepreneurs), only 0,68% of them used the mentioned financial instruments. Table 3 shows the number of users of financial instruments in the Istrian County and the value of loans/guarantees.

Table 3: Number of users of financial instruments in the Istrian County and the value of loans/guarantees in the period 2016-2019

Position	ESIF loans 2016	ESIF loans 2017	ESIF loans 2018	ESIF loans 2019	ESIF guarantee+ Interest rate 2016	ESIF guarantee+ Interest rate 2017	ESIF guarantee+ Interest rate 2018	ESIF guarantee+ Interest rate 2019
Number of projects- Istrian County	0	20	12	22	0	7	8	0
Total amount	0	5.284.842	3.281.600	5.189.806	0	38.952.074	27.938.239	0

Source: HAMAG-BICRO, 2019, Author

Table 3 shows that Istrian entrepreneurs were credited with a total of HRK 13.756.247,07, which represents an average of HRK 254.745,32 per entrepreneur. These are loans of relatively small value,



which were mainly used for the procurement of equipment and devices for micro and small enterprises (various activities; service, manufacturing, manufacturing). The financial instrument ESIF guarantee with interest rate subsidy was used by 15 Istrian entrepreneurs with a total value of HRK 66.890.313,60, representing an average amount of HRK 4.459.354,24 per company. This financial instrument has been used almost entirely for tourism investments.

It can be concluded that the interest of Istrian entrepreneurs in financial instruments, which are otherwise most wanted in Croatia, is extremely low (deviates from the county average by 0,86%).

2.2.2.2. Financial instruments for energy efficiency and use of renewable energy sources

In the current programming period, the Republic of Croatia has not envisaged generous financing possibilities for energy efficiency projects with financial instruments, except for 3 measures/financial instruments implemented by HBOR:

1. „ESIF loans for energy efficiency“
2. „Environmental protection program“
3. „ESIF loans for public lightening“

“ESIF loans for energy efficiency” are funded by ESI funds through Operational Program "Competitiveness and Cohesion 2014-2020", Priority Axis 4 "Promoting Energy Efficiency and Renewable Energy Sources" - Specific Objective 4c1 "Reducing Energy Consumption" in public sector buildings". The objective of this financial instrument is to finance investments in energy efficiency and to encourage the use of renewable energy in public sector buildings for the purpose of achieving energy savings. This financial instrument supports energy efficiency measures that will result in a reduction in heating/cooling energy consumption of at least 50% annually. The financial instrument is intended exclusively for entities that have previously received a financing decision following the call for proposals "Energy Recovery and Use of Renewable Energy in Public Sector Buildings". Eligible beneficiaries of this financial instrument are:

- ✓ local and regional authorities,
- ✓ public institutions or institutions engaged in social activities,
- ✓ state bodies, ministries, central state offices, state administrative organizations and state administration offices in counties,
- ✓ religious communities engaged in social activities,
- ✓ associations engaged in social activities and have public authority regulated by special law.

The general conditions of this financial instrument are:

- ✓ Loan amount - the lowest is HRK 100.000,00 and the highest is HRK 60.000.000,00
- ✓ Disbursement - up to 36 months
- ✓ Grace period 12 months
- ✓ Repayment term - up to 14 years, including loan repayment period is repaid in monthly, quarterly or semi-annual rate
- ✓ Interest rate - It is determined by the degree of development of the area where the investment is carried out (from 0,1% to 0,5%)
- ✓ no usual extra credit costs (different fees)



From 1.1.2014. till 30.9.2019. in the Istrian County, only one loan was approved in the amount of HRK 2,8 million.

„Environmental protection program “is a financial instrument intended for lending for environmental, energy efficiency and renewable energy projects, and the following projects may be funded:

- ✓ landfill remediation, encouraging the prevention and reduction of waste, waste management, waste treatment and use of valuable waste,
- ✓ promoting cleaner production by avoiding and reducing waste and emissions in the production process,
- ✓ protection and conservation of biological and landscape diversity,
- ✓ implementation of national energy programs,
- ✓ encouraging the use of renewable energy sources (sun, biomass, etc.),
- ✓ encouraging sustainable construction,
- ✓ promotion of cleaner transport,
- ✓ and other projects that protect the environment, achieve energy efficiency and introduce renewable energy.

The program is implemented by HBOR directly or through commercial banks, and the following users are eligible:

- ✓ local and regional authorities,
- ✓ utility companies,
- ✓ companies,
- ✓ crafts,
- ✓ family farms,
- ✓ other legal entities.

The general conditions of this financial instrument are:

- ✓ Loan amount - the lowest is HRK 100.000,00 and the highest is not limited
- ✓ Disbursement - up to 12 months
- ✓ Grace period up to 36 months,
- ✓ Repayment term - up to 15 years, including grace period, loan repayments are repaid in monthly, quarterly or semi-annual rates,
- ✓ Interest rate - 4,0%,
- ✓ Credit processing and booking fees are payable.

From 1.1.2014. till 30.9.2019. in the Istrian County, only two loans were approved in the amount of HRK 9,5 million.

„ESIF loans for public lightening“ are dedicated only for local public authorities for the following purposes:

- ✓ Disassembly and disposal of lamps and changed equipment;
- ✓ installation of lighting and control equipment;



- ✓ relocation from the power station and/or new installation of control cabinets lighting control with measurement and protection equipment;
- ✓ installation of new electricity billing and control meters;
- ✓ updating of lighting sites, geometry correction and/or cable infrastructure of existing public lighting installations;
- ✓ preparation of studies and setup of temporary traffic regulation for the purpose of performing lighting measurements and implementation of energy renovation activities for public lighting;
- ✓ expert supervision, etc.

This Financial instrument is directly distributed by HBOR. The general conditions of this financial instrument are:

- ✓ Loan amount - the lowest is HRK 500.000,00 and the highest is HRK 15.000.000,00
- ✓ Disbursement - up to 12 months
- ✓ Grace period 6 months
- ✓ Repayment term - up to 10 years, including loan repayment period is repaid in monthly, quarterly or semi-annual rate
- ✓ Interest rate - It is determined by the degree of development of the area where the investment is carried out (from 0,1% to 0,5%)
- ✓ no usual extra credit costs (different fees)

From 1.1.2014. till 30.9.2019. in the Istrian County, only three loans were approved in the amount of HRK 8,8 million.

As with the HAMAG-BICRO financial instruments, there is a markedly low interest of users in the Istrian County for financial instruments.

2.2.2.3. Grants

Grants from ESI funds

In accordance with the Operational Programme for the current programming period, for the promotion of energy efficiency and renewable energy is primarily intended thematic objective 04 - Supporting the transition to the economy with low CO2 emissions in all sectors (4b - Promotion of energy efficiency and use of renewable sources of energy in enterprises (for 4b1 and 4b2)); 4c - Supporting energy efficiency, smart energy management and use of RES in public infrastructure, including public buildings and in the housing sector (for 4c1 and 4c4)), under the Competitiveness and Cohesion Operational Program 2014-2020. With the stated thematic objective of the same OP energy efficiency measures and/or the use of renewable energy sources can be financed through the following thematic objectives:

- ✓ 01 - Strengthening research, technological development and innovation (1b - Promotion of business investments in innovation and research and developing links and synergies between enterprises, IR centres and higher education, in particular product and service development, technological integration, social innovation, eco-innovation, cultural and creative industries, public service, incentive requirements, networking, clusters and open innovation through smart



specialization, technological strengthening and applied research, pilot lines, pre-production validation, advanced manufacturing capabilities and initial production, especially in key technologies that drive development and innovation and dissemination of general-purpose technologies; 1b1 - New products and services as a result of research, development and innovation (R&D) activities; 1b2 - Strengthening the business sector's R&D (R&D) activities through the creation of a favourable innovation environment)

- ✓ 02 - Use of information and communication technology (2a - Expanding broadband availability and building high-speed networks and supporting the adoption of new technologies and networks for the digital economy; 2a1 - Developing next-generation broadband infrastructure in areas without next-generation broadband infrastructure and without sufficient commercial interest, to maximize social and economic well-being)
- ✓ 03 - Business competitiveness (3a - Promoting entrepreneurship, in particular by facilitating the economic exploitation of new ideas and encouraging the creation of new businesses, including through business incubators (3a1 Better access to finance for SMEs); 3d - Supporting the capacity of SMEs to grow at regional, national and international market and involvement in innovation processes (3d2 Improved Innovation of SMEs)
- ✓ 07 - Promoting sustainable transport and removing bottlenecks in key network infrastructure (7ii - Development and upgrading of environmentally friendly transport systems and low CO2 transport systems, including inland waterways and maritime transport, ports, multimodal links and airport infrastructure, to promote sustainable regional and local mobility)

From 1.1.2014. till 30.9.2019. a total of 47 Calls for proposals for the stated specific objectives were published. Table 4 shows the number of Calls published, the number of applications, the number of projects approved and the total eligible expenditure.

Table 4: Number of Calls published, number of applications, number of projects approved and total eligible expenditure in the current programming period by specific objectives selected

Specific objective	Number of Calls published	Number of applications	Number of signed contracts in force	Total eligible expenditure of signed awarded contracts in force
1b1	1	155	86	1.181.848.935,74
1b2	3	33	2	133.788.836,00
3a1	3	7	7	3.309.878.835,00
3d2	5	586	189	275.976.012,24
4b1	2	130	90	833.275.328,24
4b2	2	78	78	540.968.738,90
4c1	5	1.415	866	3.050.830.771,63
4c4	1	1	1	152.000.000,00
7ii1	3	21	13	455.615.595,18
7ii2	21	51	37	1.074.966.843,02



7ii3	1	1	1	1.165.671.327,00
TOTAL	47	2.478	1.370	12.174.821.222,95

Source: MRRFEU, 2019, Author

Of the total of 2.478 project applications that can be linked, to a greater or lesser extent, to increased energy efficiency and the use of renewable energy sources, 1.370 have been signed. The total value of eligible costs of approved projects was HRK 12,17 billion. We emphasize that the Call for Proposals for entrepreneurs was of great interest and as a rule the Calls were closed before the prescribed closing date of the Call. The reasons for early suspension are mainly contained in a large number of applications and values of applications that significantly exceed the amount of allocated funds. Extreme interest also prevailed in energy efficiency measures intended for the public sector and natural persons (as a rule for energy renovation of buildings in the public sector and buildings).

Grants from other sources

In the current programming period, almost all local authorities in the Istrian County create annual incentive programs for entrepreneurs. As a rule, these are smaller non-refundable financial amounts from HRK 10.000,00 till HRK 30.000,00 or co-financing of interest rates on credit obligations. The measures are aimed at the growth and development of entrepreneurs, and primarily start-ups. During the market research or communication with local authorities, no programs for promoting energy efficiency and the use of renewable energy sources intended for Istrian entrepreneurs were recorded. In the period from 2013 to 2015, a significant number of local authorities in the Istrian County implemented, independently or in cooperation with the Environmental Protection and Energy Efficiency Fund (EPEEF), measures to promote energy efficiency and/or use of renewable energy sources. The measures were intended exclusively for households or single-family homes, and the following activities were funded:

- ✓ facade renovation and installation of thermal insulation,
- ✓ roof restoration,
- ✓ joinery replacement,
- ✓ installation of more energy efficient heating systems (use of biomass, gas),
- ✓ use of solar energy etc.

Table 5 shows the number of applications submitted, the number of approved projects and the value of energy efficiency and renewable energy projects in selected local authorities.

Table 5: Number of applications submitted, number of approved projects and value of energy efficiency and renewable energy projects in selected Local Authorities

Local authority	Number of applications submitted	Number of approved projects	Value
Buje	14	14	702.641,57



Novigrad	222	148	3.357.937,17
Buzet	53	36	2.717.386,15
Poreč	62	28	1.340.389,61
Labin	23	17	1.405.294,72
Umag	65	65	3.263.449,76
Rovinj	21	21	1.000.000,00
Vodnjan	24	24	1.000.000,00
Fažana	23	23	1.085.000,00
Brtonigla	14	7	500.000,00
Medulin	19	14	812.114,64
Grožnjan	23	18	880.031,93
Svetvinčenat	18	18	700.000,00
Tinjan	19	19	500.000,00
TOTAL	600	452	19.264.245,55

Source: IRENA d.o.o., 2019, Author

As shown in Table 5, in 14 municipalities of Istrian County in the period from 2013 to 2015, 452 energy efficiency and/or renewable energy projects were implemented through grants. The total value of the implemented projects was HRK 19,26 million, which is an average of HRK 1.376.017,54 per unit of local authority. Assuming that 80% of cities and municipalities in the Istrian County implemented the above measures, 1.059 energy efficiency and/or renewable energy projects worth HRK 45,12 million were implemented in the Istrian County in the observed period (for households).

2.2.2.4. ESCO model

The ESCO model is primarily in the function of developing, implementing and financing projects with the aim of improving energy efficiency and reducing energy costs. There is only one ESCO company operating in the Republic of Croatia; HEP ESCO Ltd. HEP ESCO supports projects:

- ✓ energy efficiency of public lighting,
- ✓ energy efficiency and use of renewable energy sources in industry,
- ✓ energy efficiency and use of renewable energy sources in the building sector
- ✓ energy efficiency and use of renewable energy sources in energy supply systems.



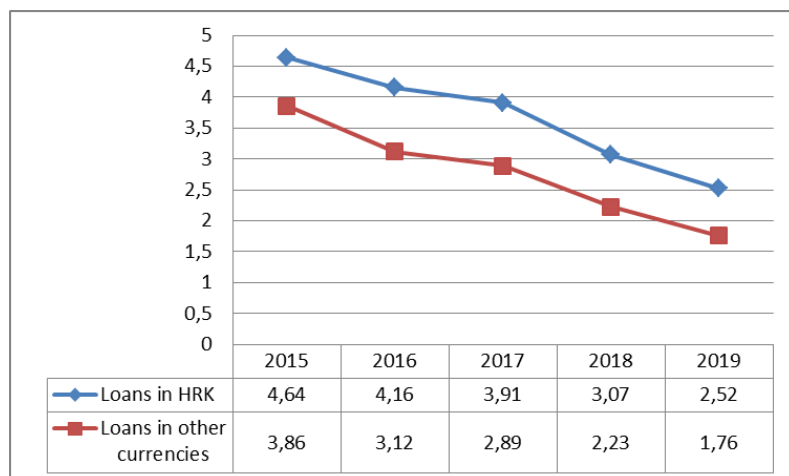
During the market analysis, it was identified that projects in Novigrad, Rovinj and Pula (public lighting) and several entrepreneurs were financed through ESCO models in the Istrian County. According to HEP ESCO data, the total value of projects in the Istrian County was HRK 8,5 million (excluding VAT).¹²

In terms of the use of the ESCO model, the County of Istria does not deviate from the national average as this model is rarely used in financing energy efficiency and RES projects.

2.2.2.5. Characteristics of the financial market

There are 25 credit institutions operating in the Republic of Croatia. According to the Croatian National Bank (HNB) report, credit institutions are covered by quality instruments and resistant to possible market shocks.¹³ The economic recovery, accompanied by continued GDP growth, as a result of boosting export, increasing investment and personal spending, has determined the stabilization of the financial market and the reduction of credit risks for the Republic of Croatia. Interest rates on corporate loans have certainly been reduced by historically low interest rates in the global financial market. Chart 14 shows the movement of interest rates for non-financial corporations in the period 2015-2019.

Chart 14: Interest rates for non-financial corporations in the Republic of Croatia from 2015 to 2019 (* excluding foreign currency clause)



Source: HNB, 2019, Author

Chart 14 shows that the credit market recorded a continuous decline in interest rates on kuna and foreign currency loans. Thus, in 2019, interest rates on kuna loans to the Croatian economy fell to the historically lowest level of 2,52%. Interest rates on foreign currency loans to the Croatian economy are even lower, with an average of 1,76% in 2019, which is also historically the lowest value of interest rates on foreign currency loans since Croatian independence.

The low interest rate in the credit market is one of the reasons for the low interest of Istrian entrepreneurs for the use of financial instruments, especially for those who have high quality collateral and high creditworthiness.

¹² Source: Interview with employees of HEP ESCO d.o.o.

¹³ <https://www.hnb.hr/analize-i-publikacije>



2.3. Establishing the evidence of market failure and suboptimal investment situations

2.3.1. Demand-side market failures

The main factors of demand for financial instruments intended to increase energy efficiency and use of RES by entrepreneurs are the needs of the entrepreneurs, their investment and financial capacity, and the level of achieved competitiveness. The presented analysis of the economy of the Istrian County shows that there is an increase in the number of entrepreneurs, but at the same time, the share of entrepreneurs operating with loss is not reducing. In 2018, 39,60% of entrepreneurs were operating at a loss, which eliminates them as potential users of financial instruments right away and is instantly reducing the demand market for financial instruments. Considering that on average 10% of entrepreneurs, or about 1.000 entrepreneurs, have been investing on average over the last three years, they would represent the upper limit of demand.

The analysis of the performance indicators of Istrian entrepreneurs indicates the relatively poor liquidity, the trend of increasing long-term liabilities, the unfavourable ratio of the share of financing sources, the unfavourable debt-equity ratio, and the extremely long maturity of the assumed long-term liabilities. All of the above indicates that Istrian entrepreneurs are medium to high risk in terms of the use of financial instruments and that they have low credit potential.

The energy needs of the Istrian economy are constantly increasing. Consumption of the most used energy product, electricity, recorded a continuous growth, with no significant reduction in energy losses from other sources. Energy efficiency plans are made without clear consistency with other coherent plans, so the expected effects of energy savings are rarely achieved. The problem of the high price paid for energy savings and climate and environmental goals is also expressed.

Insufficient efficiency in the use of funds to achieve energy and other related objectives prevents local authorities from proactive promotion of energy efficiency and RES use, although given the amount of allocated budgetary resources there is an objective possibility.

Istrian entrepreneurs are insufficiently informed about the possibilities and benefits of using grants from ESI funds and especially financial instruments. A significant number of entrepreneurs are not at all familiar with the term financial instrument and what it represents, or how it can be used effectively to enhance competitiveness. The reason for the lack of information is the insufficient communication with the local authorities and the inefficient dissemination of information by the competent public bodies.

2.3.2. Supply-side market failures

Supply-side analysis has been considered from a broader perspective (including grants from ESI funds), due to the lack of relevant financial instruments for increase of energy efficiency and use of RES, but also to identify trends in the use of Cohesion Policy instruments in general. The only financial instrument for energy efficiency and RES that can be used by Istrian entrepreneurs, from 1.1.2014. was used only by two entrepreneurs.



Local authorities and other public bodies are not interested in the financial instruments in question. Only five beneficiaries took advantage of the three available financial instruments; two entrepreneurs above mentioned and three local government units, with only around HRK 20 million being used. Slightly higher interest is recorded in financial instruments intended for entrepreneurs for growth and development, but not close to the available capacity. It is important to emphasize that the Istrian entrepreneur's interest in financial instruments is lower than the national average, whether the type of instrument involved.

Compared to the financial instruments, much bigger demand is for the grants from ESI funds; at the national and county level.

ESCO model for financing energy efficiency projects and RES has not taken hold in line with expectations. In the Istrian County, only a few local authorities and enterprises used the model. The probable reason for the poor use of the ESCO model is the demand for collateral and the high level of risk.

The financial market in the Republic of Croatia is increasingly developing, with historically low values of interest rates on corporate loans. Therefore, Istrian entrepreneurs who are familiar with inefficient bureaucracy and lengthy process of preparation and evaluation of project proposals, and later demanding controls and reporting, prefer to take loans from commercial banks. On the other hand, commercial banks borrow from creditworthy and financially sound entrepreneurs, which further reduces the potential market for financial instruments placements.

2.3.3. Suboptimal investment situations

One of the negative factors contributing to suboptimal investment situations is the high level of centralization of the Public Calls management system, which should contribute more to the achievement of regional energy, climate and environmental objectives. The above mentioned is probably the biggest reason for unrealistic placed goals at the county and local level, and consequently the lack of input from entrepreneurs to achieve the expected effects of different energy efficiency measures and use of RES. However, more active involvement of local authorities requires the training of administrative staff.

The lengthy process of preparing project proposals, often accompanied by high costs, is also one of the significant negative factors. However, since these are primarily financial instruments intended for entrepreneurs, it is necessary to emphasize the lengthy processes of evaluation of project proposals, i.e. approval and contracting, which at the outset negatively affects the decision of the entrepreneur to use financial instruments.

Energy efficiency and/or RES projects are typically characterized by a low rate of return and a relatively long payback period, so entrepreneurs prefer to invest in modernizing and/or expanding production.

Entrepreneurs who decide to invest in increasing energy efficiency and/or use of RES have usually already modernized technology and upgraded business processes, so these investments are designed to reduce operating costs (energy costs) to further increase their level of competitiveness in the market. Assuming that their energy costs have a significant proportion of their total operating expenses.

The unfavourable financial capacities of Istrian entrepreneurs reduce the availability of capital and increase its price. This is especially pronounced for beginner entrepreneurs.



3. Assessment of the added value of the financial instrument

It was previously explained that in the current programming period, the Republic of Croatia implements only 3 types of financial instruments for energy efficiency improvement and use of RES, intended primarily for the public sector. In the current and previous pre-accession period, no typical financial instruments intended exclusively for SMEs were implemented. Therefore, the assessment of the added value of a financial instrument cannot be made on the basis of an analysis of specific qualitative and quantitative indicators of added value, based on the experience and effects of the implementation of these specific financial instruments. Against this background, the assessment of the added value of a financial instrument is conducted on the basis of the assumed future effects of the innovative financial instrument proposed in the Ex-Ante assessment in question. The needs and preferences of key stakeholders in the Istrian County (direct and indirect users) are also discussed.

In principle, the added value of an innovative financial instrument intended exclusively to improve energy efficiency and use of RES comes from:

- ✓ positive effects on improving the availability of capital for SMEs,
- ✓ improvements in the availability of capital for micro-entrepreneurs,
- ✓ increase in investments in energy efficiency and use of renewable energy sources,
- ✓ contributions to the realization of SEAP/SECAPs.
- ✓ contribution to the achievement of energy, climate and environmental objectives of the EU.

The proposed innovative financial instrument is determined by all supply and demand specificities identified through market analysis. In addition to a detailed qualitative and quantitative analysis of the supply and demand markets, surveys of all relevant stakeholders were conducted for the purpose of developing the Ex-Ante analysis in question;

- ✓ SMEs as main users,
- ✓ Local authorities in the Istrian County area.

In addition to the survey conducted, direct interviews were conducted with representatives of three commercial banks and Croatian Bank for Reconstruction and Development.

The goals of the survey and interview conducted were to:

- ✓ identify investment potential in the next programming period,
- ✓ identify preferred sources of financing for new investments,
- ✓ identify preferred financing models for new investments,
- ✓ identify the optimal model for an innovative financial instrument,
- ✓ identify the relevant factors for the implementation strategy of an innovative financial instrument.

A survey of Istrian entrepreneurs was conducted on a sample of 23 entrepreneurs. Response rate was below the satisfactory level. The survey was conducted for 35 days, and more than 180 entrepreneurs were contacted directly and indirectly (through associations of entrepreneurs and craftsmen, cities,

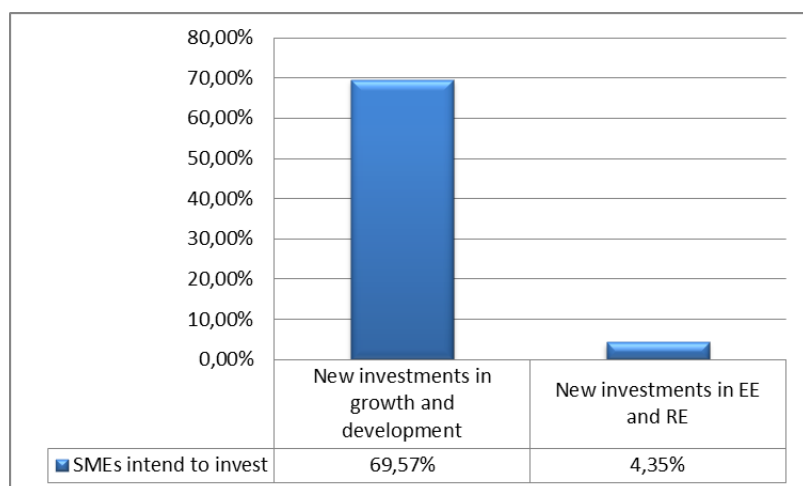


municipalities and other institutions), with a response rate of only 12,78%. The reasons for the low response may be:

- ✓ lack of time,
- ✓ lack of interest for participation in the survey,
- ✓ lack of good communication with the public sector,
- ✓ unbelief of public institutions, etc.

In the area of Istrian County, in the next period most entrepreneurs intend to implement new investment projects. 69,57% of them intend to invest or would invest in growth and development, and 4,35% in EE and RES. The implementation of investments is determined by the availability of capital and financing models (EU funds, financial instruments, co-investment funds, etc.)

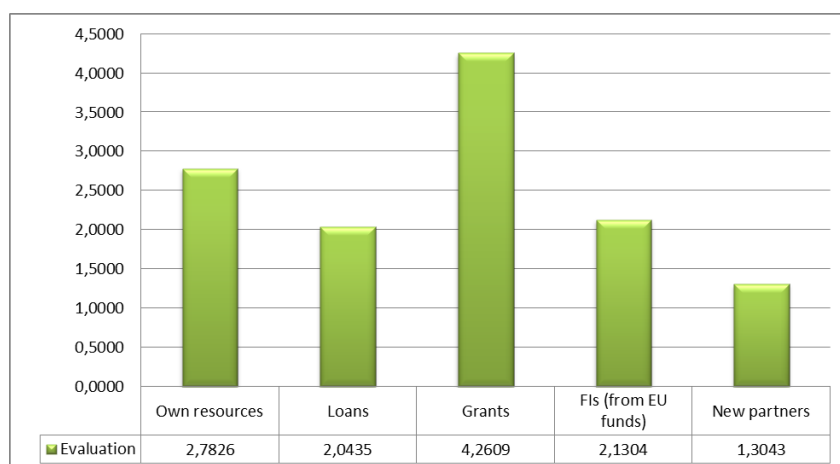
Chart 15: Planned investments in the next programming period (in the %)



Source: Survey, 2019, Author

Most of Istrian entrepreneurs as the primary source of funding would like to use grants from EU funds.

Chart 16: Preferred sources of financing for investment projects



Source: Survey, 2019, Author

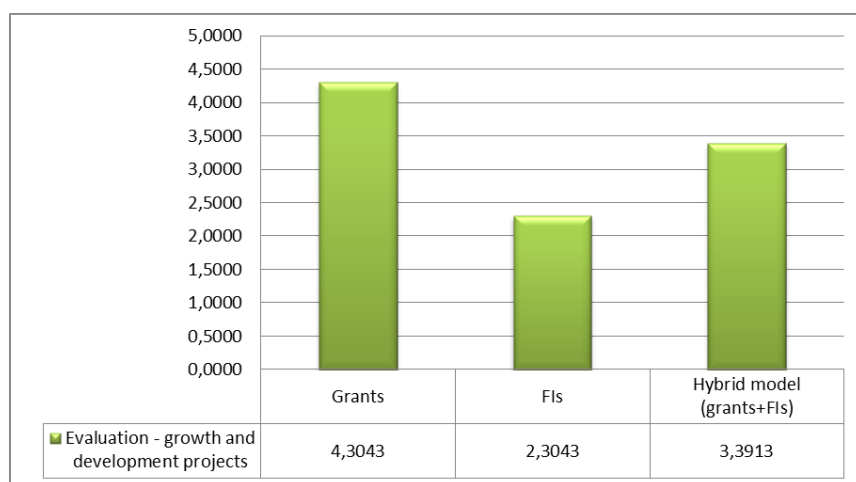


According to the ratings, Istrian entrepreneurs prefer to use their own funds in relation to credit and/or financial instruments. As a source of financing at least preferred are sources from new partners and/or investors.

Given that most entrepreneurs see Community grants as a most desirable source of funding, additional questions focus on expressing the preferences of the Community assistance model.

For investment projects for growth and development, grants from EU funds were selected as the preferred financing model. Then, with an average rating of 3,39, a hybrid model is presented, which is a combination of grants from EU funds and a financial instrument and the least preference being recorded is for a financial instrument financing model (average rating 2,30).

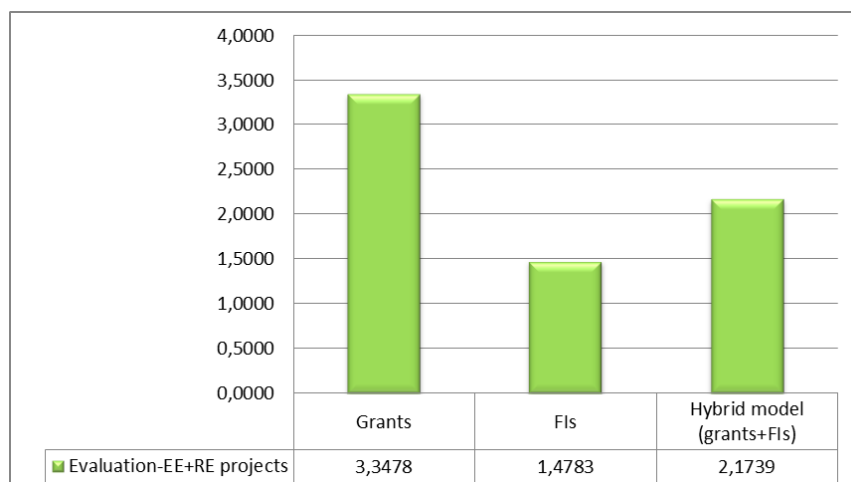
Chart 17: Preferred financing model for growth and development (from EU funds)



Source: Survey, 2019, Author

Chart 18 shows the preferred financing model for investments in improvement of energy efficiency and use of renewable energy sources, financed from EU funds.

Chart 18: Preferred financing model for EE and RE projects (from EU funds)



Source: Survey, 2019, Author

Compared to the ratings shown for the preferred financing model for R&D projects, the investment projects for EE and RES have lower average ratings for all models, which is correlated with the low

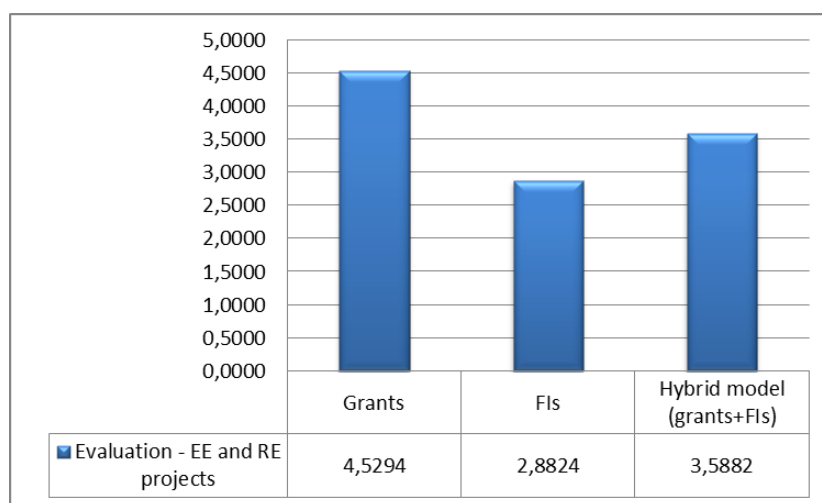


interest of entrepreneurs for investing in improving EE and use of RES. However, the highest average rating remains for the grants from EU funds (average rating 3,35). This is followed by a hybrid model of EU funded grant and a financial instrument (average rating 2,17), and the model that records the lowest rating or preferences is the financing model of an financial instrument (average rating 1,48).

The survey for public sector was conducted on a sample of 17 local authorities in the Istrian County. Response rate was above average (85%). Part of the questions referred to Block 2, so this section of the document will only show the answers to the questions relevant to the Block 1.

Compared to the entrepreneur’s ratings, the financing models for EE improvement projects and the use of RES in public sector, significantly higher average scores across all models were detected.

Chart 19: Preferred financing model for EE and RES projects (from EU funds) in public sector



Source: Survey, 2019, Author

The preferred financing model is still the one related to grants from EU funds (average rating 4,53). This is followed by the hybrid model of EU funded grants and a financial instrument (average rating 3,59), and the model that records the lowest rating or preferences is the financing model of an financial instrument (average rating 2,88). The reasons for the higher average ratings of the presented financing models for EE and RES improvement projects related to the ratings from private sector are the business objectives. The public sector does not aim to generate business profits but to provide public goods and services. Entrepreneurs, on the other hand, operate on the free market, are exposed to numerous business risks, cost increases, increased competition, etc., and with all this mentioned, they must earn a sufficient level of business income that will result with an acceptable/desired rate of return.

Taking into account all the presented features of the supply and demand side of market in the Istrian County, as well as the preferences of Istrian entrepreneurs for financing investment projects for the improvement of EE and use of RES, it is evident that in order to increase their number, it is necessary to create an innovative financial instrument. With a classical financial instrument, which would represent a more affordable and cheaper credit arrangement, no significant progress can be made in increasing the number and amount of investments in improving the EE and use of RES in the Istrian County. As already stated, the reasons are numerous and arguable, and again we point out that interest rates in Croatia are at historically low levels (from 1,76% for loans in foreign currency, to 2,52% for loans in Croatian kuna). One of the problems of reduced demand is also low share of manufacturing and processing activities in the total economy, which, as a rule for the implementation of projects in this area can significantly reduce operating costs.



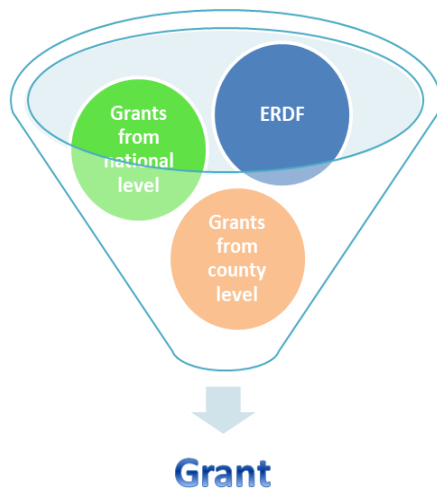
We emphasize that every investment project related to the improvement of EE and use of RES do not only contributes to reducing the entrepreneur’s costs and enhancing its competitiveness, but is directly and multiplicative in the function of contributing to EU objectives;

- ✓ increasing the competitiveness of the European economy,
- ✓ achieving energy, climate and environmental objectives.

Therefore, it can be concluded that for projects related to EE improvement and use of RES it is justified and desirable to create innovative financial instruments, namely a hybrid model, which in addition to low interest rates and/or collateral provides additional measures to encourage entrepreneurs to invest (especially micro and small enterprises). According to the results of the statistical analysis of the use of Community financial instruments and grants, as well as the results of surveys, the right measure or the trigger that would increase the investments of SMEs in improving the EE and the use of RES in the Istrian County, are grants combined with a financial instrument. Therefore, a reasonable percentage of the grant would encourage the use and increase of absorption of financial instruments, which would directly result with an increase in the number and amount of investments, the achievement of local SEAP targets and relevant EU-level targets. Considering that each County has its own energy strategies and action plans, it is possible to allocate part of the budget to enhance improvements in EE and use of RES by SMEs, i.e. co-financing the grant amount. This would reduce the share of EU co-financing of the grant and it would increase the national one, while reducing the burden on the central government budget. On the other hand, subdividing the powers and responsibilities of implementing an innovative financial instrument into lower, county level, would result in greater efficiency of the financial instrument and consequent positive effects. This proactive approach of involving counties in the preparation and implementation of the hybrid financing model would also have a positive impact on the burden on senior management levels and, in addition, on the overall absorption capacity of the Republic of Croatia in terms of utilization of all forms of Community assistance that serve the Cohesion Policy objectives.

Grant sources would be:

- ✓ grants from ERDF,
- ✓ national contribution I (central government funds),
- ✓ national contribution II (local and regional authorities funds).



The amount of the contribution from regional (counties) and local authorities to the grant amount would be funded from the budgets of the counties and their local authorities under a joint agreement for funding EE and RES improvement projects.

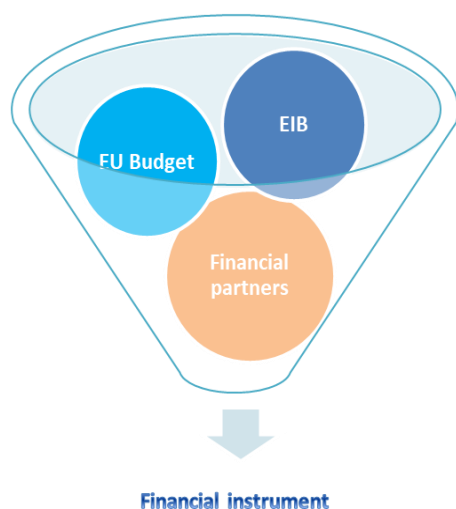
The share of the grant in the hybrid financing model for SMEs investments in improvement of EE and use of RES would be at least 10.00% and at most 30.00%, depending on the size of the company and the type of project (project effects). The share of Community grants would be 70.00%, the share of national co-financing by the central government 20.00% and the share of local co-financing 10.00%.

The minimum eligible cost of the EE improvement projects and the for use of RES would be HRK 75.000,00 and the maximum eligible cost HRK 3.750.000,00.

The source of financing for a pure financial instrument (in this context of the loan) is in the InvestEU program (after termination of use of the EFSI). From Croatian Bank for Reconstruction and Development is expected to provide at least 30.00% of the funding for the implementation of the financial instrument, while the remaining 70.00% will be provided through Community Assistance Instruments (ESIF). An optimal financial instrument that is an integral part of a hybrid model or an innovative financial instrument would be defined by the following features:

- ✓ Loan amount - the lowest is HRK 52.500,00 and the highest HRK 3.375.000,00
- ✓ Disbursement - up to 24 months
- ✓ Grace period up to 24 months,
- ✓ Repayment term - up to 12 years, including grace period, loan repayments are repaid in monthly, quarterly or semi-annual rates,
- ✓ Interest rate - It is determined by the size of the entrepreneur (from 0,05% to 0,75%)
- ✓ no usual extra credit costs (different fees)

For the implementation of the hybrid financing model, the regulation for financial instruments would apply.¹⁴



¹⁴ Application based on: Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU.

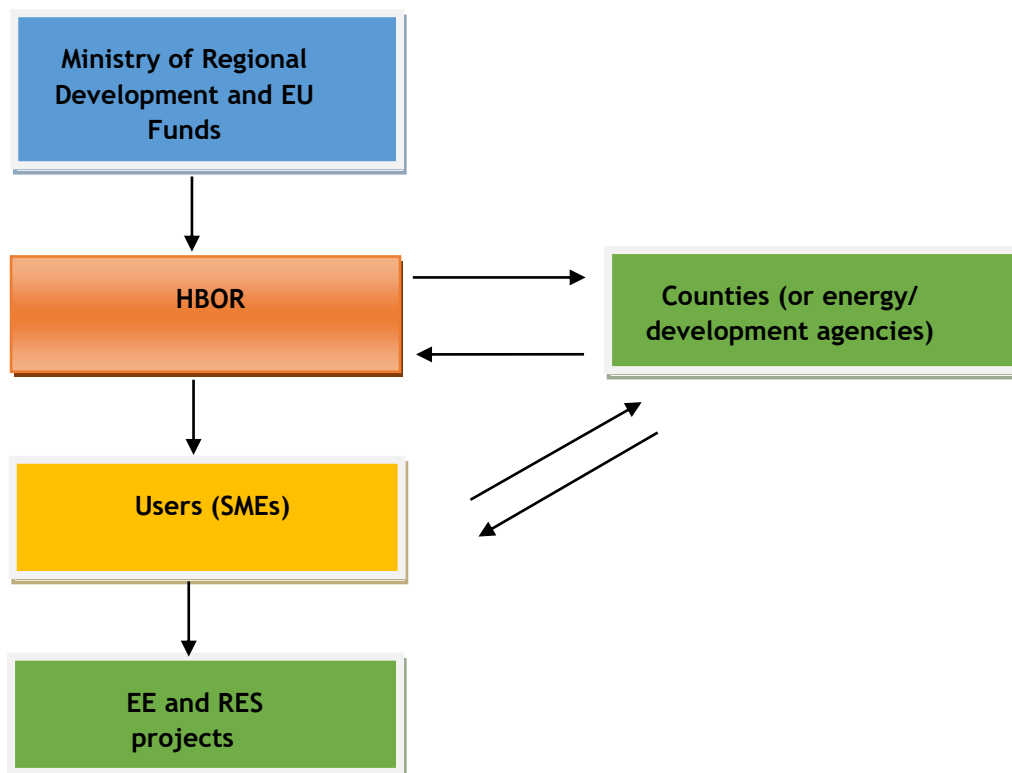
The Managing Authority of the financial instrument would be the Ministry of Regional Development and EU Funds, as the Managing Authority of the Operational Program Competitiveness and Cohesion 2014-2020, and probably of the future operational program under which this type of financial instrument would be implemented.

The Croatian Bank for Reconstruction and Development (HBOR) would be the intermediary body for the preparation and implementation of the financial instrument.

Since the implementation of the hybrid model in question in accordance with Article 52 (5), it could only be operationally implemented as a financial instrument or a single operation, the intermediary body (in this case HBOR) makes payment of the financial instrument and the grant. HBOR covers the entire territory of the Republic of Croatia with regional offices by region, so it is possible to easily and effectively establish operational cooperation with counties throughout regional offices. Counties or/and their energy(development) agencies would be proactively involved in the implementation of the financial instrument with HBOR as a second level intermediate body.

Figure 3 shows the hybrid model of a grant and financial instrument for EE enhancement and use of RES.

Figure 3: Hybrid model of a grant and financial instrument for EE enhancement and use of RES



Source: Author, 2019.

Possible other models and sources of financing for financial instruments will be explained in the following sections.



3.1. Analysis of the quantitative and qualitative dimensions of the value added for the financial instrument

In terms of quality, innovative financial instrument that is actually a hybrid model funded by grants and financial instruments will result with an increase in the number of investments, the amount of investment in the sector, reducing CO2 emissions, reducing energy losses, increasing the share of renewable energy resources, realization of energy action plans, increasing the absorption capacity of the Republic of Croatia in terms of using Community assistance (grants and financial instruments), new jobs, reducing unemployment, increasing employment, reducing the SMEs operating costs, increasing the competitiveness of SMEs, etc.

In order to effectively measure and analyse quantitative indicators of the added value of an innovative financial instrument, it is necessary to identify optimal indicators. The identification of easily measurable value-added indicators enables the continuous evaluation of the implementation of the financial instrument and the timely change and / or adjustment of the measures envisaged, target beneficiaries and priority investments.

Table 6 shows the indicators that enable an efficient evaluation of the performance of an innovative financial instrument and the consequent quantitative measurement of the added value of a financial instrument.

Table 6: Indicators for the implementation of an innovative financial instrument

Energy Efficiency projects	
DESCRIPTION AND PURPOSE OF THE MEASURE	<p>The purpose of improving energy efficiency by the Istrian SMEs is the efficient use of energy and energy products.</p> <p>With the renovation of business facilities and the installation of technologies that reduce wastage and/or consume less energy, it is necessary to educate entrepreneurs about the importance and benefits of increasing energy efficiency and the possibilities of using an innovative financial instrument that enables them to implement typical projects. It is also important to highlight the direct long-term benefits for their business, which are reflected in the reduction of operating costs of the business to increase the comfort for the workers, which results in increased work efficiency and effectiveness.</p>
USERS	<ul style="list-style-type: none"> - Entrepreneurs - Craftsmen
INDICATORS	<ul style="list-style-type: none"> ✓ Number of approved projects/investments, ✓ Number of implemented project/investments, ✓ Number and surface area of facilities that have increased energy efficiency, ✓ Total amount of investments, ✓ Number of entrepreneurs and craftsman, ✓ Number of employees,



	<ul style="list-style-type: none"> ✓ Operating results of Istrian entrepreneurs (primarily by economic activities in which most projects were funded) ✓ Energy consumption in the observed period, ✓ Energy consumption by economic activities, ✓ The amount of CO2 and other emissions of harmful gases, ✓ Percentage of realization of energy action plans.
Fostering the use of Renewable Energy Sources	
DESCRIPTION AND PURPOSE OF THE MEASURE	<p>The use of renewable energy sources is negligible in relation to the available possibilities and potentials in the Istrian County. Especially in the economy sector. Innovative financial instrument is focused on the Istrian entrepreneurs and craftsmen to use renewable energy sources; particularly solar energy, wind energy, biomass and geothermal energy. By using renewable energy, entrepreneurs are contributing to decrease of the operating costs, increasement of energy independence, and to whole society with lots of environmental and climate benefits. As with EE improvements, it is necessary to educate entrepreneurs about the importance and benefits of using renewable energy sources, and about the availability of the innovative financial instrument that enables them to implement type projects.</p>
USERS	<ul style="list-style-type: none"> - Entrepreneurs, - Craftsmen
INDICATORS	<ul style="list-style-type: none"> ✓ Number of approved RES projects, ✓ Number of implemented RES projects, ✓ Number of users of renewable energy sources, ✓ Total amount of investments, ✓ Number of entrepreneurs and craftsman, ✓ Number of employees, ✓ Operating results of Istrian entrepreneurs (primarily by economic activities in which most projects were funded) ✓ Energy consumption in the observed period, ✓ Energy consumption by economic activities, ✓ Share of renewable energy sources in the total energy system, ✓ The amount of CO2 and other emissions of harmful gases, ✓ Percentage of realization of energy action plans.



Regular annual evaluations of the effects of using the innovative financial instrument would be carried out operationally by counties (and/or their energy development agencies) and reported to the intermediary body and Managing Authority.

This approach provides an efficient system of monitoring and evaluation of the implementation and effects of the financial instrument, and provides the necessary relevant information for policy-makers for possible adjustments of the proposed financing models.

3.2. Assessing the consistency with other forms of public intervention addressing the same market

The innovative financial instrument is fully coherent with other forms of public intervention to improve energy efficiency and use of renewable energy in the current programming period. Considering the long-term defined energy and environmental objectives of the EU (2030 and 2050), and the inevitable process of decarbonization of the European economy and society, in the next period high level of compliance of the financial instrument with other forms of public intervention is also expected. In fact, energy sufficiency and independence are one of the key prerequisites for strengthening the EU's economic competitiveness. Strategic approach of energy development ensures the reliable energy supply for economy and households, at affordable and competitive prices. Further energy development of the EU is based on the 2030 Energy Strategy, which sets out the expected results of reducing the capacity of nuclear and carbon sources, increasing RES usage, improving energy efficiency and building the Trans-European Energy Network (1. at least 40% cuts in greenhouse gas emissions (from 1990 levels), 2. at least 32% share for renewable energy, 3. at least 32.5% improvement in energy efficiency). Energy strategy in addition to being aimed at the gradual transition from carbon sources to renewable energy, it is closely related to smart growth because the projected economic growth is based on the production of advanced RES technology (more efficient and less expensive wind turbines, photovoltaic cells, magnesium-ion batteries, etc.).¹⁵ At the end of 2018, with the aforementioned energy strategy, the results of analyses and simulations of possible energy scenarios by 2050 were presented to ensure long-term energy stability and economic growth.¹⁶

Whether it is public intervention in the form of Community grants, financial instruments or grants at national and local level, they are all in the pursuit of the aforementioned objectives and are, in essence, absolutely coherent. Also, regulations allow the combined financing of type projects with grants and financial instruments.

Regarding the model for financing type projects with commercial banks credits, it is important to emphasize that banks finance only highly profitable projects, which are characterized by low level of risk, which is often not the case for type projects in the Istrian County. The results of Istrian entrepreneurs show that most of them belong to risk groups (high debt ratio, low liquidity, etc.) and probably they do not meet the necessary criteria for loan approval, further confirm that the implementation of the proposed innovative financial instrument does not lead to a collision between the proposed innovative

¹⁵ Available at: <https://ec.europa.eu/energy/en/topics/energy-strategy-and-energy-union/national-energy-climate-plans>

¹⁶ Available at: <https://ec.europa.eu/energy/en/topics/energy-strategy-and-energy-union/2050-long-term-strategy>



financial instrument and commercial bank loans for type projects. Which confirms that the financial market will not result in unwanted distortion and disruption of the balance between market participants. Moreover, for banks as a target group remain SME's with positive business performance, which reduces their overall risk of high-risk investments and an increase in non-performing loans. Thus, the implementation of an innovative financial instrument also indirectly contributes to strengthening the stability of the EU financial market.

3.3. Identifying possible State aid implications

In order to prevent that State aid leads to distortions of competition in the internal market and affects trade between Member States in a manner contrary to the common interest, Article 107, paragraph 1 of the Treaty on the Functioning of the European Union (the "Agreement") sets out the principle that state aid is prohibited. However, in certain cases State aid may be compatible with the internal market under Article 107 (2) and (3) of the Agreement. Under Article 107 (3) (c) of the Agreement, the Commission may consider that State aid to facilitate the development of certain economic activities in the European Union is compatible with the internal market if such aid does not adversely affect trading conditions in a manner contrary to the common interest.¹⁷

It is assumed that in the next programming period, the innovative financial instrument will be implemented within a similar or equivalent to *Operational Programme „Competitiveness and Cohesion 2014 - 2020.“*, priority axis 4 - *Promotion of energy efficiency and renewable energy sources*, Investment priority 4b - *Promoting energy efficiency and the use of renewable energy in enterprises*. In this case, regulations and conditions would apply in accordance with the provisions of *the State Aid Program for the promotion of energy efficiency and renewable energy in enterprises and the de minimis aid Program for the promotion of energy efficiency and renewable energy in enterprises*.

This innovative financial instrument is intended primarily for SMEs, i.e. micro, small and medium-sized enterprises in the Istrian County so the proposed hybrid financing model in which the grant ratio is between 10,00% and 30,00% and the rest of the amount is financed through a pure financial instrument (credit/loan), should not be in collision with the State Aid Program for the promotion of energy efficiency and renewable energy in enterprises and the de minimis aid Program for the promotion of energy efficiency and renewable energy in enterprises. Predicted lowest amount of eligible projects costs is HRK 75.000,00 and maximum HRK 3.750.000,00. Considering the State Aid Program for the promotion of energy efficiency and renewable energy in enterprises, Article 8 states that (5) The aid intensity for energy efficiency measures that may be awarded to large companies under this Program may not exceed 30% of the eligible costs referred to paragraph 4 of this article. (6) The aid intensity for energy efficiency measures referred to paragraph 5 of this Article may be increased as follows: a) for 20 percentage points for aid awarded to small businesses, b) for 10 percentage points for aid awarded to medium-sized enterprises, the implementation of an innovative financial instrument for EE improvement projects is not in conflict with the state aid regulation. The same applies to projects encouraging the use of RES. In Article 10, which relates to investment aid for the promotion of energy from renewable energy sources states that (7) The aid intensity must not exceed: a) 45% of eligible costs for large enterprises if the

¹⁷ EC, Guidelines on State aid for environmental protection and energy 2014-2020. (2014/C 200/01), 2014.



eligible costs are calculated on the basis of paragraph 6, point a) or paragraph 6(b); b) 30% of the eligible costs for large enterprises if the eligible costs are calculated on the basis of paragraph 6(c). (8) The aid intensity referred to the paragraph 7 of this Article may be increased in the case of SMEs as follows: a) by 20 percentage points for aid granted to small businesses, b) by 10 percentage points for aid awarded to medium-sized enterprises.



4. Additional public and private resources to be potentially raised by the financial instrument

4.1. Estimating additional public and private resources

ESI Funds (European Structural and Investment Funds)

In the current programming period, the most represented public intervention in the energy market is operationally represented by grants from ESI funds, financial instruments, Union and Cross-border cooperation programs. The largest contribution is made by ESI funds.

The Partnership Agreement represents the fundamental strategic document of the Republic of Croatia (like any other Member State) for the use of cohesion policy instruments and is adopted for the period covered by the current development strategy (current 'Europe 2020' strategy). As laid down in *Regulation (EU) No 1303/2013 of the European Parliament and of the Council of 17th December 2013. establishing common directives on the European Regional Development Fund, the European Social Fund, the Cohesion Fund, the European Agricultural Fund for Rural Development and the European Maritime and Fisheries Fund and decommissioning Council (EC) directives no.1083/2006*, every Member State of the European Union is obliged to submit a Partnership Agreement. The European Commission adopted a Partnership Agreement with the Republic of Croatia on 30th October 2014. The structure of the Partnership Agreement is set out in the Funds Regulation. The Regulation establishes 11 thematic units from which a Member State can select its national investment areas. One of the most important results of the Partnership Agreement is the selection of thematic units to which the Member State will channel the ESI Funds allocation, as well as the determination of specific financial amounts for each thematic unit selected. At the same time, the Regulations dealing with individual funds define thematic units that can be financed from an individual fund.

KF - Cohesion Fund - is intended for the less developed Member States of the European Union whose GDP per capita is less than 90% of the average GDP per capita. The purpose of its use is to reduce social and economic disparities and to promote sustainable development. It mainly finances large infrastructure projects (roads, railways, ports, sewage systems, etc.) where eligible applicants are public bodies. Investments in large infrastructure projects, as a rule, result in immediate strengthening of economic activities (through the involvement of a larger workforce, public procurement of materials, appliances and equipment, etc.), and long-term positive social and economic effects through improving mobility and improving the availability and quality of public goods and services. Any project funded by the Cohesion Fund, in addition to demonstrating financial viability, must demonstrate socio-economic viability in the context of the social cost-benefit ratio. For the period 2014 to 2020, Cohesion Fund resources are channelled to EU Member States whose average GDP per capita is less than 90% of the Union average; to Bulgaria, Cyprus, Czech Republic, Estonia, Greece, Croatia, Latvia, Lithuania, Hungary, Malta, Poland, Portugal, Romania, Slovakia and Slovenia.

The European Regional Development Fund (ERDF) - aims to strengthen economic and social cohesion in the European Union by correcting imbalances between regions. ERDF is focused on stimulating and co-financing investments in the public and private sectors with the aim of job creation, enhancing the competitiveness of micro, small and medium-sized enterprises and various infrastructure projects (eg strengthening entrepreneurial infrastructure through co-financing the construction of an entrepreneurial



incubator, infrastructure of entrepreneurial zones, strengthening of educational infrastructure, construction and improvement of tourist infrastructure, etc.).

ESF - European Social Fund - is in the function of achieving social and indirect economic cohesion. The grants are available to the public sector public administration for strengthening their own administrative capacities, for programs to promote employment, social inclusion, promotion and implementation of lifelong learning, environmental protection, etc.

These funds need to be associated with two other important sources of cohesion policy funding;

The EAFRD - European Agricultural Fund for Rural Development - aims to strengthen Europe's rural development policy and to implement it more effectively. As already mentioned, it is one of the two pillars of the Common Agricultural Policy of the European Union. It is used by rural areas in European regions for:

- ✓ improving the competitiveness of the agriculture and forestry sectors,
- ✓ preserving the environment and the landscape,
- ✓ improving the quality of life and diversifying the economy in rural areas,
- ✓ Leader approach.

Available funds are available to local public administration, farms, agricultural organisations, civil society organisations and other.

EFPR - European Maritime and Fisheries Fund - is primarily aimed at achieving the objectives of the new Common Fisheries Policy and promoting the European Union's Integrated Maritime Policy. By promoting environmentally sustainable, resource-efficient, innovative, competitive and knowledge-based fisheries and aquaculture, and strengthening the administrative capacity of public bodies and institutions in the thematic area, it significantly contributes to the achievement of the objectives of cohesion policy.

Table 7 shows the list of thematic units and the funds from which each thematic unit can be funded.

Table 7: List of thematic units and sources of financing

Thematic goal	Source of financing	CF	ESF	ERDF	EAFRD	EMFF
1.	Strengthening research, technological development and innovation			X	X	
2.	Strengthening access toward use of information and communication technologies			X	X	
3.	Strengthening the competitiveness of small and medium-sized enterprises, the agricultural sector			X	X	X
4.	Support for moving towards an economy based on low CO2 emissions across all Sectors	X		X	X	X
5.	Promoting climate change adaptation, prevention and risk management	X		X	X	
6.	Protecting the environment and promoting resource efficiency	X		X	X	X



7.	Promoting sustainable transport and removing bottlenecks on key transport network infrastructure	X		X	X	
8.	Promoting employment and supporting labor mobility		X	X	X	X
9.	Promoting social inclusion and combating poverty		X	X	X	
10.	Investing in education, skills and lifelong learning		X	X	X	
11.	Institutional capacity building and effective public administration	X	X	X		
Technical support		X	X	X	X	X

Source: EU Directives 1303/2013; EU 1301/2013; EU 1304/2013; 1305/2013, Author

The thematic units presented, as defined by the directives, have been transferred to the priority axes of the national operational programs. As shown, individual thematic units can be funded from several sources or funds. Technical assistance does not have a formal status as a thematic unit, but can be programmed as a separate priority axis under the provisions of the Funds Regulation. Republic of Croatia has decided to use the funds for projects from all available thematic units through their elaboration through national operational programs. Operational programs indicate the detailed plans and ways in which the Member State intends to use the appropriations and a detailed account of the financial amounts and priorities in which these amounts will be channelled. The Funds Regulation defined the structure of the operational programs themselves, however their number is determined by the Member State itself. Croatia has drafted, and the European Commission has approved four national operational programs. *Operational Program Competitiveness and Cohesion 2014-2020* is funded by the European Regional Development Fund and the Cohesion Fund, and is also the largest operational program. The Operational Program is divided into thematic areas: *Environmental protection (water and municipal infrastructure and waste management)*, *transport infrastructure and adaptation to climate change*; *Competitiveness, research and innovation, information and telecommunications technologies, SME development, low carbon economy and education*; *SME support and investment in research, development and innovation*, which are broken down into priority axes and later into investment priorities, within which specific objectives and actions can be financed. Under the *Operational Program Competitiveness and Cohesion 2014-2020*, 6,88 billion Euros are available to the Republic of Croatia, of which 4,32 billion Euros from the *European Regional Development Fund* and 2,56 billion Euros from the *Cohesion Fund*.¹⁸ From the Operational Program Competitiveness and Cohesion 2014-2020. the projects of the market in question are financed to the greatest extent.

EFSU (European Fund for Strategic Investments)

The European Fund for Strategic Investments (EFSI) is a key element of the Investment Plan for Europe, whose primary objective is to foster long-term economic growth and competitiveness in the European

¹⁸ <http://www.strukturnifondovi.hr/op-konkurentnost-i-kohezija-2014-2020-779>; (23.11.2019.)



Union. The EFSI is part of a comprehensive strategy designed to address the uncertainties associated with public and private investment and to reduce the investment gap in the Union. The strategy consists of three pillars:

- ✓ mobilization of investment funds - EFSI,
- ✓ ensuring investment flow to the real economy (ESCU + EPPU)
- ✓ improvements to the investment environment in the Union (simplification of legal and other regulations, and necessary structural reforms).

The strategy should foster competitiveness and economic recovery and complement each other with the objective of economic, social and territorial cohesion across the Union. Therefore, the EFSI should be seen as complementary to all other actions needed to reduce the investment gap in the Union and, given that it acts as a guarantee fund, as an incentive for new investments.

The specific purpose of the EFSI is to help solve difficulties in financing and implementing strategic, transformative and productive investments with high economic, environmental and social added value that contribute to the achievement of Union policy objectives as set out in Regulation (EU) No 1287/2013 of the European Parliament and of the Council (3), Regulation (EU) No 1291/2013 of the European Parliament and of the Council (4), Regulation (EU) No 1315/2013 of the European Parliament and of the Council (5) and Regulation (EU) No 1316/2013 of the European Parliament and of the Council (6). It is intended to provide an immediate boost to the Union economy and to improve access to finance and competitiveness for enterprises and other entities, with particular emphasis on small and medium-sized enterprises (SMEs) and small mid-cap companies, in order to reduce unemployment and stimulate growth in the Union. The EFSI is therefore given support for strategic investments such as, among others, projects of common interest aimed at completing the internal market in the transport, telecommunications and energy sectors, including traffic and energy interconnectivity and digital infrastructure, the diffusion of renewable energy sources, and energy and resource efficiency, developing and modernizing the energy sector in line with the priorities of the energy union, including security of energy supply, and contributing to the sustainable development of these sectors and harnessing potential synergies between them.¹⁹ The European Commission's strategic partner in implementing the EFSI through which the instruments are implemented is the EIB (European Investment Bank). In addition to the EIB, the EIF (European Investment Fund) plays a significant role in the implementation of the EFSI through the provision of venture capital and guarantees to financial institutions for loans to SMEs. The EFSI offers a wide range of financial instruments to the public and private sectors;

- ✓ loans,
- ✓ guarantees,
- ✓ instruments to stimulate capital market development and to increase credit capacity, etc.

By December 2019, an investment of € 458,8 billion had been mobilized at Union level through the EFSI, € 84,6 billion had been approved for financing (of which € 61,0 billion through EIB financing and 23,6 through EIF instruments) while € 65,6 billion was signed. More than 31.00% of the appropriations were allocated to SMEs and 17.00% to the energy sector. In the same period, € 284 million was approved to Croatia through the EIB and the EIF, which will mobilize investments of € 1.134 billion. In Croatia, the EFSI is operationally implemented by HBOR.

In addition to ESI funds, the EFSI can and should be combined with the following EU funds:

- ✓ CEF (Connecting Europe Facility),

¹⁹ <https://eur-lex.europa.eu/legal-content/HR/TXT/PDF/?uri=CELEX:32015R1017&from=EN>



- ✓ Horizon 2020,
- ✓ EaSI (Employment and Social Innovation Program)

4.2. Estimating the leverage of the envisaged financial instrument

To assess the leverage effect of an innovative financial instrument, it is necessary to take into account the performance and business characteristics of Istrian entrepreneurs. In the previous chapters, all relevant indicators of their business are explained in detail, so it is worth pointing out here that Istrian entrepreneurs are over-indebted and accompanied by a high risk of illiquidity. Thus, in the observed period, the debt ratio averaged 0,63, the own financing ratio was 0,37, the financing ratio was 1,71, and the value of the debt factor was 6,29. The above indicators indicate a low absorption capacity of financial instruments, as leverage financing loses all meaning and is absolutely unacceptable if it approaches the level of corporate debt of 100.00%.

By incorporating part of the grant into innovative financial instruments, the effect of partially neutralizing the negative effect of increasing leverage on Istrian entrepreneurs (through a reduction in the debt-to-equity ratio of the net loan) is achieved.

To assess the relevant needs and, consequently, the leverage effect, FINA's business data for Istrian entrepreneurs and the surveys conducted are used.

In 2018, 993 entrepreneurs realized HRK 2,43 billion in investments in the County of Istria. According to the survey, in the next programming period, investments in growth and development are planned to be realized by 69,56% of entrepreneurs (approximately 10,00% of entrepreneurs per year, which is correlated with the current trends in the region of Istria - in the period from 2016 to 2018. 9,57% of entrepreneurs invested on average) and 4,35% plan to invest in EE improvement and RES utilization projects. It is estimated that EE and RES improvement projects can amount to an average of 20,00% of the value of an average entrepreneurial investment. By applying the percentage of entrepreneurs who intend to invest in improving the EE and using RES, it is possible to make a relevant assessment of the central value of Istrian entrepreneurs' demand for an innovative financial instrument. Table 8 shows the calculation of the central value of Istrian entrepreneurs' demand for an innovative financial instrument in the next programming period.

Table 8: Total amount of Istrian entrepreneurs' demand for an innovative financial instrument in the next programming period (in 000 HRK)

Position	2021	2022	2023	2024	2025	2026	2027	UKUPNO
Number of entrepreneurs investing (2018)	993	993	993	993	993	993	993	6.951
Total investment value (2018)	2.430.163	2.430.163	2.430.163	2.430.163	2.430.163	2.430.163	2.430.163	17.011.141
The average value of the EE and RES project	486.033	486.033	486.033	486.033	486.033	486.033	486.033	3.402.228
Central demand value	21.142	21.142	21.142	21.142	21.142	21.142	21.142	147.997

Source: Author, 2019.



According to the calculation shown in Table 8 for the next programming period, assuming ceteris paribus, it is sufficient to provide approximately HRK 148 million for Istrian entrepreneurs with the aim of implementing EE and RES improvement projects.

The net leverage effect of an innovative financial instrument is calculated in accordance with the recommended methodology of the Member States Guide under Article 46 and Article 37(2)(c).²⁰ The model of an innovative financial instrument has been elaborated and the calculations of the mean value of expected demand in the Istria County in the next programming period are presented. Table 9 shows the calculation of the net leverage effect of an innovative financial instrument.

Table 9: Calculation of the net effect of an innovative financial instrument for improving the EE and RES (in 000 HRK)

Position	Contribution ESIF (FI)	Contribution ESIF (grant)	National contribution (grant)	Contribution LRGU (grant)	National contribution of mediator	TOTAL
Innovative financial instrument	72.518	31.079	8.880	4.440	31.079	147.997
MCF	8.288					
TOTAL	72.518	31.079	8.880	4.440	31.079	147.997

Source: Author, 2019.

The net leverage effect of an innovative financial instrument is 74,15%. We emphasize that this is a strictly conservative estimate of the net leverage effect, so it does not include the possible participation of private resources. The possibility of attracting private resources is explained below. Their participation would determine an increase in the net leverage effect, whereby the inclusion of commercial bank resources (or an increase in HBOR's share) would result in a significant increase in this effect.

4.3. Attracting additional private resources

Attracting additional private resource interests is possible through two models. The first is the involvement of private financial institutions and the second is crowdfunding. After conducting direct interviews with representatives of commercial banks, we concluded that there was no significant interest in the implementation of a financial instrument aimed exclusively at improving the EE and RES of Istrian SMEs. In the current period, commercial banks offered several financial products on the market, but after some time they were de facto withdrawn from supply due to low interest and low demand. Therefore, if commercial banks are to be involved in the implementation of an innovative financial instrument, it must be made more attractive and more significant resources and efforts must be made to disseminate information on the opportunities and benefits of using an innovative financial instrument. Against this background, in order to attract the resources of commercial banks, it is suggested that an additional

²⁰ Available at: https://www.fi-compass.eu/sites/default/files/publications/guidance_leverage_reporting_en.pdf



analysis be made of the possibility of their involvement and the consequent increase in the net leverage effect.

As far as crowdfunding is concerned, for Istrian entrepreneurs this is an insufficiently recognized alternative source of financing. In principle, crowdfunding is a way of financing a project or venture by raising money from a large number of people, each of whom, usually online, contributes with a relatively small amount (Oxford Dictionaries, 2016)).²¹ This usually involves the project owner (entrepreneur, fundraiser), an online platform that acts as a type of intermediary through which a third party, ie mass individuals, donates their money to enable financing for a particular project developed by the project owner. Although initially considered a marginal way to raise smaller amounts of money for art projects, some of the most successful crowdfunding campaigns have shown that it can be an effective way of financing even more significant amounts. One of the first such examples is certainly the Pebble smartphone campaign, which connects wirelessly to a smartphone and serves as a handheld intelligence center.²² According to recent research by the Massolution Research Society (2015), there are currently 1.250 active crowdfunding platforms in the world. It is important to note that there are four major categories of crowdfunding platforms according to investor benefits;

1. Donation based platforms
2. Prize-based platforms
3. Loan-based platforms
4. Equity-based platforms.

In 2014, the crowdfunding industry raised 16,2 billion USD, more than double compared to 2013 when \$ 6,1 billion was raised. The upward trend continued in 2015 when 34,4 billion was collected. Compared to the world, Croatian amounts are quite small. Although there are several Croatian crowdfunding platforms (www.doniralica.hr, www.croinvest.eu, www.croenergy.eu), statistics from foreign platforms show that Croatian entrepreneurs prefer to seek financing from foreign crowdfunding platforms given the larger number of potential investors and higher chances of successful financing. By monitoring Croatian projects on foreign crowdfunding platforms, it can be concluded that in 2015, 63 Croatian projects were presented, of which only 23 were able to raise the necessary funds. A total of 7.673 investors raised more than \$ 750.000. The most popular international internet platform among Croats is Indiegogo with 47 Croatian projects in 2015, while the average amount of a Croatian campaign is \$ 10.000 (Hafner, 2016).²³

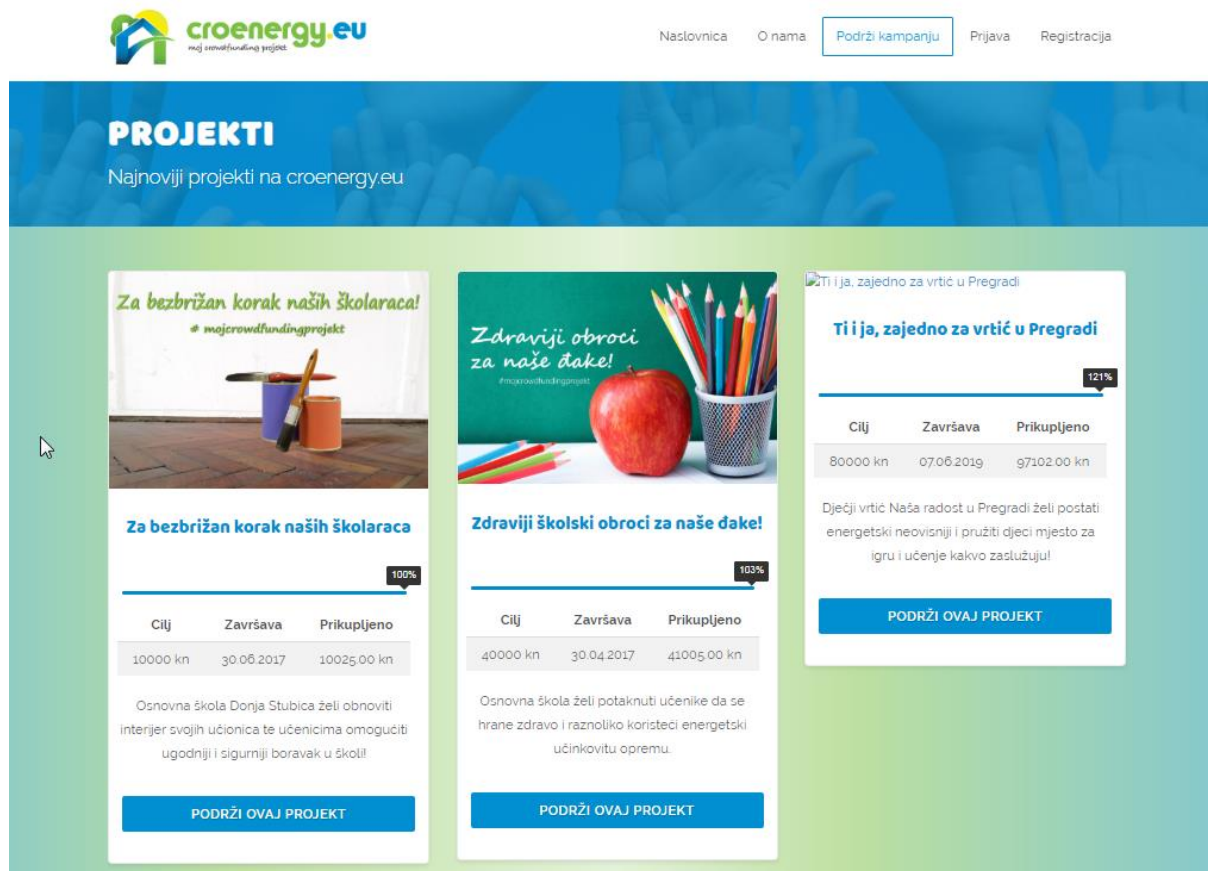
Croenergy is one of Croatia's most famous crowdfunding platforms and is focused on raising funds for financing socially useful projects in the energy and environmental sectors. The founder of the platform is the Regional Energy Agency of Northwestern Croatia (REGEA), founded in 2008 by three counties - Zagreb, Karlovac and Krapina-Zagorje and the City of Zagreb as part of the EU Intelligent Energy Europe program. Since 2017, it has raised funds for the implementation of 9 projects of individual value from HRK 10.000,00 to HRK 425.000,00. Throughout the campaigns so far, approximately HRK 730.000,00 has been raised, which enabled the implementation of 6 socially beneficial projects.

²¹ Đurđenić, K., Crowdfunding - Hrvatska pravna perspektiva i usporedba s drugim izvorima financiranja, IJF, Zagreb, 2017.

²² Đurđenić, K., Crowdfunding - Hrvatska pravna perspektiva i usporedba s drugim izvorima financiranja, IJF, Zagreb, 2017.

²³ Đurđenić, K., Crowdfunding - Hrvatska pravna perspektiva i usporedba s drugim izvorima financiranja, IJF, Zagreb, 2017.

Figure 4: Crowdfunding platform Croenergy



Source: <http://www.croenergy.eu/projekti?page=2> (29.11.2019.)

According to the realization of the goals and values of the campaigns, it is evident that crowdfunding in Croatia has not yet emerged as a recognizable alternative model of project financing. On the other hand, Croatian entrepreneurs do not have any preferences for establishing partnerships, which through crowdfunding campaigns would result in the division of equity or the payment of high interest rates on loans.

The above statement is confirmed by the result of a survey of SMEs according to which the financing model of the new partners / co-investors is rated at an average score of 1,30 and is the last in the list of preferred models of financing investment projects. Therefore, we believe that crowdfunding campaigns for EE improvement projects and the use of RES by Istrian entrepreneurs cannot attract significant funding.



5. Lessons learnt

5.1. Gathering relevant information

For the purpose of making the Ex-Ante assessment in question, analyses were made of available data and information on the use of financial instruments to improve EE and use of RES. Interviews were also conducted with representatives of commercial banks and HBOR. As only 3 financial instruments are available in the Republic of Croatia for the improvement of the EE and the use of RES, with limited access to SMEs, there is insufficient data and information available to determine which factors could increase the demand for this type of financial instruments. Therefore, additional surveys were carried out by SMEs and LSGs in the County of Istria in order to perform a relevant simulation of the effects of offering financial instruments for this type of projects in the Istrian County.

5.2. Identifying success factors and pitfalls of past experiences

In the Republic of Croatia, as well as in the territory of the County of Istria, in the current programming period, three financial instruments are available for EE improvement and use of RES. They are implemented by HBOR and are characterized by low levels of demand and utilization (only a few loans have been placed, namely to the public sector). Key reasons for low demand are contained in:

- ✓ non-refundable grants offer in the market,
- ✓ favourable commercial bank loans offer to the economy,
- ✓ complexity and duration of preparation, implementation and reporting of projects financed by a financial instrument,
- ✓ low rate of return of EE and RES projects,
- ✓ relatively weak financial indicators of the entrepreneurs' business or their credit rating,
- ✓ insufficient awareness of SMEs about the opportunities and benefits of implementing the EE Enhancement Project and using RES,
- ✓ mistrust of entrepreneurs towards financial and public sector institutions, etc.

5.3. Applying lessons learnt to enhance the performance of the financial instrument

All the above factors indicate that in order to increase the demand for financial instruments intended to improve EE and RES, it is necessary to fully implement an innovative financial instrument that would include a certain amount of grants as "rewards" to SMEs for contributing to the achievement of local, regional, national and EU energy, climate and environmental goals. Namely, Istrian SMEs have expressed high preference for a financing model which involves the use of grants. Apart from the use of non-



refundable grants, combined non-refundable funding grants + financial instrument are also acceptable to Istrian SMEs. For all other financing models, a low level of preference is expressed. The aforementioned further confirms the expressed great interest of Istrian entrepreneurs in the relevant Calls for Proposals under OP "Competitiveness and Cohesion 2014-2020" in the current program period based on non-refundable grants. High demand was also noted for the financing of EE improvement projects and the use of RES grants, jointly implemented by EPEEF and LGUs in the Istria County.

We believe, and in the Ex-Ante assessment in question, we argue that the proposed innovative financial instrument would significantly increase the demand of Istrian SMEs, increase the number of investments and make a significant contribution to the achievement of general energy, climate and environmental goals. It would also contribute to strengthening the competitiveness of the local economy through the effect of leverage and reducing the business costs for SMEs. However, in addition to the innovative financial instrument for achieving the desired effects, it is necessary to create and implement a complete set of technical implementation and quality dissemination measures.



BLOCK 2

6. Proposed investment strategy

The proposed investment strategy, including an analysis of possible solutions related to the envisaged offer of financial products, should identify and propose the optimal model of delivery of the financial instrument to end users, but also to ensure maximization of allocated funds, low implementation costs, and achievement of goals envisaged by the proposed instrument (in this case it is about improving EE and the use of RES).

In order that proposed investment strategy, which represents the enhancement of investments in EE and RES by using an innovative financial instrument, becomes feasible and acceptable, it is primarily necessary to harmonize the strategy with the relevant EU directives and regulations, and national laws, regulations, and directives. Therefore, the proposed investment strategy is fully in line with *REGULATION (EU) No 1303/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL from 17 December 2013. about laying down common provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund, the European Agricultural Fund for Rural Development and the European Maritime and Fisheries Fund and laying down general provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund and the European Maritime and Fisheries Fund and repealing Council Regulation (EC) No 1083/2006. Legislative basis for feasible implementation of the financial instrument represents Article 37. and Article 38. of the Regulation (EU) No 1303/2013.* Namely, Article 37, paragraph 2 states that the support of financial instruments is based on an Ex-Ante assessment which detects market failures or sub-optimal investments and the level of need for public investment, including the types of financial instruments intended to be supported. In the paragraphs of this section is defined the scope and content of the necessary Ex-Ante assessment.

In Block 1, a detailed analysis was conducted and all the necessary elements from the Ex-Ante assessment of financial instruments were presented related to:

- a) *analysis of market failures, suboptimal investment situations, and investment needs for policy areas and thematic objectives or investment priorities to be addressed with a view to contributing to the achievement of specific objectives set out under a priority and to be supported through financial instruments. That analysis shall be based on available good practices methodology;*
- b) *assessment of the added value of the financial instruments that are being considered for support from the ESI Funds, consistency with other forms of public intervention addressing the same market, possible State aid implications, the proportionality of the envisaged intervention and measures to minimise market distortion;*
- c) *estimation of additional public and private resources to be potentially raised by the financial instrument down to the level of the final recipient (expected leverage effect), including as appropriate an assessment of the need for, and level of, preferential remuneration to attract counterpart resources from private investors and/or a description of the mechanisms which will be used to establish the need for, and extent of, such preferential remuneration, such as a competitive or appropriately independent assessment process;*



- d) *assessment of lessons learnt from similar instruments and ex ante assessments carried out by the Member State in the past, and how such lessons will be applied in the future.*²⁴

It is also important to point out that the proposed innovative financial instrument, which involves the combined use of a financial instrument and a grant, is feasible in accordance with Article 37 (7), which states the following:

- a) *Financial instruments may be combined with grants, interest rate subsidies and guarantee fee subsidies. Where support from ESI Funds is provided by means of financial instruments and combined in a single operation, with other forms of support directly related to financial instruments targeting the same final recipients, including technical support, interest rate subsidies and guarantee fee subsidies, the provisions applicable to financial instruments shall apply to all forms of support within that operation. In such cases, applicable Union State aid rules shall be respected and separate records shall be maintained for each form of support.*

Therefore, the document in question (Block 2) focuses on the analysis of possible solutions regarding the enforcement mechanisms within the meaning of Article 38.:

- ✓ Financial products to be offered,
- ✓ Final recipients targeted,
- ✓ Envisaged combination of the financial instrument with grant support,
- ✓ and other elements of the Ex-Ante assessment.

It is particularly important to point out that, in accordance with Article 38 (4), when supporting financial instruments referred to in point (b) of paragraph 1 the Managing Authority may:

- a) *invest in the capital of existing or newly created legal entities, including those financed from other ESI Funds, dedicated to implementing financial instruments consistent with the objectives of the respective ESI Funds, which will undertake implementation tasks; the support to such entities shall be limited to the amounts necessary to implement new investments in accordance with Article 37 and in a manner that is consistent with the objectives of this Regulation;*
- b) *entrust implementation tasks to: i. the EIB; ii. international financial institutions in which a Member State is a shareholder, or financial institutions established in a Member State aiming at the achievement of public interest under the control of a public authority; iii. a body governed by public or private law; or*
- c) *undertake implementation tasks directly, in the case of financial instruments consisting solely of loans or guarantees. In that case the managing authority shall be considered to be the beneficiary as defined in point (10) of Article 2.*

Considering that in the implementation of the innovative financial instrument following is planned:

- ✓ *combined use of financial loans and grants,*
- ✓ *decentralised implementation (at the level of counties),*

certain legislative adjustments are needed at the level of the Member State (Republic of Croatia) of lower level intermediary/implementing bodies.

²⁴ Regulation (EU) No 1303/2013 of the European Parliament and of the Council of 17 December 2013., Available at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32013R1303>

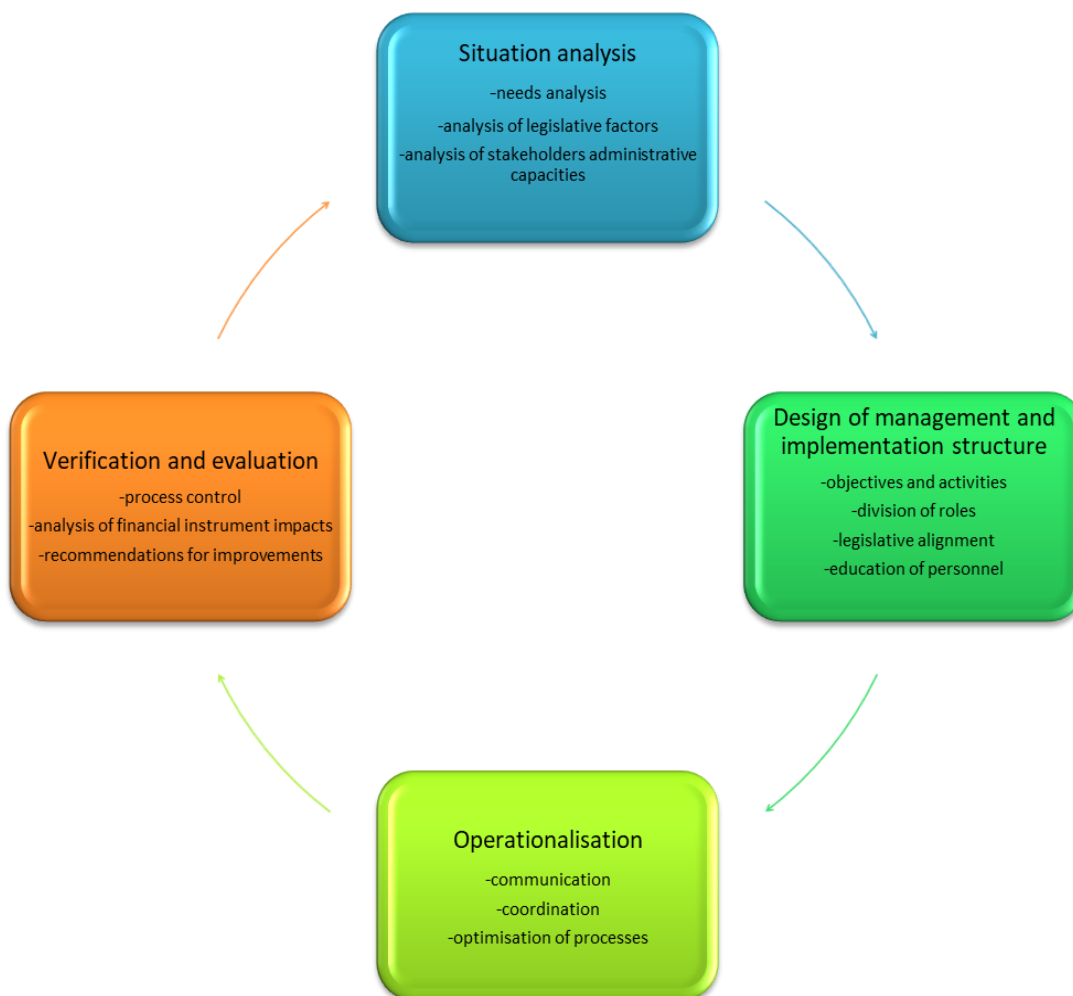


In the following chapters, the implementation capacities of all possible stakeholders in the implementation of the innovative financial instrument in question will be presented and analyzed in detail. The analysis also presents a special review of the key elements of the institutional framework in the context of the ESI Fund Management System in the Republic of Croatia for the current programming period 2014-2020.

6.1. Process to develop a proposed investment strategy

A prescriptive methodological approach has been used in developing the proposed investment strategy. Detailed analysis of the legislative options at EU and Croatian level was conducted including relevant findings of the market analysis and other elements of the surrounding area review from Block 1. The administrative capacity of key stakeholders in the implementation of the financial instrument and the institutional framework for the management of the ESI Funds has been analyzed, in line with the defined energy and environmental objectives of the EU, in whose function the proposed innovative financial instruments is. Figure 5 shows methodological framework for developing the proposed investment strategy.

Figure 5: Methodological framework for developing the proposed investment strategy



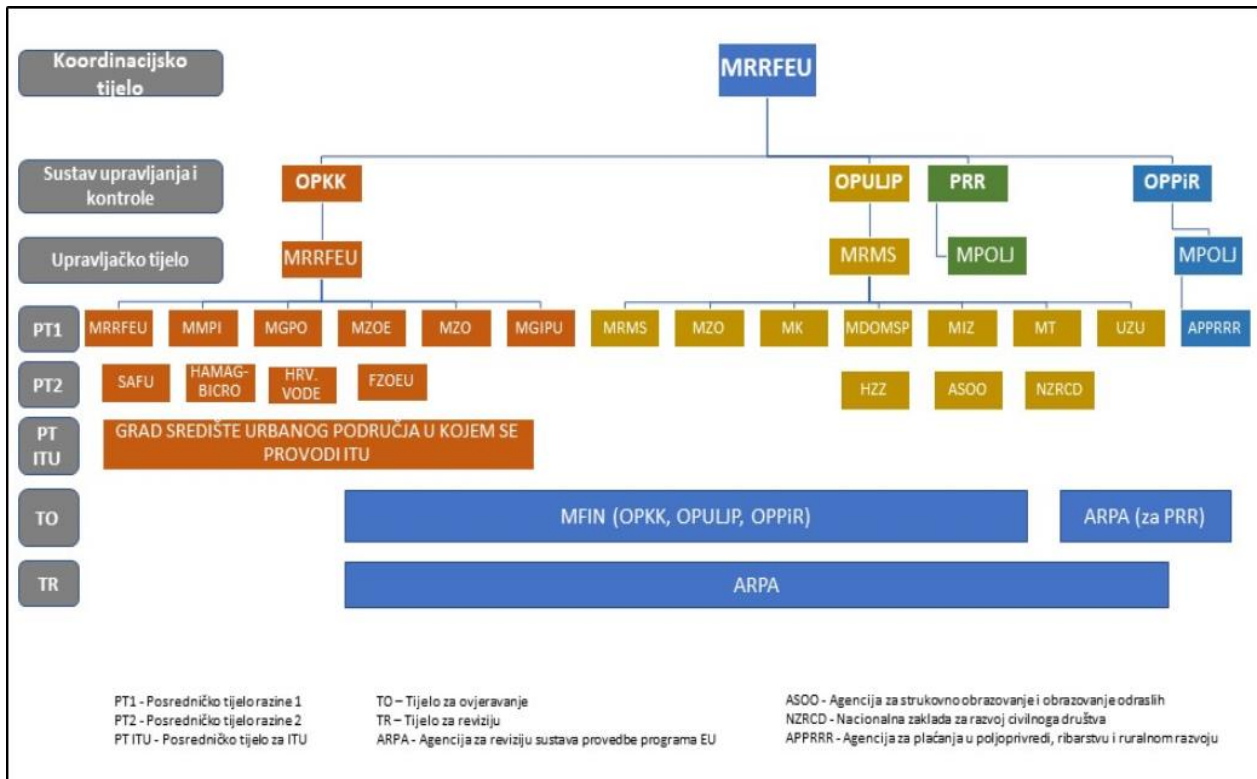
Source: Author; 2020.

Legislatively, the following laws, regulations and ordinances are crucial for the institutional framework at the national level for the implementation of ESI Funds:

- ✓ Law on the establishment of an institutional framework for the implementation of European structural and investment funds in Croatia in the period 2014-2020 (Official Gazette 92/14),
- ✓ Regulation on the bodies in the Management and Control System for the implementation of the Operational Program for Maritime Affairs and Fisheries (Official Gazette 129/2014),
- ✓ Regulation amending the Regulation on bodies in the management and control systems for the use of the European Social Fund, the European Regional Development Fund and the Cohesion Fund, in relation to the objective "Investment for growth and jobs"(Official Gazette 23/2015),
- ✓ Regulation on bodies in the management and control systems of the use of the European Social Fund, the European Regional Development Fund and the Cohesion Fund, in relation to the objective "Investment for growth and jobs" (Official Gazette 107/14, 23/15, 129/15 i 15/17 and correction 18/17),
- ✓ Regulation of the bodies in the management and control systems for the implementation of programs that support the objective "European Territorial Cooperation" in the financial period 2014-2020 (Official Gazette 120/2014),
- ✓ Regulation on the bodies in the Management and Control System for the Use of the European Agricultural Fund for Rural Development (Official Gazette 129/2014),
- ✓ Decision on the obligation to carry out Ex-Ante control of public procurement within projects intended to be co-financed and co-financed from the European Structural and Investment Funds in the financial period 2014-2020 (Official Gazette 87/2018),
- ✓ Ordinance amending the Ordinance on the eligibility of expenditure within the European Social Fund (Official Gazette 74/16),
- ✓ Ordinance amending the Ordinance on the eligibility of expenditure within the European Social Fund (Official Gazette 49/14, 14/16 i 74/16) - unofficial consolidated text,
- ✓ Ordinance on the eligibility of expenditures for projects of the Operational Program Effective Human Resources in the financial period 2014-2020 (Official Gazette 149/14),
- ✓ Ordinance on eligibility of expenditures for projects of the Operational Program Competitiveness and Cohesion in the financial period 2014-2020 (Official Gazette 143/14),
- ✓ Ordinance amending the Ordinance on the eligibility of expenditure under the European Social Fund (Official Gazette 14/2016),
- ✓ General conditions applicable to projects financed from the European Structural and Investment Funds in the financial period 2014-2020 - Annex II of the Grant Agreement,
- ✓ Pravila o provedbi postupaka nabava za ne obveznike Zakona o javnoj nabavi,
- ✓ Ordinance on the eligibility of expenses (Official Gazette 115/18),
- ✓ Ordinance amending the Ordinance on eligibility of expenses (Official Gazette 6/2020),

Figure 6 shows the institutional framework of the Republic of Croatia for the implementation of operational programs in the current programming period 2014-2020.

Figure 6: Institutional framework for operational program in current programming period 2014.-2020.



Source: Available at: <http://www.istra-europa.eu/>

The implementation of the innovative financial instrument is planned for the next programming period, 2021-2027. Given that no information is available on possible changes in the institutional framework for managing ESI Funds in the Republic of Croatia for the next programming period, the key elements of the investment strategy are based on the legislative basis currently in force.

6.2. Defining the scale and focus of the financial instrument

Block 1 of this Ex-Ante assessment analyses in detail all relevant supply and demand factors, which determined the creation of an innovative financial instrument. From the resulting data, for projects aiming at improvement of EE and the use of RES, an innovative financial instrument was created, ie a hybrid model which, in addition to a loan with low interest rates, includes the payment of grants as "rewards"/incentives to entrepreneurs to contribute to achieving EU energy and environmental goals. Namely, as shown by the results of statistical analysis of the use of Community financial instruments and grants, and the results of conducted surveys, the right measures or trigger that would encourage increased investment of SMEs in improving EE and use of RES in the Istrian County are grants combined with financial instrument/loan. A reasonable percentage of the grant (up to a maximum of 30.0% of the total eligible project costs) in this hybrid model will significantly increase the use and absorption of financial instruments, which will directly result in increasing the number and amount of investments, achieving local SEAP goals and relevant energy and environmental objectives at EU level.



The innovative financial instrument in question represents a combination of classical financial instrument/loan with a share of at least 70,0% and a grant with a share of up to 30.0% for projects aiming at the improvement of EE and use of RES.

The source of funding the pure financial instrument (in this context the loan) is in the program InvestEU (after termination of the use EFSI), while the sources of the grant are the following:

- ✓ grants from ERDF,
- ✓ national contribution I (central government funds),
- ✓ national contribution II (local and regional authorities funds).

Table 10 shows the expected impact of using an innovative financial instrument in the Istrian County in the programming period 2021-2027.

Table 10: Number and amount of investments in the improvement of EE and the use of RES in the area of Istrian County in the period from 2021 to 2027 (according to sources of financing in 000 kuna)

Position	2021	2022	2023	2024	2025	2026	2027	UKUPNO
Number of undertakings/investors in the area of Istrian County								
Number of undertakings/investors	43	43	43	43	43	43	43	302
Total	43	43	43	43	43	43	43	302
Source of funding								
Financial instrument/loan	14.800	14.800	14.800	14.800	14.800	14.800	14.800	103.598
Grant	6.343	6.343	6.343	6.343	6.343	6.343	6.343	44.399
Total								
TOTAL	21.142	21.142	21.142	21.142	21.142	21.142	21.142	147.997

Source: Author, 2020.

As shown in Table 10, the use of an innovative financial instrument in the next programming period in the Istrian County will implement 302 investments in the improvement of EE and the use of RES, with a total gross value of 147,997 million kuna.

It is important to point out that the share of co-financing of applicants / users of the innovative financial instrument "de facto" is on average 70.0% of the value of the investment. This allows re-use of the same funds (after return) to entrepreneurs in the future, ie retains the key feature of the financial instrument - "Reproducibility".

In addition to increasing the number and amount of investments in EE improvement and the use of RES as a precondition for reducing CO2 emissions, reducing energy losses, increasing the share of RES, achieving targets of energy action plans and finally achieving EU energy and environmental goals, the focus of the Ex- Ante also estimates finding a model that would significantly contribute to increasing the absorption capacity of the Republic of Croatia in terms of using Community assistance (grants and financial instruments), and new jobs, reducing unemployment, increasing employment, reducing operating costs of SMEs, increasing competitiveness SMEs, etc.



Therefore, the conceptualization of an innovative financial instrument is an immanent and innovative implementation model that implies the creation of a decentralized institutional framework for operational implementation.

The European Commission has also recognized that simplification of procedures, reduction of bureaucratic obstacles and decentralization are among the important factors in increasing the effectiveness of cohesion policy. In the communication of the European Commission „*A Modern Budget for a Union that Protects, Empowers and Defends - The Multiannual Financial Framework for 2021-2027.*“ from 2.5.2018. numerous findings and knowledge about the necessity of defining a different, simpler and more efficient approach to use cohesion policy instruments in the next programming period are listed. A simpler and more effective approach to implementation will be a key element of the proposed new regulations, with the following changes from 2021:

- ✓ **Reduced administrative burden through synergies and the alignment of implementing rules across funds**, increased cross reliance on audits and the possibility to roll-over existing management and control systems;
- ✓ **Differentiated implementation via lighter management and control systems for programmes with good track records**;
- ✓ **Flexibility in the form of a mid-term review to adjust**, if necessary, the priorities of the last programming years to address emerging priorities, take stock of progress in addressing investment-related guidance issued alongside the Country-Specific Recommendations and performance;
- ✓ **Increased use of financial instruments**, including through a voluntary participation in the new InvestEU Fund;
- ✓ **A focus on results rather than costs.**²⁵

This especially refers to the InvestEU fund, i.e. the use of financial instruments and their combination with grants. In that document, the European Commission states the following:

- ✓ **„The EU long term goals regarding sustainability, competitiveness and inclusive growth require significant investments in new mobility models, renewable energies, energy efficiency, research and innovation, digitisation, education and skills, social infrastructure, circular economy, natural capital, climate action or small businesses creation and growth.** Renewed efforts are needed to tackle persisting market failures caused by private investors' risk aversion, the public sector's limited capacity and structural inefficiencies of the investment environment. Member States cannot always bridge those investment gaps alone. Grants alone cannot address the significant investment gaps. **The use of financial instruments, with a leverage effect and closer to the market, efficiently complements grants in the EU budget toolbox. Intervention at Union level provides economies of scale in the use of innovative financial instruments by catalysing private investment in the whole EU and making best use of the European institutions and their expertise for that purpose.** EU intervention also gives access to a diversified portfolio of European projects and allows for the development of innovative financing solutions which can be scaled up or replicated in all Member States. The multiplying effect and the impact on the ground are thus much higher than what could be achieved by an initiative in a single Member State, in particular for large-scale investment programmes. EU level intervention also provides flexibility to support intermediaries and final beneficiaries in locations where they are most needed, often in

²⁵ European Commission, COMMUNICATION FROM THE COMMISSION- A Modern Budget for a Union that Protects, Empowers and Defends - The Multiannual Financial Framework for 2021-2027., Brussels, 2018.



urban areas which do not necessarily benefit from the European Structural and Investment Funds. In addition, it allows to effectively address investment needs linked to EU-wide policy objectives, **complementing efforts to promote structural reforms and improved regulatory environment to thus address the remaining investment gaps in the post-2020 period...**

- ✓ ...The InvestEU Fund will pool all centrally managed financial instruments in a single, flexible, multi-policy guarantee instrument at the EU level, allowing for significant economies of scale - doing more with less - and attracting private investors. Building on the European Fund for Strategic Investments, the InvestEU Fund will address market gaps and sub-optimal investment situations by providing an EU guarantee to the Commission's strategic implementing partner, the EIB Group, as well as to other partners such as National Promotional Banks and Institutions or International Financial Institutions (e.g. the European Bank for Reconstruction and Development). To ensure the best possible financing mix for strategic projects across the EU, **the InvestEU Fund will allow for simple combination with grants from the EU budget as well as with European Structural and Investment Funds (on voluntary basis)...**
- ✓ As a delivery tool for EU policies, the InvestEU Fund will foster investment in full synergy with the corresponding EU policies and programmes, such as the Connecting Europe Facility, Horizon Europe, the Digital Europe Programme or the Single Market Programme. It will ensure complementarity with investments under the European Structural and Investment Funds and with EU support provided by relevant spending programmes in the form of grants. **Moreover, the programme will allow for the blending of financial instruments with grants from other programmes, in particular for projects that do not generate sufficient revenue.**²⁶

The investment strategy in question, the scale and focus of the innovative financial instrument, as well as the Ex-Ante in general, in addition to the stated intentions of the European Commission, also take into account the findings of the European Court of Auditors from the report „*Implementing the EU budget through financial instruments - lessons to be learnt from the 2007-2013 programme period*“. In the Report, the European Court of Auditors states a number of reasons for the relative failure of financial instruments in the previous programming period, which can be summarized as follows:

- ✓ Low disbursement rates due to excessive initial endowment of financial instruments,
- ✓ Market needs were not always properly assessed by managing authorities before funds were allocated to ERDF and ESF financial instruments (the average use was only 57.0% of the entire capital that was paid to financial instruments from the operational programs),
- ✓ In nearly half of the cases examined, market needs had been assessed too high
- ✓ ERDF and ESF financial instruments are significantly smaller than centrally managed funds or private investment funds,
- ✓ Delays in the implementation significantly shortened the actual investment period of several ERDF and ESF financial instruments,
- ✓ Cumulative management costs and fees reach up to 75 % of the financial support disbursed to final recipients,

²⁶ European Commission, COMMUNICATION FROM THE COMMISSION- A Modern Budget for a Union that Protects, Empowers and Defends - The Multiannual Financial Framework for 2021-2027., Brussels, 2018.



- ✓ Significant differences in the management costs and fees between the different types of financial instruments,

As regards financial instruments, improvements were made in the legal framework for the 2014-2020 programme period based on the expertise gained during the 2007-2013 programme period, but certain issues remained.²⁷

6.3. Defining the governance structure of the financial instrument

6.3.1. Preference analysis of FI users in Istrian County

To create an effective and efficient strategy for governing an innovative financial instrument, in addition to institutional, administrative and legal aspects, it is necessary to analyze the preferences of target users arising from problems in regular business, but also the experience of cooperation and communication with local public authorities.

Although scientific research on the level of communication and trust of Croatian entrepreneurs in institutions is currently not available, research by the general public²⁸ indicates a very low level of trust in many institutions. 10.0% of citizens trust the government and public administration, and only 8.0% trust political institutions such as Parliament. According to the research, one of the key reasons for the extremely low level of trust is the lack of communication between the public administration and institutions with citizens. The same can be assumed for entrepreneurs who also appear in the social role of citizens. With the aim of making a comprehensive analysis of the capacity for the implementation of the financial instrument within the survey for the development of Block 1 and Block 2, a set of questions was included to assess problems in current operations, and the quality of communication and trust of entrepreneurs in local government institutions in the Istrian County (see Annex 1 and Annex 2).

A survey of Istrian entrepreneurs was conducted on a sample of 23 entrepreneurs. Response rate was below a satisfactory level. The research was carried out 35 days, and directly and indirectly (through associations of undertakings and craftsmen, cities, municipalities and other institutions) contacted more than 180 businesses, a response was only 12.78%. As reasons for the small response can be:

- ✓ lack of time,
- ✓ lack of interest for participation in the survey,
- ✓ insufficient quality communication with the public sector,
- ✓ distrust of public sector institutions, etc.

The biggest concerns for Istrian entrepreneurs in their regular business are:

1. administrative and bureaucratic obstacles with an average grade 3,87,

²⁷ European Court of Auditors, Special report - Implementing the EU budget through financial instruments - lessons to be learnt from the 2007-2013 programme period., Luxembourg, 2016.

²⁸ Values in Croatia from 1999 to 2018 according to European Values Study, 2019.

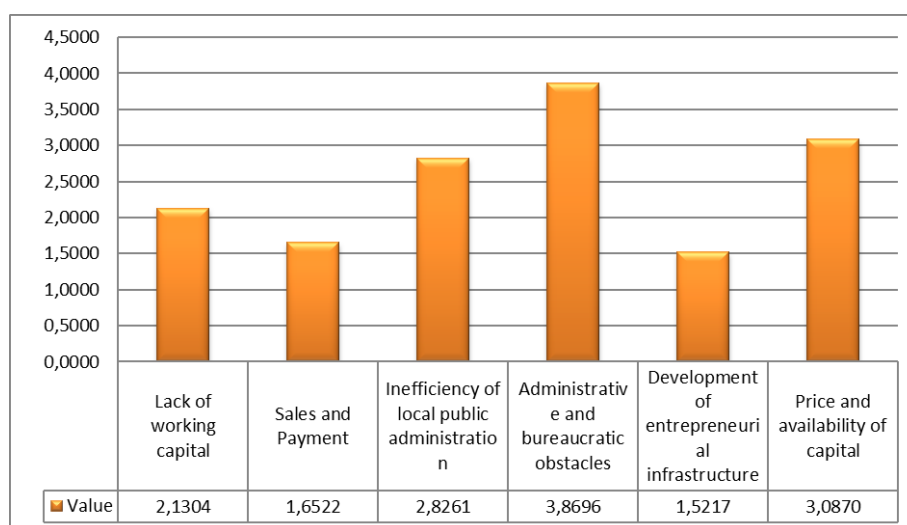


2. cost and availability of capital with an average grade of 3,09,
3. inefficiency of local public administration with an average grade of 2,83,
4. lack of working capital with an average grade of 2,13.

Smallest concerns for Istrian entrepreneurs in their regular business are:

1. sales and payment collection with an average grade of 1,65,
2. development of business infrastructure with an average grade of 1,52.

Chart 20: Business problems of Istrian entrepreneurs



Source: Survey, 2019, Author

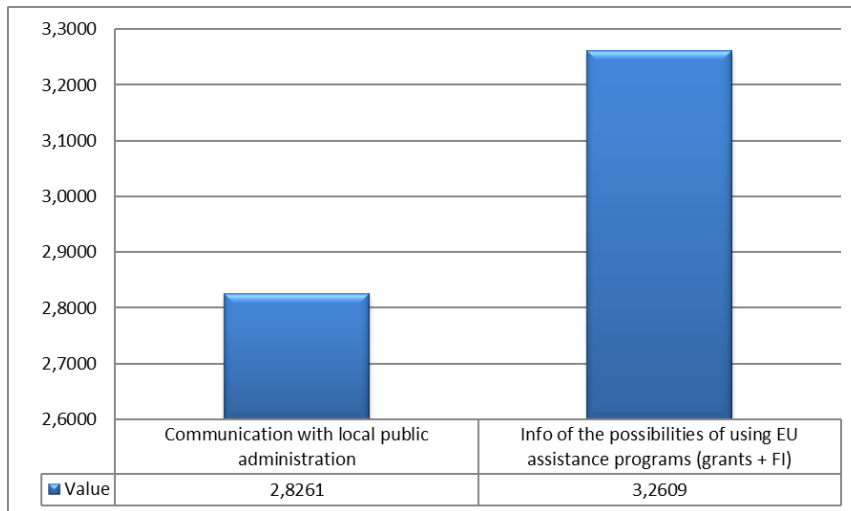
According to Chart 20, administrative and bureaucratic obstacles are the biggest problems in the business of Istrian entrepreneurs. This confirms the conclusions from Block 1 that the implementation of an innovative financial instrument is necessary to simplify administrative processes. Basically, the simplification of administrative and bureaucratic processes implies the following effects:

- ✓ reducing the number of bodies involved in the preparation and implementation of an innovative financial instrument,
- ✓ quality dissemination of information and improvement of communication with applicants,
- ✓ simple and concise project application (eligible applicants and partners, eligible and ineligible costs, project implementation time, public procurement, etc.),
- ✓ time-acceptable duration of project proposal evaluation and decision-making on project proposal financing (as short as possible),
- ✓ simple control and audit processes.

If the level of communication of Istrian entrepreneurs with the local public administration is exclusively observed, it can be assessed as good (average grade is 2,8). Entrepreneurs awareness of the possibilities from the EU programmes was evaluated also good (average grade of 3,26).



Chart 21: Quality of communication of Istrian SMEs with local public administration



Source: Survey, 2019, Author

Based on the above results of the survey, it can be concluded that there is a significant space and opportunity to improve the quality of communication of local institutions to entrepreneurs. Therefore, it is necessary to improve the quality of communication through new communication channels, and to hold trainings in the field of communication skills and technologies for employees of local institutions.

Regarding the results of the analysis of issues related to problems in the regular business of entrepreneurs, it is clear that administrative and bureaucratic obstacles are cited as the biggest business problem, greater even than the price and availability of capital, or sales and collection.

As mentioned above, for the successful implementation of this financial instrument, it is necessary to minimize administrative and bureaucratic activities in the whole process, especially taking into account the expressed low preferences of Istrian entrepreneurs to invest in EE and RES (see Block 1). Improving communication with entrepreneurs and minimizing administrative and bureaucratic procedures, can significantly contribute to increasing the demand of entrepreneurs for the financial instrument in question, i.e. increase the number and amount of investments in EE and RES in Istria in the coming period.

6.3.2. Administrative capacity analysis of potential stakeholders

Institutional framework for the use of ESI funds in the programming period 2014-2020 is determined by the *Act on the Establishment of the Institutional Framework for the Implementation of the European Structural and Investment Funds in the Republic of Croatia in the Period 2014-2020 (OG 92/14)*. The law establishes a system of management and control. Management and control of the use of funds from ESI funds are defined by the following regulations:

- ✓ *Regulation concerning the bodies in the system of management and control of the use of the European Social Fund, the European Regional Development Fund and the Cohesion Fund, regarding the objective, "Investment for growth and jobs" (OG 107/14, 23/15, 129/15 and 15 / 17 and correction 18/17),*



- ✓ *Regulation concerning the bodies in the management and control systems for the implementation of the programs supporting the objective of "European Territorial Cooperation" in the financial period 2014-2020.*

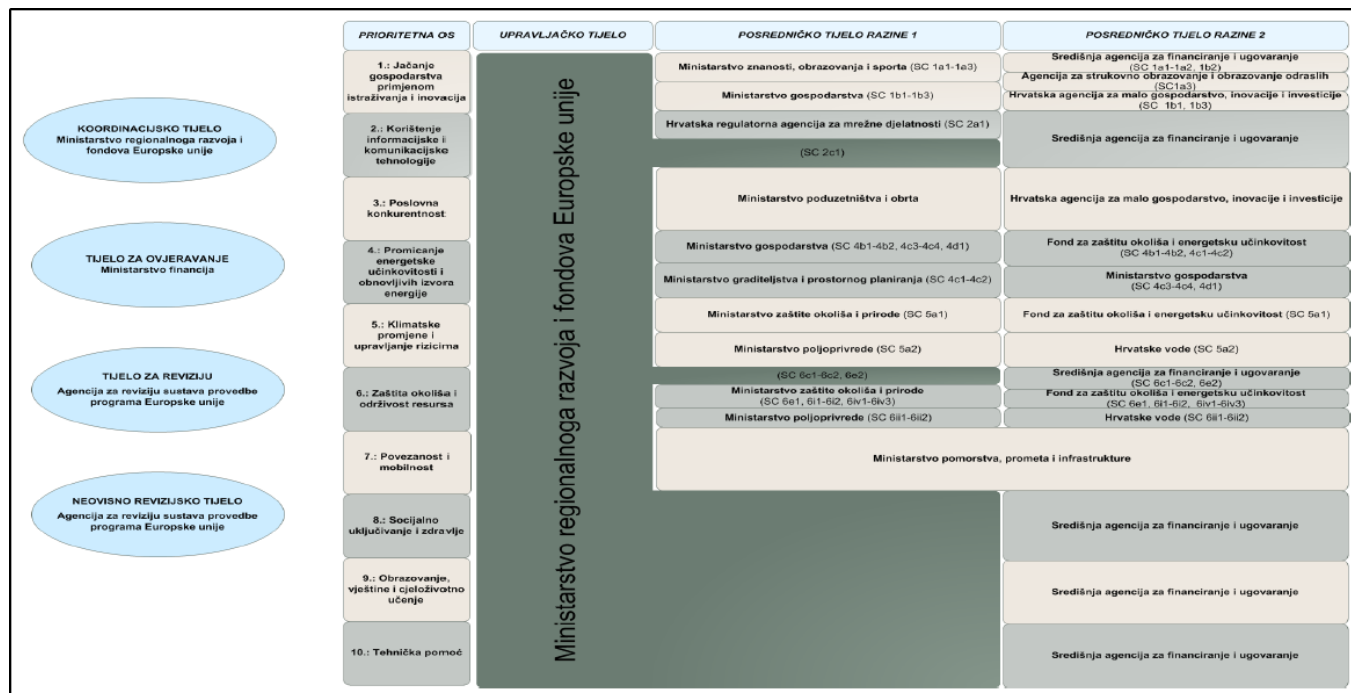
The institutional framework of the EU funds management system has been defined in accordance with the aforementioned legislative framework in the Republic of Croatia.

The key bodies of the EU funds management system are:

- ✓ **Managing Authority** - the main activities of this body are: implementation and monitoring of the OP, and supervision of delegated functions,
- ✓ **1st level Intermediate body** - basic activities of this body are: programming, selection of operations, preparation of tender documentation for project selection contracting, participation in project selection and monitoring of projects within its competence or the relevant OP,
- ✓ **2nd level Intermediate body** - the main activities of this body are: participates in the preparation of tender documents, support the 1st level Intermediate Body in the selection of operations and projects, administrative and physical verification of eligibility of costs, communication with beneficiaries, and control of project implementation,
- ✓ **Coordination body** - the basic activities of this body are: coordination of the programming process and the establishment of a single legal framework, rules of procedure and IT systems,
- ✓ **Authority for certification of expenditures** - the main activities of this body are: certification of statements of expenditure and requests for payments before their submission to the EC, and supervision of irregularities,
- ✓ **Audit body** - this body is functionally independent of the Managing Authority and the Certifying Authority, and the basic activities are: control and verification of the effective functioning of the management system, and control of the use of structural instruments.

Figure 7 shows the institutional management system of EU funds in the current programming period in the Republic of Croatia.

Figure 7: Institutional management system of EU funds in the current programming period in the Republic of Croatia



Source: Institutional framework for the financial period 2014-2020. - Operational Program “Competitiveness and Cohesion”, Ministry of Regional Development and European Union Funds, 2015. (Available at: <http://arhiva.strukturnifondovi.hr/UserDocsImages/Novosti/Helga%20B.D.%20prezentacija%20final.pdf>)

In accordance with the stated institutional framework of the EU funds management system in the Republic of Croatia, the organizational and administrative capacities of potential stakeholders in the implementation of an innovative financial instrument are briefly analysed in following text.

6.3.2.1. Ministry of Regional Development and EU Funds

Ministry of Regional Development and EU Funds has been established by the Act on the Organization and Scope of Ministries and Other Central State Administration Bodies (OG 93/16 and OG 104/16). Ministry of Regional Development and EU Funds performs administrative and other tasks related to:

- ✓ planning and implementation of regional development policy and establishment of a comprehensive system of planning, programming, management and financing of regional development,
- ✓ coordination of participants and activities related to planning, programming, implementation, monitoring and evaluation of annual and multi-annual regional development programs and projects aimed at the development of counties and wider regions, encouraging the development of areas lagging behind the national development average, encouraging cross-border, interregional and transnational cooperation as well as the preparation of priorities and multi-annual and annual strategic and operational documents for the use of European Union funds and other international sources of funding for regional development,
- ✓ proposing changes to the regional development management system,



- ✓ proposing and coordinating the implementation of state incentive measures and regional development programs and projects, as well as monitoring their implementation and evaluating their effects,
- ✓ coordinating and management of all intersectoral working groups related to regional development,
- ✓ coordinating of all tasks related to harmonization with the European Union in the field of regional policy and management of structural instruments,
- ✓ the Ministry is a holder of the Housing Program for aided and demographically endangered areas and the body responsible for monitoring the implementation of the this program,
- ✓ cooperation and coordination of the necessary activities with local and regional self-government units, as well as with other participants and stakeholders in the preparation, organization and implementation of development programs and projects,
- ✓ performing of administrative and other tasks related to: establishment and management of a comprehensive system of strategic development planning at the national level, coordination of the development of the national development strategy, taking into account compliance with objectives and priorities at the European Union level,
- ✓ preparation of strategic documents that regulate national development goals and priorities for the use of funds from the European Union and monitors the implementation of measures and activities set out in such strategic documents.
- ✓ coordination of activities related to the management of European Union programs open to the Republic of Croatia, and within its scope cooperates with the ministry responsible for finance and other competent ministries, as well as institutions and bodies of the European Union and the Member States,
- ✓ performing administrative and other tasks related to: sustainable development of the Adriatic Sea and islands,
- ✓ proposing development policy and establishing a comprehensive system of planning, programming, management and financing of island development, planning, drafting and implementation of strategic documents and projects of transport, communal and social infrastructure on the islands,
- ✓ initiation, harmonization and supervision of activities determined by acts and regulations focused on governing the development of the island,
- ✓ participation with the ministry responsible for state property management in the management and disposal of shares and business stakes of companies that constitute state property owned by the Republic of Croatia and in respect of companies that are mainly engaged in activities within the prescribed competence of this Ministry,
- ✓ performing administrative and other tasks related to participation in the work of European Union bodies in the areas within the competence of the Ministry,
- ✓ performing administrative and other tasks related to participation in the work of European Union bodies in the areas within the competence of the Ministry,
- ✓ performing all other tasks assigned to it by a special law.²⁹

The Ministry of Regional Development and EU Funds is responsible for monitoring the overall implementation of projects and programs financed from EU programs, as well as for monitoring the implementation of decisions and recommendations issued by the bodies supervising the monitoring of

²⁹ Available at: <https://razvoj.gov.hr/o-ministarstvu/djelokrug-1939/1939>



implementation. Also, the Office of the National Coordinator for Assistance and Cooperation with the European Union in the Strategic Planning Directorate performs the function of the Technical Secretariat of the Supervisory Board for Monitoring the Implementation of IPA in the Republic of Croatia and the Sectoral Monitoring Committee for Monitoring the Implementation of Component I of the IPA Programme.³⁰

Regulation on the internal organization of the Ministry of Regional Development and EU Funds (Official Gazette 128/19) governs the internal organization of the Ministry.

In accordance with this regulation, the following internal organizational units have been established.

1. Cabinet of the Minister
2. General Secretariat
3. Directorate for Finance and Information and Telecommunication Systems
4. Directorate for Strategic Planning and Coordination of EU Funds
5. Directorate for the Implementation of Operational Programs and Financial Instruments
6. Directorate for Regional Development, Coordination and Control of European Territorial Cooperation Programs
7. Directorate for Islands
8. Directorate for Assisted Areas
9. Directorate for Strategic Communication and Visibility of EU Funds
10. Independent Sector for strategic development management of the Republic of Croatia and coordination of investments from EU instruments
11. Independent Sector for Management of Interreg Cooperation Programs
12. Independent Internal Audit Service.

The exact number of employees in the Ministry of Regional Development and EU Funds is not publicly available, but the Regulation defines a total of 624 employees by organizational/organizational units. Therefore, we assume that the Ministry of Regional Development and EU Funds has between 600 and 650 employees.

6.3.2.2. Ministry of Economy, Entrepreneurship and Crafts

The focus of the Ministry of Economy, Entrepreneurship and Crafts is on creating an environment for simpler and cheaper business, relieving entrepreneurship, encouraging investment and innovation, digitalisation of the economy and free access to the EU internal market.

Within the scope of work, the Ministry of the Economy, Entrepreneurship and Crafts performs administrative and other tasks related to: development and improvement of the competitiveness of the Croatian economy, instruments and measures of economic policy; development of micro, small and medium enterprises; industrial policy and policy of application of innovations and new technologies;

³⁰ Available at: <https://razvoj.gov.hr/o-ministarstvu/djelokrug-1939/eu-fondovi/pracenje-provedbe-monitoring-i-vrednovanje-evaluacija/306>



industry improvement guarantee fund management; activities related to the application and use of intellectual and industrial property rights and the encouragement of creativity in industry and trade in order to develop the competitiveness of the Croatian economy; mining; a strategy to facilitate and encourage investment and exports.

The Ministry participates with other competent state administration bodies in the coordination of state property management strategy, including participation in the coordination of restructuring and rehabilitation of legal entities, preparation of analyses in restructuring procedures of companies owned by the Republic of Croatia and management of ownership shares in companies owned by the Republic of Croatia; trade in the internal market of the European Union; supply and prices; national coordination of activities in the internal market of the European Union, including technical legislation and quality infrastructure, coordination and development of national policy in the field of standardization, accreditation, conformity assessment and metrology; market situation and phenomena; consumer protection; strategic commodity stocks.

The Ministry performs administrative and other tasks related to the development, improvement and coordination of the public procurement system; improvement and development of the system of concessions in the area of its competence and supervision over its implementation, and improvement and development of the system of public-private partnership

The Ministry performs activities related to the participation of the Republic of Croatia in the work of European Union bodies in the areas within its competence.

The Ministry also performs other tasks assigned to it by a special law.³¹

In terms of the institutional framework for the implementation of operational programs and ESI Funds, the Ministry of Economy, Entrepreneurship and Crafts has the status of a 1st level Intermediate Body.

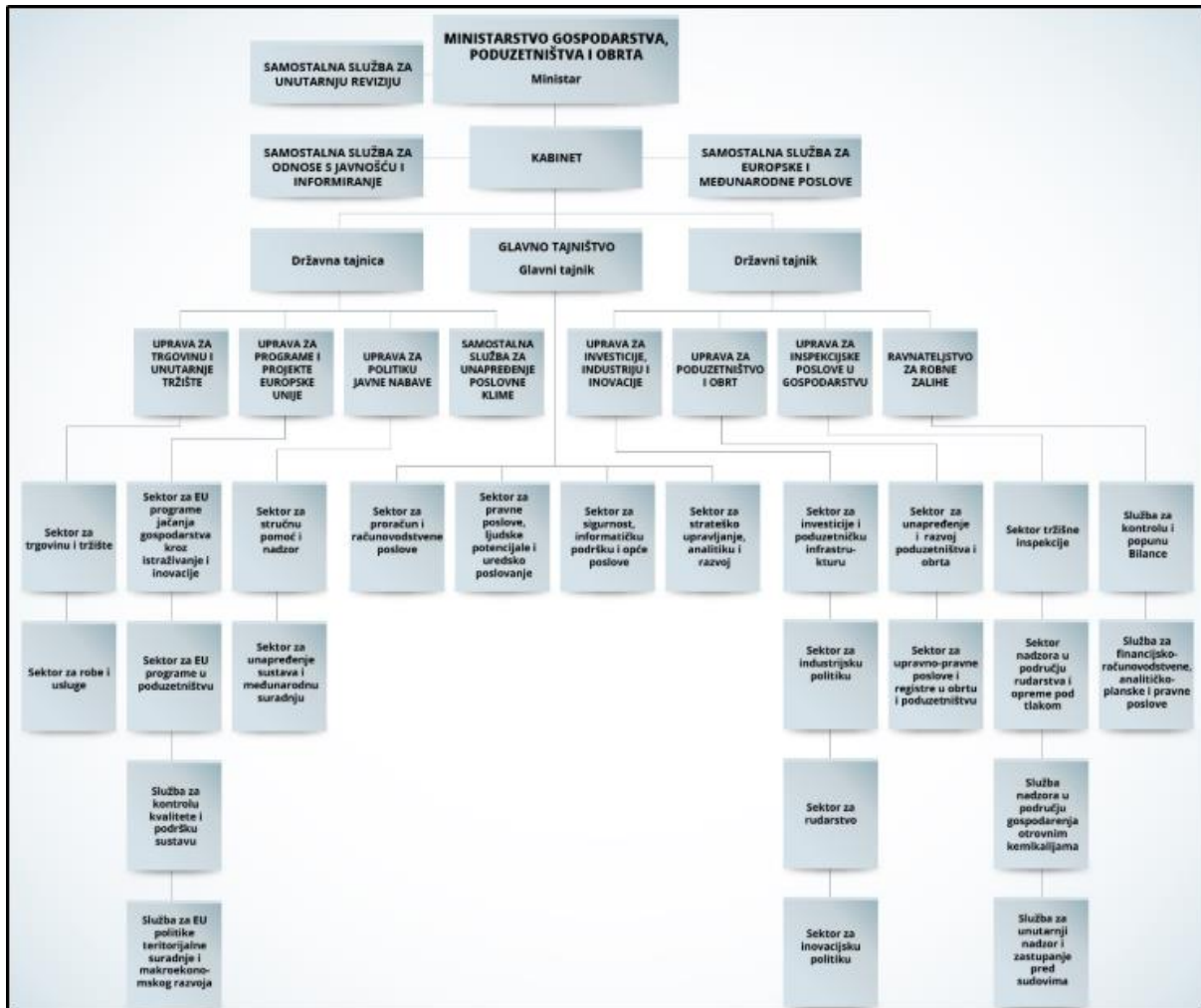
Regulation on the Internal Organization of the Ministry of the Economy, Entrepreneurship and Crafts (OG 14/2017) governs the internal organization of the Ministry, which consists of the following organizational units:

1. Cabinet of Ministers
2. General Secretariat
3. Directorate for Investments, Industry and Innovation
4. Directorate for Trade and Internal Market
5. Directorate for Entrepreneurship and Crafts
6. Directorate for European Union Programs and Projects
7. Directorate for Public Procurement
8. Directorate for Inspection Affairs in the Economy
9. Independent Internal Audit Service
10. Independent Public Relations and Information Service
11. Independent Service for European and International Affairs
12. Independent Service for improvement the business climate.

³¹ Available at: <https://gospodarstvo.gov.hr/o-ministarstvu/djelokrug/11127>

Figure 8 shows the organizational structure of the Ministry of Economy, Entrepreneurship and Crafts.

Figure 8: Organizational structure of the Ministry of Economy, Entrepreneurship and Crafts



Source: Available at: <https://gospodarstvo.gov.hr/o-ministarstvu/ustroj-ministarstva/86>

The exact number of employees in the Ministry of Economy, Entrepreneurship and Crafts is not publicly available, but the Decree defines a total of 642 employees by organizational/organizational units. Therefore, we assume that the Ministry of Economy, Entrepreneurship and Crafts has between 600 and 650 employees.

6.3.2.3. The Environmental Protection and Energy Efficiency Fund

The Fund for Environmental Protection and Energy Efficiency is a central place for collecting and investing extra-budgetary funds in programs and projects for environmental and nature protection, energy efficiency and the use of renewable energy sources.

In the system of management and control of the use of EU structural instruments in the Republic of Croatia, the Fund has the role of a 2nd level Intermediate Body for certain specific objectives in the field of environmental protection and resource sustainability, climate change, energy efficiency and renewable energy sources.



The Fund's activities include activities related to financing the preparation, implementation and development of programs and projects and similar activities in the field of preservation, sustainable use, protection and improvement of the environment and in the field of energy efficiency and use of renewable energy sources, in particular:

- ✓ expert and other tasks related to obtaining, managing and using the Fund's resources,
- ✓ intermediation related to the financing of environmental protection and energy efficiency from the funds of foreign states, international organizations, financial institutions and bodies, as well as domestic and foreign legal and natural persons
- ✓ maintaining a database of programs, projects and similar activities in the field of environmental protection and energy efficiency, and the necessary and available financial resources for their implementation,
- ✓ encouraging, establishing and realizing cooperation with international and domestic financial institutions and other legal and natural persons in order to finance environmental protection and energy efficiency in accordance with the National Environmental Strategy and National Environmental Action Plan, Energy Development Strategy and Energy Development Strategy Implementation Program, national energy programs, other programs and acts in the field of environmental protection and energy efficiency, and international agreements to which the Republic of Croatia is a party for the purposes determined by the provisions of the Law on the Fund for Environmental Protection and Energy Efficiency
- ✓ performing other tasks related to the promotion and financing of environmental protection and energy efficiency determined by the Statute of the Fund.³²

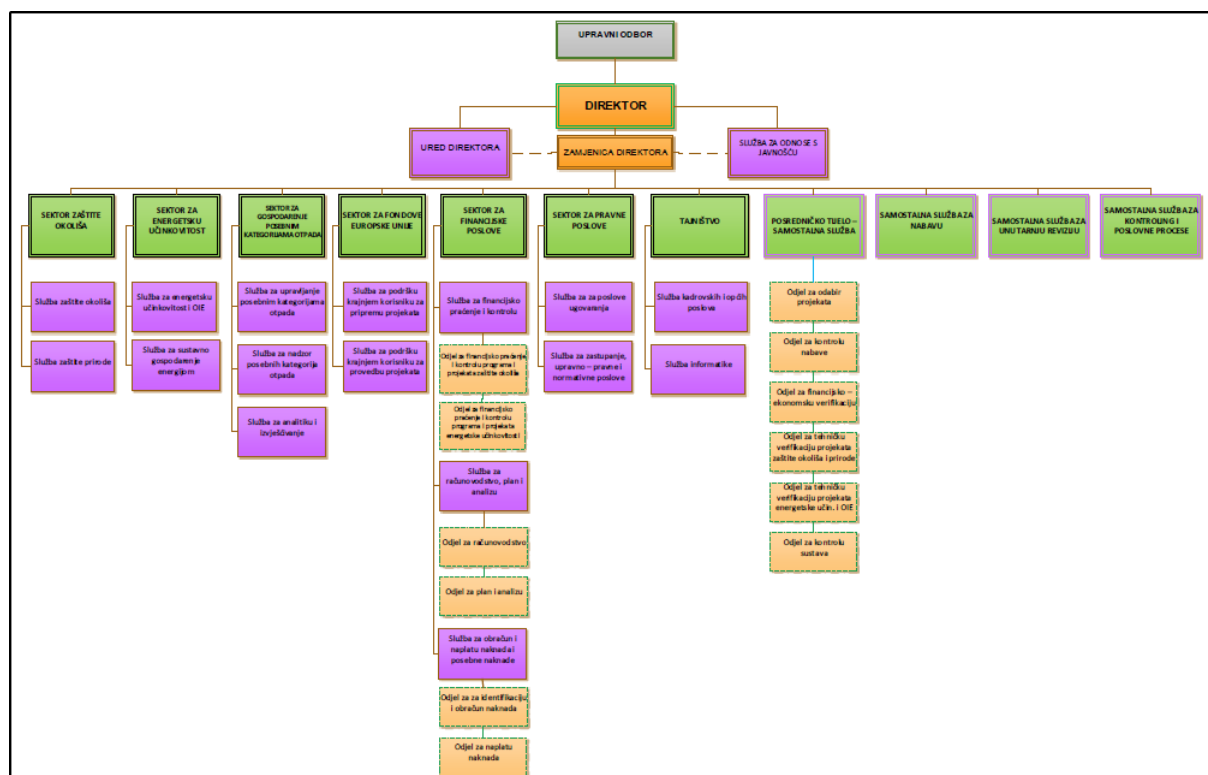
The bodies of the Fund are the Board of Directors and the Director of the Fund. The Board of Directors manages the Fund, and the Director represents the Fund. The Director manages the operations of the Fund and performs other tasks prescribed by the Law. Directors scope of authority and responsibilities are determined by the Statute of the Fund.³³

Figure 9 shows the organizational structure of the Fund for Environmental Protection and Energy Efficiency.

³² Available at: http://www.fzoeu.hr/hr/o_fondu/djelatnost_fonda/

³³ Available at: http://www.fzoeu.hr/hr/o_fondu/organizacijska_struktura/

Figure 9: Organizational structure of the Fund for Environmental Protection and Energy Efficiency



Source: Fund for Environmental Protection and Energy Efficiency (Available at: http://www.fzoeu.hr/docs/organizacijska_struktura_fzoeu_v1.pdf)

Data on the total number of employees in the Environmental Protection and Energy Efficiency Fund are not publicly available. According to media statements in 2019, the 2nd level Intermediate Body working on the evaluation, implementation and monitoring of EU employed an average of 130 people.

In the program period in question, the Fund for Environmental Protection and Energy Efficiency, as a 2nd level Intermediate Body, participates in the implementation of tenders financed from EU funds in the following areas:

- ✓ Waste management,
- ✓ Energy efficiency,
- ✓ Climate change,
- ✓ Protection of the environment and nature,
- ✓ Nature protection - Natura 2000

The Fund for Environmental Protection and Energy Efficiency also carries tenders financed by national grants in the field of:

- ✓ Environmental protection,
- ✓ Energy efficiency.

Beneficiaries of national grants can be (depending on the thematic area and eligibility of beneficiaries):

- ✓ Local and regional self-government units,
- ✓ State bodies and other public institutions,



- ✓ Companies,
- ✓ Craftsmen,
- ✓ Citizens (natural persons),
- ✓ Civil society organizations,
- ✓ Scientific organizations,
- ✓ Other.

Fund for Environmental Protection and Energy Efficiency issues tenders in following thematic areas:

- ✓ Energy efficiency in building sector,
- ✓ Renewable energy sources,
- ✓ Energy efficiency in transport,
- ✓ Public lighting,
- ✓ Energy efficiency in industry,
- ✓ Education, etc.,

It is important to point out that thanks to many years of experience in the preparation, evaluation and implementation of tenders, the Fund for Environmental Protection and Energy Efficiency is the public body with the greatest knowledge and experience in the Republic of Croatia, when it comes to EnU and OiE projects.

6.3.2.4. HBOR (Croatian Bank for Reconstruction and Development)

The Croatian Bank for Reconstruction and Development (HBOR) is a development and export bank of the Republic of Croatia whose main task is to stimulate the development of the Croatian economy. By lending, insuring exports against political and commercial risks, issuing guarantees and business consulting, HBOR builds bridges between entrepreneurial ideas and their achievements with the aim of strengthening the competitiveness of the Croatian economy.

The Croatian Bank for Reconstruction and Development (HBOR) was established on 12th June 1992 with the enactment of the Croatian Credit Bank for Reconstruction (HKBO) Act (OG 33/92). Amendments to enactment were published in OG 76/93, 108/95, 08/96. In December 1995, the Bank changed its name to the Croatian Bank for Reconstruction and Development.

The founder and 100% owner of HBOR is the Republic of Croatia, while the share capital is determined by law in the amount of 7 billion HRK, which dynamics of payment from the State Budget is determined by the Government of the Republic of Croatia.

HBOR's core activities are:

- ✓ financing the reconstruction and development of the Croatian economy,
- ✓ financing of infrastructure,
- ✓ promotion of export,
- ✓ support for the development of small and medium enterprises,



- ✓ encouraging environmental protection,
- ✓ exports insurance of Croatian goods and services against non-market risks.

Within these activities, HBOR places a number of different financial instruments on the market; loans, guarantees, credit insurance for export, etc. According to the financing agreement by the Ministry of Regional Development and EU Funds, the Croatian Bank for Reconstruction and Development is responsible for the implementation of financial instruments in the current programming period. Thus, HBOR in cooperation with the Managing Authority and intermediary bodies in the current programming period:

- ✓ ESIF Loans for growth and development,
- ✓ ESIF Loans for energy efficiency in public sector,
- ✓ ESIF Loans for public lighting,
- ✓ Investment loans for rural development.

Also, in cooperation with the European Investment Fund, it proactively participates in venture capital funds:

- ✓ FRC2 Croatia Partners SCSp,
- ✓ CROGIP.

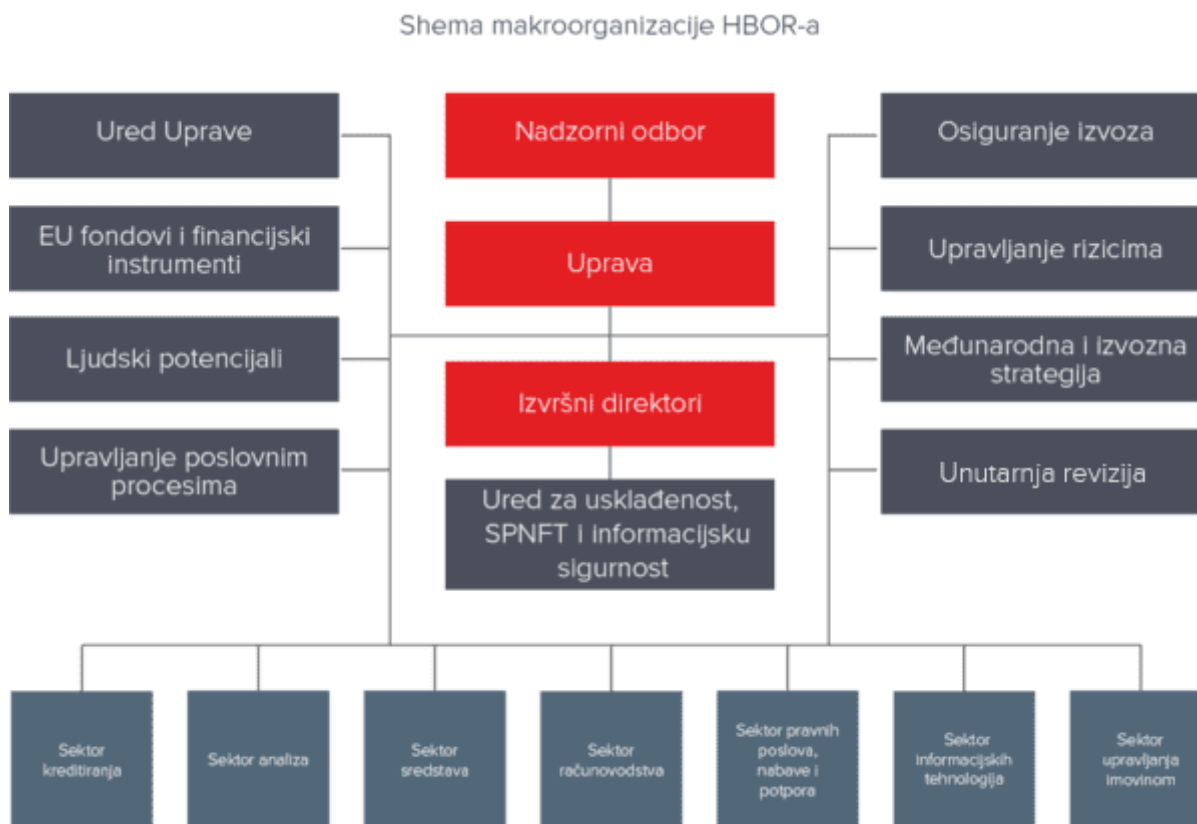
HBOR is a member of many international associations in the field of finance, and actively cooperates with the EIB, EBRD, WB, EIF, CEB and OECD.

Organizationally, HBOR covers the entire territory of the Republic of Croatia by regions;

1. Regional Office for Dalmatia,
2. Regional Office for Istria,
3. Regional Office for Lika,
4. Regional Office for Primorje and Gorski kotar,
5. Regional Office for Northwestern Croatia,
6. Regional Office for Slavonia and Baranja.

Figure 10 shows a diagram of HBOR's macro organization.

Figure 10: HBOR's macro organization



Source: <https://www.hbor.hr/naslovnica/hbor/o-nama/>

In the first quarter of 2020, HBOR employed an average of 370 employees.

According to the Business Strategy of the Croatian Bank for Reconstruction and Development for the period 2020-2024, one of the strategic goals is:

Encouraging a climate and energy neutral economy through energy efficiency, renewable energy sources and environmental protection

Namely, the accelerated growth and development of the global economy, along with a number of positive aspects, brings also some negative elements. Reducing the negative climate and environmental consequences of economic growth and development is one of the basic goals of the European Union and a global goals in general. Although the Republic of Croatia has met the current national and EU targets regarding the use of renewable energy sources, the planned further strengthening of the share of renewable energy sources in the EU energy sector poses a new challenge for the Republic of Croatia. Unlike the production of energy from renewable sources, in the field of energy efficiency, the Republic of Croatia has a high energy intensity that should be reduced by investing in energy efficiency of buildings (public and private), transport and industry. Taking into account modern EU trends and strategic long-term vision of a prosperous, modern, competitive and climate-neutral national and EU economy, HBOR, in cooperation with other relevant institutions and entities, will provide stronger support to public and



private institutions in the next five years in the promotion of energy efficiency, renewable energy sources and environmental protection as basic preconditions for sustainable national and global development.³⁴

6.3.2.5. Istrian County

The Istrian County is determined by the Law on the Territories of Counties, Cities and Municipalities in the Republic of Croatia, as one of the 20 Croatian counties. The constituent session of the County Assembly of the Istrian County was held on April 16, 1993 in Pazin. In accordance with the provisions of the Law on Local and Territorial (Regional) Self-Government Act (Official Gazette no. 33/01, 60/01 and 106/03), a county is a unit of regional self-government whose area represents a natural, historical, traffic, economic, social and self-governing whole, and is organized for the purpose of performing activities of regional interest.

In its self-governing scope, the Istrian County performs tasks of regional significance, and especially tasks related to:

- ✓ education,
- ✓ health,
- ✓ spatial and urban planning,
- ✓ economic development,
- ✓ planning and development of a network of educational, health, social and cultural institutions.

Administratively, the County of Istria is divided into 41 territorial units of local self-government - into 10 cities and 31 municipalities. The seat of the Istrian County and the Assembly of the Istrian County is in Pazin.

Administrative bodies of the Istrian Region are administrative departments and Region's services established for the performance of works in the self-governing domain of the Region, as well as for the performance of works of state administration transferred to the Region. Their establishment is regulated by the general act in accordance with the law and the Statute. Administrative bodies are managed by Heads nominated by the Government on the basis of a public competition. Administrative bodies closely collaborate with town and municipality administrations, pass information to each other, collaborate with legal persons in the domain they were established for, coordinate their work, and commonly prepare professional background for the decision-making process of the President, the Government, and the Regional Assembly. They directly perform and monitor the implementation of the decisions of the Regional Assembly, the decisions of the Government, and individual acts of the President. In this sense, they take concrete measures with the objective of harmonious functioning, improvement, and the development of the work they were established for. The County has the following administrative bodies that perform various tasks within their scope of work;

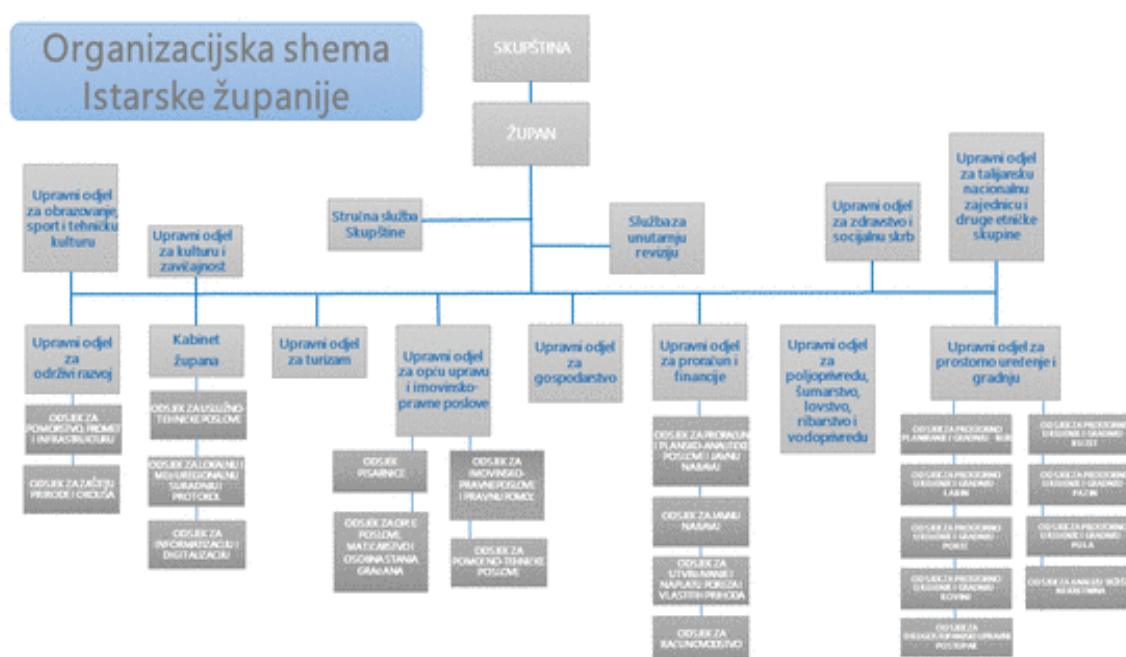
- ✓ Professional Service of the Assembly
- ✓ Internal Audit Service
- ✓ Cabinet of the County president

³⁴ Business strategy of the Croatian Bank for Reconstruction and Development for the period 2020. - 2024., Available at: https://www.hbor.hr/wp-content/uploads/2020/02/HBOR_Strategija-poslovanja-2020.-2024-1.pdf

- ✓ Administrative Department for Sustainable Management
- ✓ Administrative Department for Education, Sports and Technical Culture
- ✓ Administrative Department for Health and Social Care
- ✓ Administrative Department for Budget and Finances
- ✓ Administrative Department for Agriculture, Forestry, Hunting and Water Management
- ✓ Administrative Department for Tourism
- ✓ Administrative Department for the Italian National Community and other Ethnic Groups
- ✓ Administrative Department for Decentralization, Local and Territorial (regional) Self-government, Spatial Planning and Construction
- ✓ Administrative Department for Culture
- ✓ Administrative Department for Economy
- ✓ Administrative Department for General Administration and Property-Legal Affairs.³⁵

Figure 11 shows the organizational structure of the Istrian County.

Figure 11: Organizational structure of the Istrian County



Source: <https://www.istra-istria.hr/index.php?id=469>

³⁵ Available at: <https://www.istra-istria.hr/index.php?id=2>



Through the presented administrative bodies, the Istrian County manages partially or completely the work of 76 institutions and foundations, and 10 companies.

On 31.12.2018., a total of 170 employees were employed in the administrative bodies of the Istrian County.³⁶

As a result of public administration reform measures in the Republic of Croatia, in 2019 many tasks were decentralized and transferred to lower county levels. In addition to the work of the central State Administration Office, their employees were also transferred to the counties. This is the case in the County of Istria from 01.01.2020. For this reason in the County of Istria from 1.1.2020. the number of employees in the administrative bodies of the County increased by 128 employees or by 75.3%.

In the context of the optimal model of the strategy for managing an innovative financial instrument, the most important public body of the Istrian County is the Administrative Department for the Economy.

The Administrative Department for the Economy of the Istrian County performs tasks in the field of regional development, namely the preparation of strategic documents, cooperation with state administration bodies, municipalities, cities, counties and other entities, and implementation of regional development policy programs and projects in accordance with national and European regional development policies. It prepares the concept and strategy of economic development, conditions for market operation, monitors current economic trends, monitors commodity reserves, acts in the direction of balanced economic development of all parts of the County, especially those lagging behind in economic development. Performs activities in the field of energy, monitors the development of strategic documents at the level of the Republic of Croatia, cooperation with competent authorities, and coordinates the implementation of programs and projects of regional energy policy in accordance with national and European policies in the field of energy.

In particular, it monitors the situation and undertakes activities to achieve conditions for the development of dominant industries, development of entrepreneurship, investments of importance to the County, ensuring conditions for investments of foreign partners and economic relations with foreign partners, nominates and monitors projects co-financed by EU and state funds from the area of competence, and ensuring financial, technical and personnel prerequisites for their preparation and implementation, monitors the situation and achieves conditions for the development of companies owned and co-owned by the County within the competence of the administrative department. Analyzes the situation and current issues of individual economic activities and other economic policy issues, collects data, prepares analyzes, proposes measures, proposes public-private partnership projects, etc. Participates in the organization of professional and economic events and promotions, and exhibitions of professional organizations, associations of innovators and economic operators.³⁷ Tasks from the self-governing scope are performed at the headquarters of the department in Pula, and entrusted state administration tasks are performed at separate workplaces (at the locations of previous Branches) in:

- ✓ Pula-Pola,
- ✓ Poreč-Parenzo,
- ✓ Rovinj-Rovigo,
- ✓ Umag-Umag,

³⁶ Public administration at your service - Statistical presentation of the Ministry of Administration - Number 14., 2019.

(Available at:

https://uprava.gov.hr/UserDocsImages//Statisti%C4%8Dki%20prikaz//Statisti%C4%8Dki%20prikaz%20broj%2014.%20_%20finalni.pdf)

³⁷ Decision on the organization and scope of administrative bodies of the Istrian County (Available at: https://www.istra-istria.hr/fileadmin/dokumenti/novosti/sjednice_skupstine_2009/04/04-05.pdf)



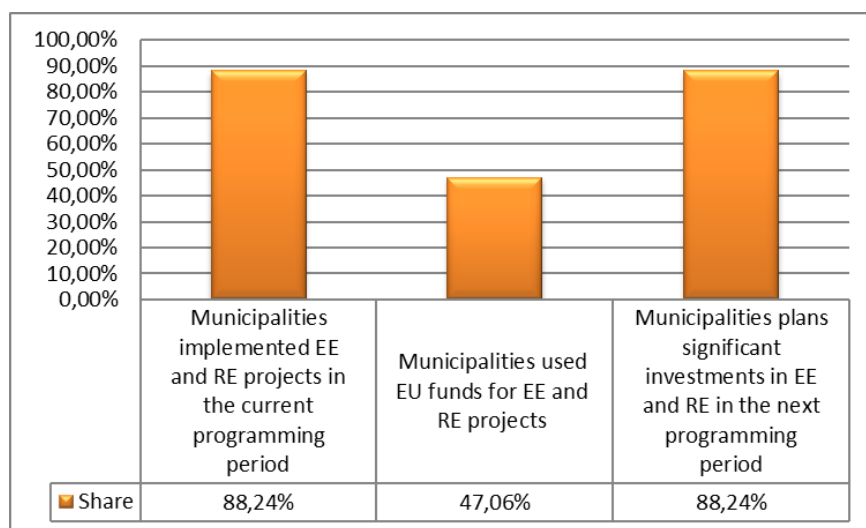
- ✓ Labin,
- ✓ Pazin and
- ✓ Buzet.

In the previous period, a total of 1.069 projects with a total value of EUR 493,10 million were implemented or are being implemented by the Istrian County, county agencies and institutions, cities and municipalities, scientific and other institutions, non-governmental organizations and economic entities.³⁸

For the purposes of the Ex-Ante assessment, a survey was conducted by the Local Self-Government Units in the Istrian County and the Istrian County in order to further analyze the implementation capacities and quality of communication between public bodies and Istrian entrepreneurs, as far as possible. Which is extremely important for choosing the optimal model of management strategy for an innovative financial instrument.

In the previous period, 88.24 local self-government units in the Istrian County implemented EE and RES projects, with 47,06 of them using Community grants for the implementation of EE and RES projects.

Chart 22: Municipalities that have implemented and intend to implement EE and RES projects, with the use of EU funds



Source: Survey, 2019, Author

88,24% of local self-government units in the Istrian County are planning significant investments in EE and RES in the next programme period.

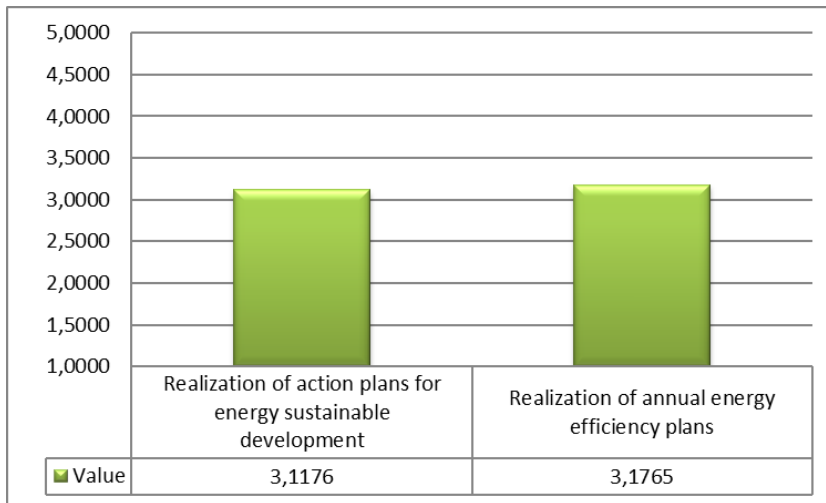
If we observe the results of the analysis from Block 1, which refer to the achievement of energy savings targets³⁹ and the opinions of local self-government units representatives (Chart 22), a certain level of discrepancy is evident. Namely, although the statistical analysis revealed a significant inconsistency between the planned annual measures, the amount of implementation measures costs, energy savings and CO2 emissions, with the achieved values, representatives of local governments assessed the implementation of energy plans with an average score of 3,12 and 3,17.

³⁸ Available at: <https://euprojekti.istra-istria.hr/>

³⁹ Block 1, page 16/17



Chart 23: Assessment of achieving the goals of energy plans in the Istria County



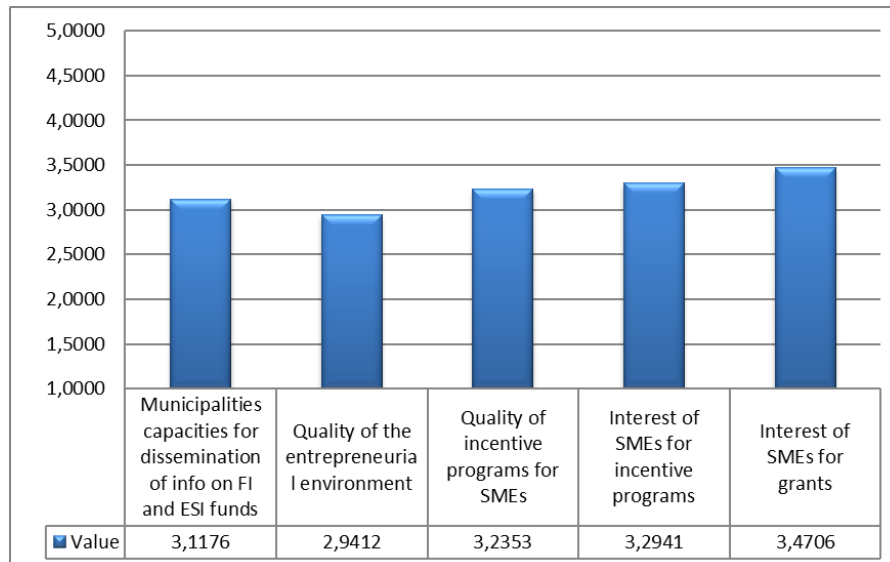
Source: Survey, 2019, Author

The stated differences between the attitudes of the representatives of local self-government units and specific indicators of energy savings in relation to the defined goals, do not necessarily indicate a high level of subjectivity and lack of information. Namely, 88.24% of representatives implemented EE and RES projects in the previous period, of which 47.06% were financed by Community grants, which indicates that the representatives of local self-government units are to some extent familiar with the thematic area of EE and RES. Therefore, it is primarily necessary to take into account all the specifics of EE and RES, especially when it comes to achieving positive effects which are reflected in the reduction of energy consumption, reduction of harmful gas emissions and environmental protection. That is why there is a public body such as The Environmental Protection and Energy Efficiency Fund at the national level, and the energy development agency IRENA at the county level. By improving the cooperation of relevant public bodies in defining energy goals and implementing measures for their achievement, it is possible to significantly improve the implementation of energy efficiency and energy sustainable development plans. From the above-stated, we can derive that the optimal strategy model for managing an innovative financial instrument should include a public body specialized in EE and RES as one of the intermediary/ collaborating bodies.

In addition to identifying public bodies for the implementation of the strategy for managing an innovative financial instrument, one of the most important factors is the administrative capacity and quality of communication of the public body with target groups of beneficiaries and the level of mutual trust.



Chart 24: Assessment of success factors in the implementation of an innovative financial instrument by Municipalities in the Istria County



Source: Survey, 2019, Author

According to Chart 24, the representatives of local self-government units assess their own capacities for disseminating information on project financing models with cohesion policy instruments with an average score of 3.12, which indicates that they are aware of the possibility of significant capacity increase in the future. The quality of mutual communication is visible from the coherence of the answers to specifically structured questions to Istrian entrepreneurs and local self-government units. If we look at the results of a survey of Istrian entrepreneurs from Block 1⁴⁰ and chapter 6.3.1. 6.3.1. *Preference analysis of FI users in Istrian County*, and compare them with the results from Chart 24: Assessment of success factors in the implementation of an innovative financial instrument by local governments in the Istrian County area, a high level of coherent perception in relation to the identification and value of relevant success rate indicators of the innovative financial instrument management strategy is visible. Therefore, although communication can be assessed as good, by disseminating relevant information, by using targeted education of local self-government units' employees and the use of new communication channels, it is possible to improve it further which will certainly have a positive effect on the Istrian entrepreneurs' interest of an innovative financial instrument.

6.3.2.6. Istrian Regional Energy Agency (IRENA Ltd.)

IRENA - Istrian Regional Energy Agency Ltd Labin, was founded in 2009 by the Istrian County. Under the Intelligent Energy Europe (IEE) programme, IRENA was established as an independent non-profit organization, providing public advisory services in the form of information, awareness raising assistance, and similar activities, to local energy and private sector decision makers, households and citizens. In

⁴⁰ Block 1, page 29-32.



In addition to conventional energy sources, the energy sector in Istria is also encouraged through the promotion of energy efficiency, with the possibility of using renewable energy sources and cogeneration.

IRENA's main activity goals are:

1. Energy efficiency stimulation,
2. Energy savings in public and private sector,
3. Renewable energy sources usage,
4. Cogeneration,
5. Environmental protection.

IRENA currently has seven employees, a director and six senior associates with significant experience in the development and implementation of projects aimed at encouraging investment in energy efficiency and renewable energy sources.

IRENA's area of activity includes:

- ✓ Promoting the use of innovative materials and technologies in energy saving,
- ✓ Education on the use of local energy resources,
- ✓ Organization of conferences, gatherings, workshops,
- ✓ Cooperation with ministries, funds, agencies and regions in the country and abroad,
- ✓ Implementation of national energy programs,
- ✓ Preparation, development and implementation of programs and projects in the field of energy efficiency and renewable energy sources,
- ✓ Proposing improvements in living conditions in rural areas by creating a market for renewable energy sources,
- ✓ Promoting public awareness response to energy use, from contacts with representatives of the public and private sectors and individuals, to the organization of meetings and conferences,
- ✓ Promotion of energy efficiency, use of renewable energy sources and cogeneration,
- ✓ Development of annual and action energy efficiency plans for the Istrian County area,
- ✓ Management of the information system for energy management in buildings owned by the County of Istria and planning of measures for achieving savings in the mentioned buildings.

IRENA has significant experience in the preparation, implementation and promotion of EU projects that represent the main activity of the company, and has participated or is currently participating in a total of 16 projects, of which 5 as a leading partner:

- ✓ IPA Adriatic IPA projects - ALTEREENERGY, SEA-R, LEGEND
- ✓ South East Europe project TERRE
- ✓ ERASMUS + projects - CITY MINDED and EH-Cmap as lead partner, E-RESPLAN
- ✓ Interreg MED projects - MAESTRALE, ENERJ
- ✓ Interreg Europe projects- SUPPORT as lead partner, CAPonLITTER
- ✓ Interreg Central Europe - FIRECE
- ✓ Horizon 2020 - HAPPEN

- ✓ Interreg Italy-Croatia - iDEAL and COASTENERGY as lead partner, Joint_SECAP

IRENA is the partner responsible for the realization of project activities that include day-to-day management, project reporting and execution of results, implementation of pilot investments, organization of public events and workshops, management of social networks and marketing, and communication and networking with stakeholders related to the energy sector. It should be noted that IRENA employees have many years of experience in the preparation and implementation of energy policies of the Istrian County, cross-border and international cooperation projects, and projects to improve EE and the use of RES.⁴¹

6.3.3. Governance structure proposal for the implementation of the innovative financial instrument

6.3.3.1. Model 1

Taking into account the EU and national legislative directives related to defining the institutional framework for the implementation of cohesion policy instruments, Model 1 represents the governance structure according to the established criteria and directives for the implementation of ESI Funds in the current programming period, without the need for significant harmonization in regulations, rules and procedures.

According to Model 1:

- ✓ **Managing Authority** responsible for management and implementation of the Operational Program (in the context of the current programming period - Operational Program Competitiveness and Cohesion 2014-2020) is the Ministry of Regional Development and European Union Funds,
- ✓ **1st level Intermediate body** is the Ministry of Economy, Entrepreneurship and Crafts - in accordance with the jurisdiction of specific objectives of improving EE and the use of RES in small and medium enterprises and crafts,
- ✓ **2nd level Intermediate body** is the Environmental Protection and Energy Efficiency Fund - in accordance with the aforementioned Act and Regulations, in the current programming period the Environmental Protection and Energy Efficiency Fund has been assigned the role of the Level 2 intermediary body for a significantly expanded area. In addition to the area of waste management, the Fund performs the functions of the Level 2 Intermediate Body for the area of EE and RES, climate change adaptation, air protection, biodiversity, and NATURA 2000 areas.
- ✓ Croatian Bank for Reconstruction and Development (HBOR) is the **implementing body of the financial instrument.**

⁴¹ Source: Interview with IRENA employees, 2019/2020.



The analysis of administrative capacities showed that the stakeholders of the management structure of the innovative financial instrument have sufficient administrative capacities to perform the tasks provided by the Law and regulations, especially in the context of program implementation and operational program objectives in the current programming period.

The establishment and implementation of a new financial instrument would require strengthening the administrative capacity to increase the nominal number of employees.

Regarding the implementation of the innovative financial instrument according to the proposed Model 1, stakeholder roles are contained in the following basic activities:

- **Managing Authority** (Ministry of Regional Development and European Union Funds) programs and manages the operational program, delegates powers to 1st and 2nd intermediate bodies, concludes the agreement on the implementation of the financial instrument with the implementing body (HBOR), and performs other activities in accordance with laws, directives and regulations.

- **1st level Intermediate body** (Ministry of Economy, Entrepreneurship and Crafts) - participates in programming and defining the capacity of the financial instrument, develops a manual on rules and procedures, develops eligibility criteria for project proposals in accordance with relevant laws, regulations and ordinances (eg. Ordinance on eligibility of expenditures), prepares instructions for applicants, prepares other parts of the documentation of the call for project proposals, participates in the evaluation and selection of project proposals, co-signs contracts for financing project proposals with applicants, provides part of the national co-financing component, monitors project implementation progress, implements information dissemination measures regarding the financial instrument, if necessary, organizes informative and/or educational workshops for potential applicants, etc. We emphasize that most of the above activities are performed by the 1st level intermediate body in cooperation with the 2nd level intermediate body.

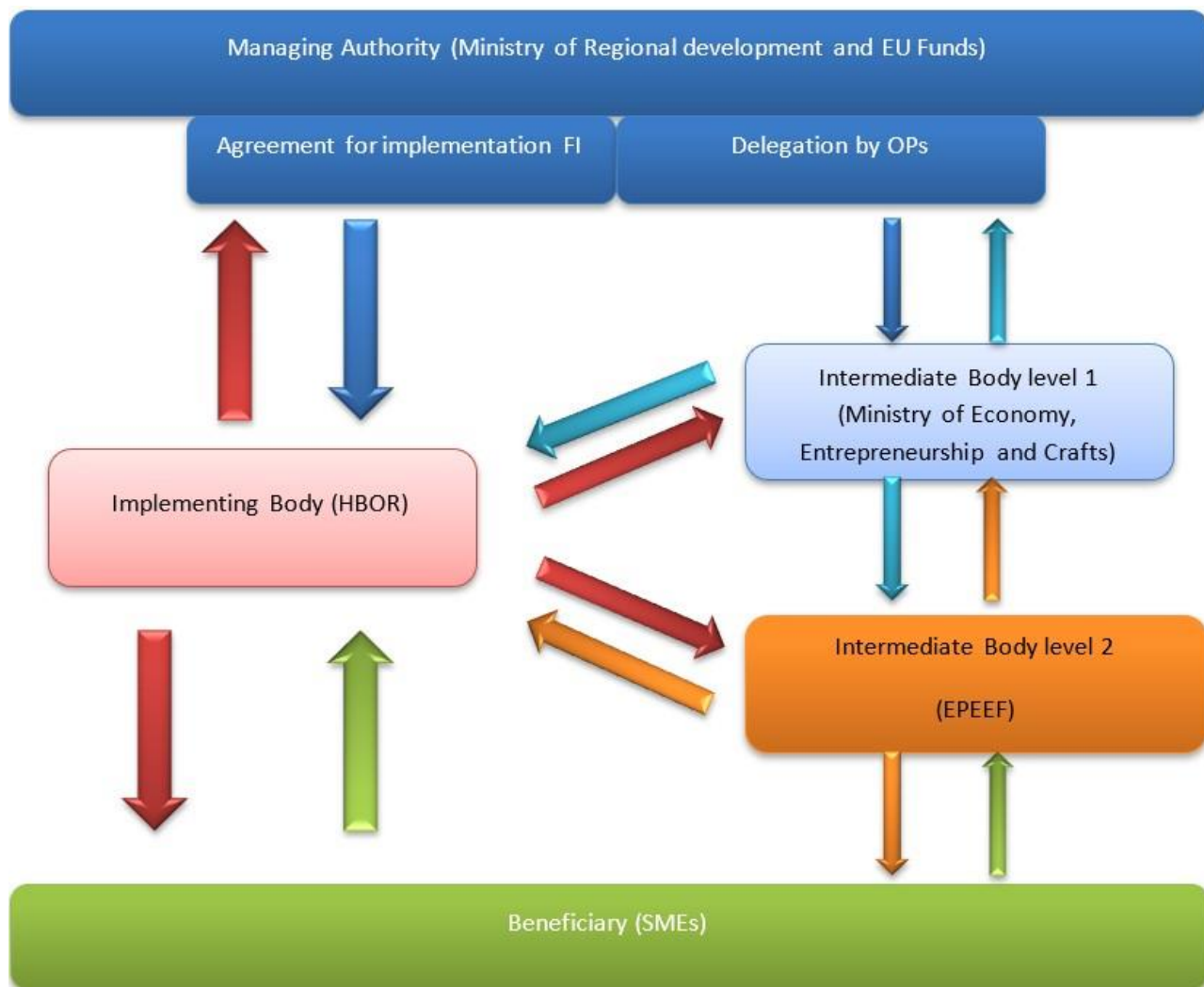
- **2nd level Intermediate body** (Environmental Protection and Energy Efficiency Fund - EPEEF) - by the relevant Law and regulations in the current programming period, the Environmental Protection and Energy Efficiency Fund implements the functions of the 2nd level intermediate body for EE and RES, climate change adaptation, air protection, biodiversity, and NATURA 2000 areas. Therefore, it participates with the 1st intermediate body in defining the eligibility criteria of project proposals, drafting the methodology for evaluating the eligibility criteria, drafting instructions for applicants, drafting other parts of the call documentation for project proposals, participates in evaluation and selection of project proposals, provides part of the funds of the national component of co-financing from revenues generated by the Fund on the basis of various fees, monitors the progress of project implementation, makes payments of the part of the innovative financial instrument related to the grant part of the project proposal (up to 30% of total eligible costs); implements measures for dissemination of information on the financial instrument, if necessary, organizes information and/or educational workshops for potential applicants, etc.

- **Implementing body** (Croatian Bank for Reconstruction and Development - HBOR) - signs an agreement with the Managing Authority on the implementation of the financial instrument as a designated manager of ESIF funds, participates in the development of eligibility criteria related to the assessment of credit eligibility of applicants, receives approval for project proposal, contracts for financing project proposals, provides and disburses the part of the innovative financial

instrument related to the loan (repayable part of co-financing), and amounts to at least 70,0% of the total amount of eligible costs. It also monitors the progress of project implementation and reports to partner bodies on the implementation of commitments, and in cooperation with 1st and 2nd level intermediate bodies implements measures for dissemination of information on the financial instrument and, if necessary, organizes information and/or educational workshops for potential applicants.

Picture 12 shows model 1 diagram.

Figure 12: Model 1 diagram



Source: Author, 2020.

The advantages of the mentioned innovative financial instrument management concept model are:

- ✓ Established legal frame,
- ✓ The required minimum of legislative and procedural adjustments,
- ✓ Administrative capacities with quality and experience in implementation in level 1 and 2 intermediate bodies, and in relation to the implementing body.



The disadvantages of the mentioned innovative financial instrument management concept model are:

- ✓ too large number of interdependent functions of level 1 and 2 intermediate bodies, and implementation body,
- ✓ too large number of internal procedures in and between implementation bodies,
- ✓ non-sufficient administrative capacity for inclusion of new financing models like the mentioned innovative financial instrument,
- ✓ unlike decentralized, bottom-up approach, significantly reduced possibility of optimal assessment of financial allocation for an innovative financial instrument (Croatia is a country of significant differences in terms of climate, geomorphology, energy, economic, demographic and other factors relevant to optimal assessment of required financial allocation),
- ✓ significant time spent by stakeholders in the preparation and implementation of an innovative financial instrument (several different bodies jointly prepare, evaluate and control project proposal documentation),
- ✓ high costs of preparation and implementation of an innovative financial instrument (mainly due to the already mentioned reasons such as time consumption, burden of existing administrative capacities and probable need for additional employment and / or training),
- ✓ centralised system of communication with potential applicants,
- ✓ according to the previous experiences of applicants and consultants in instruments with several intermediary bodies, the processes of evaluation and decision-making on the selection and financing of project proposals take too long, which discourages entrepreneurs from using ESI funds for planned investments.

6.3.3.2. Model 2

As mentioned above, in addition to creating an innovative financial instrument that would contribute to increasing investment in EE improvement and the use of RES, the focus of this Ex-Ante assessment is to find a model that would significantly increase the absorption capacity of the Republic of Croatia from the aspect of community assistance usage (grants and financial instruments), and related socio-economic benefits. Thus, Model 2 represents an innovative implementation model that implies the creation of a decentralized institutional framework for operational implementation.

Basically, the system of management and implementation of the innovative financial instrument according to Model 2 "descends" to the county levels of newly established intermediary bodies. That decentralized model complies with Article 38 (1) (b) of Regulation (EU) No 1303/2013.

The Republic of Croatia is administratively divided into 20 counties and the City of Zagreb, which has the status of a city and a county. Climatic, geomorphological, energy, economic and other relevant specifics of Croatian counties differ greatly. For example, the energy potentials and needs of the County of Istria differ significantly from the potentials and needs of the Vukovar-Srijem, Sisak-Moslavina or Šibenik-Knin Counties. It is almost impossible (or possible with extremely high costs and lengthy development process) to make a relevant Ex-Ante assessment of the financial instrument for EE improvement and the use of RES at the national level which results in problems in defining the real needs of Croatian entrepreneurs and the capacity for financial allocation (which was recognized in their reports by numerous EU institutions such as the European Commission and the European Court of Auditors). In this sense, Model 2 assumes that Ex-Ante assessments would be made at the level of Croatian counties, based on which programming and



the amount of financial allocation for financial instruments for EE improvement and the use of RES would be performed at the levels of relevant ministries and agencies. In accordance with the assessed needs and defined programs, the Managing Authority would allocate to each county the estimated amount of funds for the implementation of the innovative financial instrument.

Certain legislative changes and adjustments are needed for the implementation of the innovative financial instrument. Most of the necessary legislative changes and adjustments relate to regulations on bodies in the management and control systems for the use of ESI Funds.

The amended regulations would allow the Managing Authority (MRRFEU) to designate counties as intermediate bodies for the implementation of the innovative financial instrument. By signing, for example, the *Agreement on the performance of delegated and related activities within the operational program*, a formal legal basis would be created for the institutional framework for the implementation of the financial instrument. Therefore, the Managing Authority remains the Ministry of Regional Development and EU Funds, and the County of Istria would be appointed as the *Intermediate body of the Innovative Financial Instrument* based on the agreement.

In Model 2, HBOR's role remains the same as in Model 1, i.e. HBOR is still the implementing body for the part of financing related to the part of the pure financial instrument or loan.

County energy and/or development agencies would play an important role in implementation, since they usually have sufficient administrative capacities, knowledge and experience to provide technical support to county bodies. Especially when it comes to assisting in the preparation of Ex-Ante assessment, instructions for applicants, defining eligibility criteria, evaluation, implementation control, or those activities that in Model 1 is performed by the Fund for Environmental Protection and Energy Efficiency as the 2nd level intermediate body.

Given that not all Croatian counties have established energy development agencies, their tasks could be performed by county development agencies, with possible limited engagement of external experts for EE and RES.

By analysing the administrative capacities of the Istrian County and IRENA (a qualitative and quantitative analysis was conducted), we believe that there are sufficient capacities for the effective and efficient implementation of the innovative financial instrument. We also believe that in most Croatian counties there is sufficient administrative capacity to implement an innovative financial instrument under Model 2, and that it is not necessary to hire new staff.

Given the above, the implementation of an innovative financial instrument under the proposed Model 2, stakeholder roles are contained in the following core activities:

- **Managing Authority** (Ministry of Regional Development and Eu Funds) programs and manages the operational program, delegates powers and signs an agreement with the Intermediate body for the implementation of the Innovative Financial Instrument (Istrian County), concludes an agreement on the implementation of the financial instrument with the Implementing body (HBOR); and performs other activities in accordance with laws, regulations and regulations.
- **Intermediate body** (Istrian County) - participates in programming and defining the capacity of the financial instrument through the preparation of Ex-Ante assessment of the innovative financial instrument, prepares a manual for the intermediary body for the implementation of the innovative financial instrument within the relevant Operational Program, adjusts the inner procedure Rulebook for the Administrative Department for Economy in the County of Istria, i.e. establishes an operational body within the organization that will operationally implement the financial instrument, develops systematization of jobs for newly established organizational units (e.g. internal redistribution establishes a new Department within the Administrative Department),

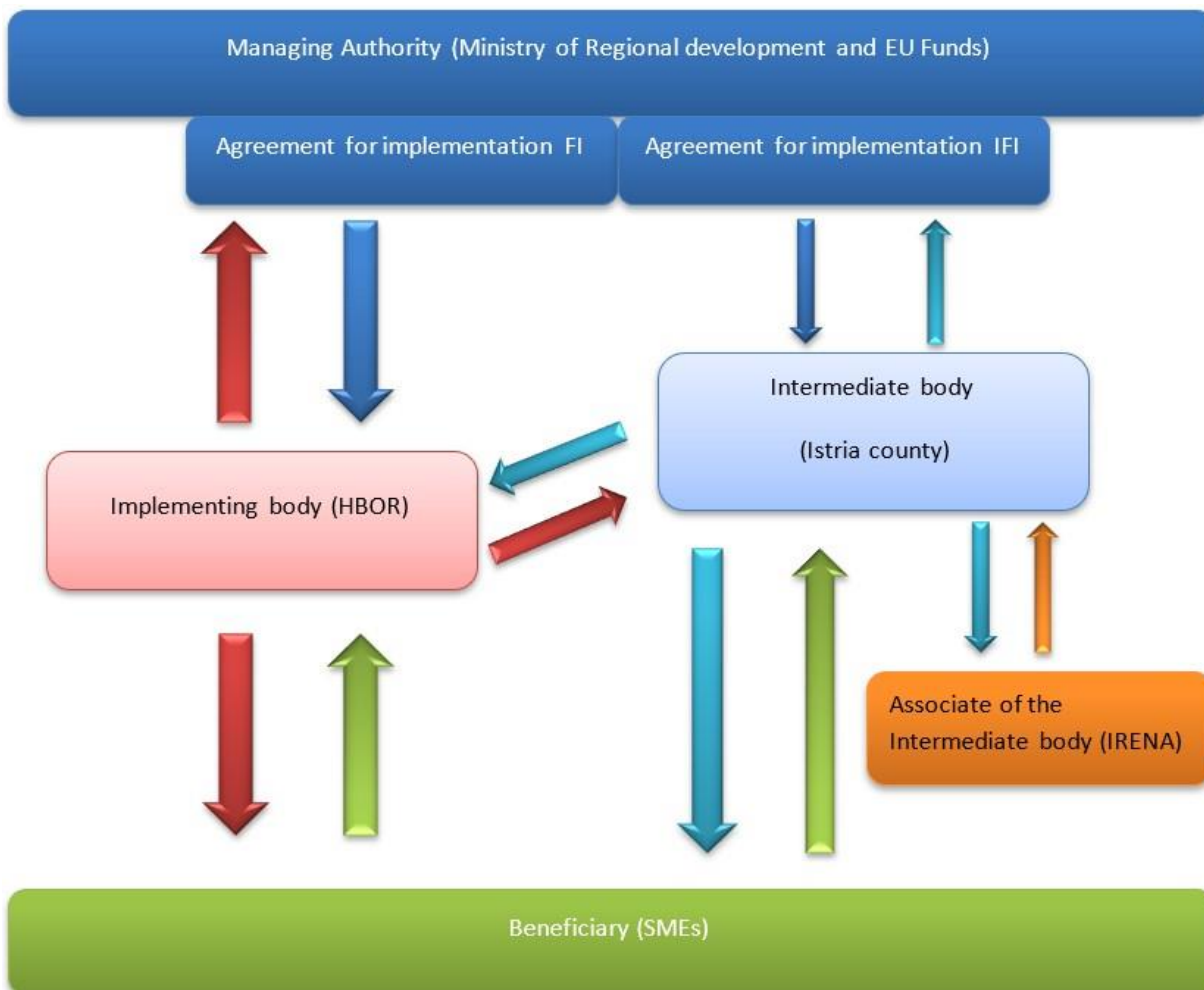


establishes Project Selection Committee eligibility criteria for project proposals in accordance with relevant laws, regulations and ordinances (e.g. Ordinance on eligibility of expenditures), prepares instructions for applicants, prepares other parts of the documentation of the call for proposals project proposals, participates in the evaluation and selection of project proposals, submits the Decision on project selection and other relevant documentation to the Implementing Body (HBOR) which pays part of the support related to the financial instrument/loan, co-signs project proposal financing agreements with applicants, in accordance provides part of the funds of the national co-financing component, executes payments to beneficiaries related to part of the grant within the innovative financial instrument (up to a maximum of 30,0% of the eligible project costs), monitors the progress of project implementation, reports to the Managing Authority, implements information dissemination measures about the financial instrument, organizes informative and/or educational workshops for potential applicants, etc.

- **Associate for the implementation of the innovative financial instrument (IRENA - Istrian Regional Energy Agency)** - provides comprehensive technical and administrative support to the Intermediate body; participates in the creation of the Project Selection Committee, participates in defining the eligibility criteria for project proposals, development of Ex-Ante evaluation, development of the methodology for evaluating eligibility criteria, development of instructions for applicants, development of other parts of call documentation, participation in evaluation and selection of project proposals, implements measures for dissemination of information on the financial instrument, if necessary organizes informative and/or educational workshops for potential applicants, etc.
- **Implementing Body (Croatian Bank for Reconstruction and Development - HBOR)** - signs an agreement with the Managing Authority on the implementation of the financial instrument as a designated manager of ESIF funds, participates in the development of eligibility criteria related to the assessment of credit eligibility of applicants, receives approval for project proposal financing, co/signs contracts for financing project proposals, provides and disburses the part of the innovative financial instrument related to the loan (repayable part of co-financing), and amounts to at least 70,0% of the total amount of eligible costs. It also monitors the progress of project implementation and reports to partner bodies on the implementation of obligations, and in cooperation with the intermediary body (Istrian County) implements measures for dissemination of information on the financial instrument and organizes informative and/or educational workshops for potential applicants.

Figure 13 shows Model 2 diagram.

Figure 13: Model 2 diagram



Source: Author, 2020.

The advantages of the mentioned innovative financial instrument management concept model are:

- ✓ high level of probability of estimating the optimal allocation for financing EE improvement projects and use of RES,
- ✓ reducing the number of bodies involved in implementation,
- ✓ reducing the burden on administrative capacity at the central government level,
- ✓ through the acquisition of additional knowledge, skills and competencies of the intermediary and associate body, a significant increase in the quality of administrative capacity at the county level,
- ✓ reduction of the total number of internal procedures between bodies within the institutional implementation framework,
- ✓ reduction of the time needed to prepare and implement an innovative financial instrument,
- ✓ administrative and bureaucratic simplification of the process for end users,
- ✓ significant reduction of the time required for evaluation and selection of project proposals,
- ✓ maximization of the positive effect enabled by the organizational structure of HBOR towards regional offices (better and higher quality communication, faster and simpler processes of approving and disbursing a loan from a financial instrument),



- ✓ the possibility of a significant reduction of costs of implementing an innovative financial instrument (only the optimal allocation of funds of the financial instrument and the reduced capacity of reserved funds enable significant direct and indirect savings),
- ✓ the possibility of significantly improving the quality of communication between implementing bodies with local SMEs and craftsmen,
- ✓ increase of the absorption capacity of ESI funds in the Republic of Croatia,

The disadvantages of the mentioned innovative financial instrument management concept model are:

- ✓ additional legislative changes and adjustments are needed compared to Model 1,
- ✓ the possibility of delays of some counties in fulfilling the obligations of making an Ex-Ante assessment and establishing an operational body for the implementation of an innovative financial instrument.

6.3.4. The selected model

Given the previously presented detailed analysis of possible models for managing an innovative financial instrument, it is clear that Model 2 is an effective and efficient model for implementing financing of EE improvement projects and use of RES, at least in relation to Model 1 which is closest to management models in the programming period.

Apart from being truly innovative, at least for Croatian frameworks and experiences, in terms of creating an institutional framework for the implementation of the financial instrument, Model 2 is fully acceptable and feasible from a legislative, administrative and operational point of view.

True, some legislative changes and adjustments are needed to make Model 2 feasible, which will take some time for the Managing Authority and other relevant central government bodies, but the direct benefits and positive externalities arising from the implementation of the innovative financial instrument under Model 2 are many times greater.

Thus, the investment strategy in question, which involves the use of an innovative financial instrument through a decentralized model of management and implementation, results in the following concrete positive effects:

- ✓ increase of the number and amount of investments in projects of EE improvement and the use of RES,
- ✓ increase of the contribution of the Istrian / Croatian / European economy in achieving the EU's energy, climate and environmental goals,
- ✓ increase of the absorption capacity of the Republic of Croatia,
- ✓ reduction of Cohesion Policy instruments usage costs,
- ✓ reduction of operating costs of Istrian / Croatian / European entrepreneurs,
- ✓ increase of the level of competitiveness of Istrian / Croatian / European entrepreneurs.



7. Specification of expected results consistent with the relevant Programme

7.1. Establishing and quantifying the expected results of the financial instrument

Quantitative and qualitative effects of the implementation of the proposed innovative financial instrument are determined by the defined strategic objectives / priority axes, investment priorities, specific objectives and expected results of the relevant operational program. Given that we are in the last year of the current programming period, and that the innovative financial instrument is primarily planned for the next programming period (2021-2027), the focus of this chapter is not on quantifying the results of contributions to the objectives but on establishing and defining a methodological framework for assessment of the results of the contribution to the achievement of the objectives of the future operational program. The starting point is the methodological framework of the Operational Program Competitiveness and Cohesion 2014-2020, and the innovative financial instrument directly contributes to the achievement of the following thematic objectives:

- ✓ 04 - Supporting the shift towards a low-carbon economy in all sectors,
- ✓ 03 - Enhancing the competitiveness of SMEs, of the agricultural sector (for the EAFRD) and of the fishery and aquaculture sector (for the EMFF).

Therefore, the financial instrument in question should cover the same thematic areas in the context of the thematic objectives of the 2021-2027 programming period. and the relevant future operational program.

7.1.1. Implementation indicators of the innovative financial instrument

Quantifying the effects of the implementation of an innovative financial instrument is possible by defining indicators of its implementation. Assuming that the innovative financial instrument will be available to SMEs and crafts from different economic activities (production, processing and services), it is possible to define the following indicators:

- ✓ Number of companies receiving support,
- ✓ Reduction of CO2 emissions.

The Ex-Ante assessment analyzes the needs and priorities of Istrian entrepreneurs in the context of investing in the improvement of EE and the use of RES, while for the assessment at the national level it is recommended to make an Ex-Ante assessment of each of the Croatian counties.

Table 11 shows the implementation indicators of the innovative financial instrument.

Table 11: Implementation indicators of the innovative financial instrument

Position	Measure unit	Description	Expected value	Data source	Reporting frequency
Number of companies receiving support	Number of companies	Companies (including SMEs and bigger companies)	302	Report on the implementation of the projects, Integrated information system for the management of the Cohesion Fund and the Structural Funds	Once per year
Reduction of CO2 emissions	CO2/t	Reduction of CO2 emissions as a direct positive effect of investments in the improvement of EE and the use of RES	To be assessed according to county and national energy and environmental plans	Reports of the Ministry of Environment and Energy and the Environmental Protection Agency	Once per year

Source: Author, 2020.

According to Table 11, during the programming period 2021-2027, at least 302 companies in the Istrian County will receive support based on the use of an innovative financial instrument for the improvement of EE and the use of RES.

7.1.2. Results of implementation indicators of the innovative financial instrument

Increasing investments and the number of investors in improving EE and the use of RES will result in a concrete reduction in heat losses, a reduction in the use of energy from primary sources and an increase in the use of energy from RES. Thus, it is possible to quantify the results of the implementation of the innovative financial instrument according to the mentioned indicators.

Table 12 shows indicators of EE and RES improvements.

Table 12: Indicators of EE improvements and use of RES

Position/indicator	Measure unit	Base value	Expected value	Data source	Reporting frequency
Energy savings in economy	PJ	To be assessed (Istrian County)	To be assessed	Ministry of Environment and Energy	Once per year
The share of renewable energy in gross final energy consumption in the	1.000 tons of oil equivalent	To be assessed (Istrian County)	To be assessed	EUROSTAT	Once per year



economy					
The share of private investments in EE and RES	HRK	To be assessed (Istrian County)	103.598.000,00	Report on the implementation of the projects, Integrated information system for the management of the Cohesion Fund and the Structural Funds	Once per year

Source: Author, 2020.

Through the implementation of an innovative financial instrument, private investors in the Istrian County will invest HRK 103,598 million in EE and RES projects. Other indicators need to be assessed according to the county's energy and environmental plans for the next programming period.

7.2. Specification of how the financial instrument will contribute to the strategic objectives

The previous chapters explain in detail the contribution of the innovative financial instrument intended for Istrian entrepreneurs and craftsmen, the achievement of the thematic objectives of the relevant operational program, and consequently the relevant thematic objectives.

Figure 14 shows the contribution of the financial instrument to the thematic objective *04 - Supporting the shift towards a low-carbon economy in all sectors*.



Figure 14: Contribution of the financial instrument to the thematic objective 04 - Supporting the shift towards a low-carbon economy in all sectors

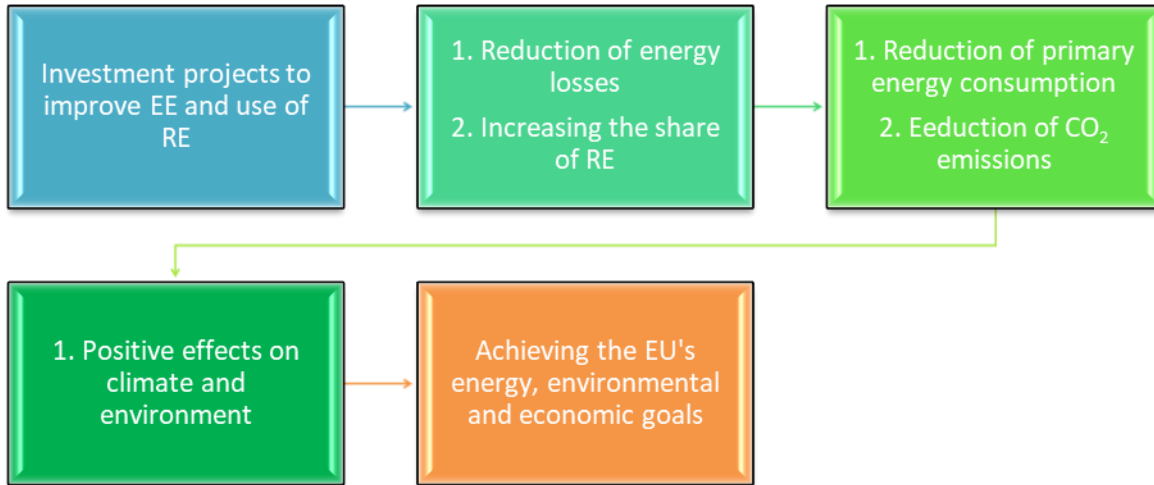
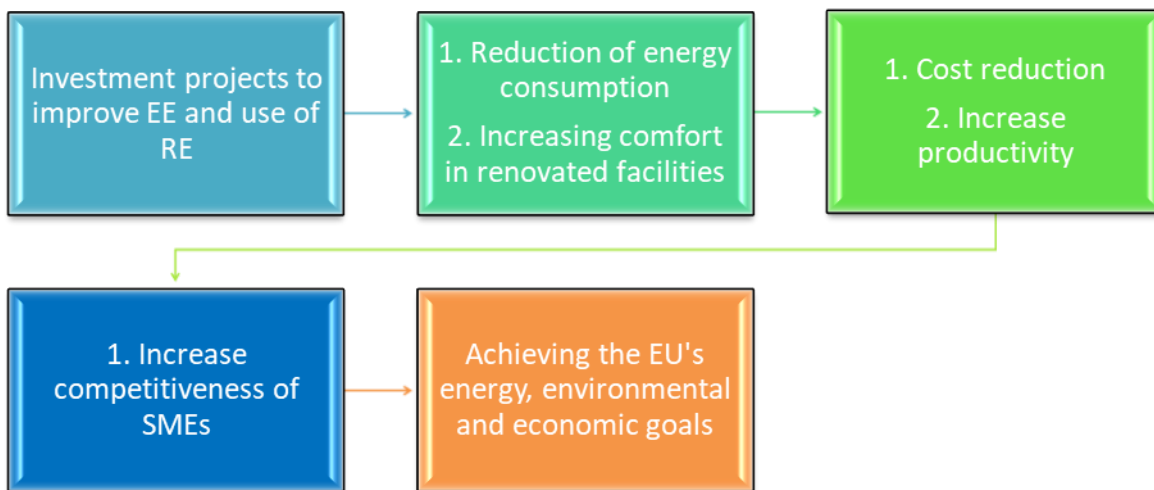


Figure 15 shows the contribution of the financial instrument to the thematic objective 03 -Enhancing the competitiveness of SMEs, of the agricultural sector (for the EAFRD) and of the fishery and aquaculture sector (for the EMFF).

Figure 15: Contribution of the financial instrument to the thematic objective 03 -Enhancing the competitiveness of SMEs, of the agricultural sector (for the EAFRD) and of the fishery and aquaculture sector (for the EMFF)



7.3. Monitoring and reporting

In addition to evaluation, monitoring and reporting as integral elements of the project cycle implementation are extremely important for the successful implementation of an innovative financial instrument. In accordance with the established institutional framework for the implementation of ESI Funds in the Republic of Croatia, the Managing Authority (Ministry of Regional Development and European Union Funds) is to define and manage a model for monitoring the implementation of the innovative financial instrument. Namely, the OPCC Managing Authority established the Evaluation Unit (Monitoring, Reporting and Evaluation Department) and appointed the Evaluation Head (Head of the Financial Management and Control, Monitoring and Evaluation Service).

The monitoring process should focus on the effects of the innovative financial instrument, i.e. its contribution to the achievement of the thematic objectives. The existing monitoring system provides procedures for regular quarterly monitoring of implementation progress for internal needs, as well as regular annual reporting on implementation to the European Commission, in accordance with Article 50 of Regulation (EU) no. 1303/2013. The mentioned system envisages the collection and monitoring of financial and physical indicators (specific result indicators, common indicators of immediate results, and result indicators specific to OPCC) which represent a quality and systematic information base for the needs of evaluation.

In order to ensure quality monitoring and reporting on the implementation of the innovative financial instrument, it is proposed to develop a Joint Plan for the implementation of the innovative financial instrument that would cover the entire implementation period (n+3 or more likely n+2 for the next programming period). This Joint Plan can be developed on the basis of the signed Agreement on the implementation of the innovative financial instrument. The Joint Plan would ensure time coordination and would coordinate the activities to be funded.

It is also proposed that the integral part of the implementation plan (or the Joint Plan) are the following annexes:

- ✓ Implementation forecast and
- ✓ List of indicators.

It is up to the intermediate/implementing Bodies to prepare, submit and, if necessary, correct the Implementation Forecast and the List of Indicators to the Managing Authority within the proposed timeframe. These annexes would provide sufficient relevant and verified information to enable the Managing Authority to effectively monitor the implementation of the innovative financial instrument.

Regarding reporting at the level of intermediary / implementing bodies to the Managing Authority, it is recommended to prepare quarterly reports.

All reporting activities should be performed through the systems eFondovi and ESIF MIS.

It is up to the Managing Authority to define procedures for other important activities, such as the preparation of financial plans, the establishment of the Implementation Monitoring Committee, the holding of coordination meetings, etc., with the aim of effective and efficient monitoring of implementation.



8. Provisions for the update and review of the Ex-Ante assessment methodology

In a turbulent global market conditions, the Ex-Ante assessment after the mid-term (2-3 years) and/or long-term period (3-5 years) often does not reflect the real needs of the market. Therefore, in accordance with Article 37(2)(g) of Regulation (EU) no. 1303/2013, the Ex-Ante assessment can be reviewed and, if necessary, updated during the implementation of any financial instrument carried out on the basis of such assessment when during the implementation phase the Managing Authority considers that the Ex-Ante assessment may no longer accurately represent market conditions present at the time of implementation.

Possible indicators to start the update procedure are:

- ✓ significant expected differences between the proposed objectives, and the achieved one,
- ✓ disorders of demand determined by a lower demand for financial instruments than anticipated or a lack of available funds in relation to the current demand,
- ✓ changes in the risk profile of the financial instrument, leading to a possible failure of a financial instrument and significant financial losses,
- ✓ significant changes in economic conditions, cost of capital and money supply of the financial market.

The need for updating and modifications of Ex-Ante evaluation can be realized through:

- ✓ analysis of regular reports on the implementation of the financial instrument,
- ✓ ad-hoc evaluations of the implementation of the financial instrument,
- ✓ survey quantitative research at the level of intermediate/implementing bodies.

In the Ex-Ante assessment itself, it is not possible to overlook at what point there might be a need to update and change it. Therefore, through the presented methodological framework of the proposed investment strategy and the selected management model, a set of measures is envisaged that will enable the Managing Authority to identify market distortions in a timely manner and / or the absence of expected results. These are the following measures:

- ✓ preparation of Ex-Ante assessments for innovative financial instruments at the county level,
- ✓ development of an implementation plan (or Joint Plan) whose integral elements are the Implementation Forecast and the List of Indicators,
- ✓ quarterly reports of intermediary/implementing bodies,
- ✓ use of information systems in collecting reports and data,
- ✓ annual reports on the implementation of the innovative financial instrument,
- ✓ quality coordination and communication.

9. Ex-Ante assessment completeness checklist

Table 13 shows the Ex-Ante assessment completeness checklist.

Table 13: Ex-ante assessment completeness checklist

Ex-Ante assessment requirements	Regulation 1303/2013, Article 37.	Source of assessment
Identification of market problems existing in the country or region in which the FI is to be established.	Article 37 (2) (a)	Block 1
Analysis of the gap between supply and demand of financing and the identification of suboptimal investment situation.	Article 37 (2) (a)	Block 1
Quantification of the investment (to the extent possible).	Article 37 (2) (a)	Block 1 Block 2
Identification of the quantitative and qualitative dimensions of the value added of the envisaged FI.	Article 37 (2) (b)	Block 1
Comparison to the added value of alternative approaches.	Article 37 (2) (b)	Block 1
Consistency of the envisaged FI with other forms of public Intervention.	Article 37 (2) (b)	Block 1
State aid implications of the envisaged FI.	Article 37 (2) (b)	Block 1
Identification of additional public and private resources to be potentially raised by the envisaged FI and assessment of indicative timing of national co-financing and of additionality contributions (mainly private)	Article 37 (2) (c)	Block 1
Estimation of the leverage of the envisaged FI.	Article 37 (2) (c)	Block 1 Block 2
Assessment of the need for, and level of, preferential remuneration based on experience in relevant markets.	Article 37 (2) (c)	Block 1
Collation of relevant available information on past experiences, particularly those that have been set up in the same country or region as the envisaged FI.	Article 37 (2) (d)	Block 1
Identification of main success factors and/or pitfalls of these past experiences.	Article 37 (2) (d)	Block 1
Using the collected information	Article 37 (2) (d)	Block 1



to enhance the performance of the envisaged FI (e.g. risk mitigation).		Block 2
Definition of the level of detail for the proposed investment strategy (maintaining a certain degree of flexibility).	Article 37 (2) (e)	Block 2
Definition of the scale and focus of the FI in line with the results of the market assessments and value added assessment.	Article 37 (2) (e)	Block 2
Selection of the financial product to be offered and the target final recipients.	Article 37 (2) (e)	Block 1
Definition of the governance structure of the FI.	Article 37 (2) (e)	Block 2
Selection of the most appropriate implementation arrangement and the envisaged combination of grant support.	Article 37 (2) (e)	Block 1 Block 2
Set up and quantification of the expected results of the envisaged FI by means of output indicators, result indicators and FI-performance indicators as appropriate.	Article 37 (2) (f)	Block 1 Block 2
Specification of how the envisaged FI will contribute to deliver the desired strategic objectives.	Article 37 (2) (f)	Block 2
Definition of the monitoring system in order to efficiently monitor the FI, facilitate reporting requirements and identify any improvement areas.	Article 37 (2) (f)	Block 2
Definition of the conditions and/or the timing in which a revision or an update of the ex-ante assessment is needed.	Article 37 (2) (g)	Block 2
Ensure that this flexibility, and trigger points, is reflected in the monitoring and reporting provisions.	Article 37 (2) (g)	Block 2
The ex-ante assessment is submitted to the monitoring committee for information purposes and in accordance with Fund-specific rules.	Article 37 (3)	n/a
Publication of summary findings and conclusion of the ex-ante assessment within three months of their date of finalisation.	Article 37 (3)	n/a

Source: Developed by the Author according to *Regulation 1303/2013, Article 37.*; 2020.



10. Conclusion

The aim of this Ex-Ante assessment was to provide an objective and independent assessment of the possibility of implementing an innovative financial instrument for the improvement of EE and use of RES by the end-users, Croatian entrepreneurs and craftsmen. Ex-Ante assessment was performed at the level of Istrian County. Although the Istrian County is by all relevant indicators the second most developed county in the Republic of Croatia, the analysis of market needs and investment preferences of Istrian entrepreneurs, showed a very low interest in investing in the improvement of EE and RES. Low interest is further reduced when only a classic financial instrument or a favourable loan is offered. Therefore, for the purposes of this Ex-Ante assessment, an innovative financial instrument has been created which represents a hybrid of a classic financial instrument and Community grants. Through the strategy of implementation (and management) of the innovative financial instrument, two possible models were analysed, and a simplified decentralized model was selected, which envisages operational implementation at the county level.

The results of research and analysis indicate that the use of an innovative financial instrument and its feasible decentralized implementation would significantly contribute to increasing the number and amount of investments of entrepreneurs in craftsmen in EE and RES projects in Istria. It is conservatively estimated that thanks to the presented model of financing, implementation and management, in the next programming period in the Istrian County will be realized 302 investments in EE and RES, with a total investment value of 147,997 million Kuna. We believe that entrepreneurs in other Croatian counties would show much greater interest in investing in the improvement of EE and the use of RES if they would have at their disposal the financial instrument in question, implemented according to simplified procedures.

Therefore, the use of an innovative financial instrument according to the proposed model of implementation and management would significantly contribute to increasing the absorption capacity of ESI funds and consequently to the achievement of county, national and European economic, energy, climate and environmental objectives.

11. List of figures, tables and charts

Figure 1: Development of the Block 1 (Market assessment)	6
Figure 2: Geographical position of the Istrian County	7
Chart 1: Structure of the GVA of the Istrian County, divided by the type of activity for the year 2016	8
Chart 2: Number and structure of entrepreneurs (profits and losses) in the area of Istrian County from 2015 to 2018	9
Chart 3: Revenues, costs and gross profit of Istrian entrepreneurs from 2015 to 2018	10
Chart 4: Key liabilities positions of Istrian entrepreneurs from 2015 to 2018	10
Chart 5: The assets and investments of Istrian entrepreneurs from 2015 to 2018	11
Chart 6: Trends in the number of investors in the Istria County from 2015 to 2018	11
Chart 7: Selected indicators of business performance of Istrian entrepreneurs from 2015 to 2018	12
Chart 8: Electricity consumption in the Istrian County from 2015 to 2018 (in GWh)	13
Chart 9: Direct energy consumption in Istrian County	14
Chart 10: Shares of energy consumption in industry by sources in the Istrian County	14
Chart 11: Energy consumption by cubsectors in the building sector in the Istrian County	15
Chart 12: Consumption in the transport sector by energy sources in the Istrian County	15
Table 1: Expected and achieved results of annual energy efficiency plans in the Istrian County in the period 2016-2019	16
Table 2: Planned investments, expected energy savings, and climate and environmental impacts by 2020 according to measures from current local SEAPs.....	17
Chart 13: Demand for financial instruments targeted at entrepreneurs in the period 2016-2020 .	19
Table 4: Number of Calls published, number of applications, number of projects approved and total eligible expenditure in the current programming period by specific objectives selected.....	23
Table 5: Number of applications submitted, number of approved projects and value of energy efficiency and renewable energy projects in selected Local Authorities	24
Chart 14: Interest rates for non-financial corporations in the Republic of Croatia from 2015 to 2019 (* excluding foreign currency clause).....	26



Chart 15: Planned investments in the next programming period (in the %)	30
Chart 16: Preferred sources of financing for investment projects	30
Chart 17: Preferred financing model for growth and development (from EU funds)	31
Chart 18: Preferred financing model for EE and RE projects (from EU funds)	31
Chart 19: Preferred financing model for EE and RES projects (from EU funds) in public sector	32
Figure 3: Hybrid model of a grant and financial instrument for EE enhancement and use of RES	35
Table 6: Indicators for the implementation of an innovative financial instrument	36
Table 7: List of thematic units and sources of financing	42
Table 8: Total amount of Istrian entrepreneurs' demand for an innovative financial instrument in the next programming period (in 000 HRK)	45
Table 9: Calculation of the net effect of an innovative financial instrument for improving the EE and RES (in 000 HRK)	46
Figure 4: Crowdfunding platform Croenergy	48
Figure 5: Methodological framework for developing the proposed investment strategy	53
Figure 6: Institutional framework for operational program in current programming period 2014.-2020.	55
Table 10: Number and amount of investments in the improvement of EE and the use of RES in the area of Istrian County in the period from 2021 to 2027 (according to sources of financing in 000 kuna)	56
Chart 20: Business problems of Istrian entrepreneurs	60
Chart 21: Quality of communication of Istrian SMEs with local public administration	61
Figure 7: Institutional management system of EU funds in the current programming period in the Republic of Croatia	63
Figure 8: Organizational structure of the Ministry of Economy, Entrepreneurship and Crafts	67
Figure 9: Organizational structure of the Fund for Environmental Protection and Energy Efficiency	69
Figure 10: HBOR's macro organization	72
Figure 11: Organizational structure of the Istrian County	74
Chart 22: Municipalities that have implemented and intend to implement EE and RES projects, with the use of EU funds	76
Chart 23: Assessment of achieving the goals of energy plans in the Istria County	77



Chart 24: Assessment of success factors in the implementation of an innovative financial instrument by Municipalities in the Istria County	78
Figure 12: Model 1 diagram	82
Figure 13: Model 2 diagram	86
Table 11: Implementation indicators of the innovative financial instrument	89
Table 12: Indicators of EE improvements and use of RES	89
Figure 14: Contribution of the financial instrument to the thematic objective 04 - Supporting the shift towards a low-carbon economy in all sectors	91
Figure 15: Contribution of the financial instrument to the thematic objective 03 -Enhancing the competitiveness of SMEs, of the agricultural sector (for the EAFRD) and of the fishery and aquaculture sector (for the EMFF).....	91
Table 13: Ex-ante assessment completeness checklist	94



12. Annexes

Questionnaire for entrepreneurs

Questionnaire for SMEs and craftsmen

The survey is conducted by the consulting company IDEO PLAN from Pula for the purpose of preparing an Ex-Ante assessment of the implementation of financial instruments for investments in energy efficiency and the use of RES for the Istrian County. Your opinions, attitudes and expectations are extremely important to us.

When answering questions that involve a quantitative grade, please circle / "bold" the number from 1 to 5 (1 is the lowest and 5 is the highest grade).

Please mark the selected fields with an X when answering YES and NO

Basic information about the legal person being surveyed (optional):

Round up/mark the economic activity for which you are registered

A	Agriculture, forestry and fisheries
B	Mining and extraction
C	Manufacturing
D	Electricity, gas, steam and air conditioning supply
E	Water supply, wastewater removal, waste management and environmental remediation
F	Construction
G	Wholesale and retail trade, motor vehicle and motorcycle repair
H	Transport and storage
I	Activities of providing accommodation and preparation and service of food
J	Information and communications
K	Financial and insurance activities
L	Real estate business
M	Professional, scientific and technical activities
N	Administrative and ancillary service activities
O	Public administration and defence; compulsory social security
P	Education
Q	Health care and social care activities
R	Art, entertainment and recreation
S	Other service activities
T	Household activity as an employer; activity of households producing different goods and performing different services for their own
U	Activities of extraterritorial organisations and bodies



Business and development issues

1. Is your company an exporter?

Yes _____ No _____

If you are an exporter, what is the average percentage of your export in total revenues(%) _____

2. Average number of employees? _____

3. Is your company planning new investments in growth and development?

Yes _____ No _____

If planned, please briefly describe them and specify when they are planned for.

4. Does your company plan new investments to increase energy efficiency and/or use of renewable energy sources?

Yes _____ No _____

If planned, please briefly describe them and specify when they are planned for.



5. If the answer to questions 3 and/or 4 yes, what funding model do you plan to use for new investments?

- | | |
|---|-----------|
| 1. Own resources | 1—2—3—4—5 |
| 2. Loan from financial institutions | 1—2—3—4—5 |
| 3. Grant from EU funds | 1—2—3—4—5 |
| 4. Financial instruments from EU programmes | 1—2—3—4—5 |
| 5. Funding from news partners | 1—2—3—4—5 |
| 6. Other (please specify) | |
-

6. What are the biggest problems in your business??

- | | |
|--|-----------|
| 1. lack of working capital | 1—2—3—4—5 |
| 2. sales and collection of goods and/or services | 1—2—3—4—5 |
| 3. administrative barriers and the efficiency of local public administration | 1—2—3—4—5 |
| 4. underdeveloped business and general infrastructure | 1—2—3—4—5 |
| 5. administrative and bureaucratic regulations at the state level | 1—2—3—4—5 |
| 6. Capital prices (e.g. terms and costs of borrowing) | 1—2—3—4—5 |
| 7. Other (please specify) | |
-

7. In the previous period, have you used a grant or other incentive model for business/investment activities??

Yes _____ No _____

If the answer is YES, please briefly specify the source of the grant (e.g. *EU funds, city or county grants, central government/ministry grants, ESIF loans, etc.*)



8. How do you evaluate communication with your local public administration (municipality, city, county)?

1—2—3—4—5

9. How do you evaluate the information on funding opportunities from EU funds (*grants, financial instruments, etc.*)?

1—2—3—4—5

10. If you would use EU funds for growth and development (*primarily investments in new production technologies, production facilities, equipment, appliances, etc.*) which aid model would prefer?

- | | |
|---|-----------|
| 1. Grants from EU funds | 1—2—3—4—5 |
| 2. Financial instrument | 1—2—3—4—5 |
| 3. Hybrid model (grants + financial instrument) | 1—2—3—4—5 |

11. If you would use EU funds to increase energy efficiency and/or use of RES (*primarily investment in improving the energy performance of facilities, the use of RES such as solar energy, wind, etc.*) which aid model would prefer?

- | | |
|---|-----------|
| 1. Grants from EU funds | 1—2—3—4—5 |
| 2. Financial instrument | 1—2—3—4—5 |
| 3. Hybrid model (grants + financial instrument) | 1—2—3—4—5 |



Questionnaire for Local and Regional Authorities

Questionnaire for Istrian County and Local Authorities

The survey is conducted by the consulting company iDEO PLAN from Pula for the purpose of preparing an Ex-Ante assessment of the implementation of financial instruments for investments in energy efficiency and the use of RES for the Istrian County. Your opinions, attitudes and expectations are extremely important to us.

When answering questions that involve a quantitative grade, please circle / "bold" the number from 1 to 5 (1 is the lowest and 5 is the highest grade).

Please mark the selected fields with an X when answering YES and NO

Basic information about the legal person being surveyed (optional):

Local/Regional Authority: _____

Name and surname: _____ Function: _____

Contact: _____ Tel: _____ E-mail: _____

1. Rate the availability and quality of the administrative capacity of the authority that you represent to proactively participate in dissemination of information on financial instruments and other funding models from the ESI Funds?

1—2—3—4—5

2. Rate the quality of the entrepreneurial environment in your area (entrepreneurial zones, entrepreneurial incubators, entrepreneurial support institutions)?

1—2—3—4—5

3. Rate the quality of incentive programs for entrepreneurs in your area?

1—2—3—4—5



4. Rate the interest of entrepreneurs in your territory for using incentive programs for entrepreneurs you carry out on your own?

1—2—3—4—5

5. Rate the current interest of entrepreneurs and craftsmen in your field for the use of EU grants?

1—2—3—4—5

6. Rate the achievement of the energy sustainable development action plans you are implementing in your area?

1—2—3—4—5

7. Rate the achievement of the annual energy efficiency plans that you implement in your area?

1—2—3—4—5

8. Has the public body that you represent in the current programming period invested in EE and RES projects??

Yes _____ No _____

If the answer is YES, please briefly describe/specify them, sources of financing and estimated investment amounts.



9. Has the authority that you represent in the current programming period used the financial instruments of the ESI Funds to implement projects?

Yes _____ No _____

If the answer is YES, please briefly describe them and specify the estimated used amount.

10. Does the authority that you represent plans significant investments in EE and RES in the next programming period?

Yes _____ No _____

If the answer is YES, please briefly describe/specify them, the level of preparedness and estimated amounts of investments.

11. Please rate the preferred financing model of EE and RES projects in the next programming period?

11.1. Grants from EU funds 1—2—3—4—5

11.2. Financial instruments 1—2—3—4—5

11.3. Hybrid model (grants + financial instrument) 1—2—3—4—5