Interreg CENTRAL EUROPE

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MESTRI-CE

D.3.1.1 Baseline on financing models and instruments, potentials, and policy frameworks in partner countries

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Contents

A. Country overviews

1. Slovenia

1.1. List of abbreviations

CCF	Climate Change fund
CF	Crowdfunding
EE	energy efficiency
EED	Energy efficiency directive
EIB	European Investment Bank
EnPC	Energy Performance Contracting
EPC	Energy Performance Contracting
ESCO	Energy service company
ESIF	European structural and investment funds
FoF	Fund of Funds
GBS	Green Bond Standards
GHG	Greenhouse gas emissions
ICMA	International Market Capital Association
LTRS	Long-term renovation strategy
NECP	National Energy and Climate Plan
PPP	Public-private partnership
RES	Renewable energy sources
RRF	Recovery and Resilience Facility
RRP	Recovery and Resilience Plan
RS	Republic of Slovenia
SMEs	Small and medium-sized enterprises
SRDF	Slovenian Regional Development Fund
SSSBs	Slovenian Sustainability Bond Framework
ZOEE	Electricity Supply Act
ZSROVE	Act on the Promotion of the Use of Renewable Energy Sources

1.2. General overview of the financial sector

Introduction:

The financial landscape in Slovenia encompasses a dynamic interplay of various components, including robust financial markets, a diverse array of financial institutions such as banks, insurance companies, investment firms, and management companies, as well as an extensive range of financial instruments. These instruments span from traditional forms like deposits and loans to more sophisticated ones such as shares, bonds, units of investment funds, options, and financial features, collectively contributing to the multifaceted nature of the country's financial system. [1]

Key policy makers/Stakeholders:

The Ministry of Finance, as the legislative regulator and overseer of the Slovene financial system, plays a multifaceted role. Not only does it fulfill a regulatory and supervisory function, but it also actively engages as a trader in financial markets. This involvement includes borrowing loans, issuing securities, offering loan guarantees, and providing liquidity assets to both banks and the state.

Within the Ministry of Finance, one of the key entities is the Financial Administration of the Republic of Slovenia (FURS). FURS assumes a pivotal role in the financial landscape by managing the collection of various fiscal elements, including taxes, social security contributions, customs duties, excise, and other duties, ensuring a comprehensive and effective fiscal administration. The overview of all organizational units and bodies within the ministry is available here. Furthermore, there are four competent authorities supervising and regulating the financial system - the Bank of Slovenia, the Securities Market Agency, the Insurance Supervision Agency and the Office for Money Laundering Prevention[2].

The Slovene banking sector is underpinned by key stakeholders, including The Bank of Slovenia, the Bank Association of Slovenia, and the Bank Assets Management Company. Currently, 14 individual banks and savings banks operate in Slovenia, complemented by two branches of banks and banking groups from other EU Member States (refer to Table 3 for details). Notably, the five largest banks collectively command a substantial 61.5% market share in Slovenia.

A discernible upward trajectory in the Slovene market is evident over the years, as indicated by the Herfindahl-Hirschman index, which captures the sum of the squares of the market shares of all banks (see Table 2). This growth underscores the sector's resilience and expansion.

[1] https://www.gov.si/podrocja/finance-in-davki/financni-sistem/
[2] https://www.gov.si/en/policies/finance-and-taxation/financial-system/

The oversight of capital markets is a collaborative effort, with the Bank of Slovenia, the Insurance Supervision Agency, and the Securities Market Agency playing crucial supervisory roles. Together, they ensure the stability and integrity of Slovenia's capital markets.

Basic facts, characteristics and past market trends in the past 3-5 years:

In 2022, the government deficit reached 3% of GDP, as outlined in Table 1. This uptick in the deficit can be attributed to strategic measures aimed at alleviating the burden of energy costs. Initiatives such as a reduced Value Added Tax (VAT), exemption from the payment of CO2 tax, adjustments to the network fee for the electricity system, and contributions for the production of electricity from renewable energy sources (RES) and combined heat and power (CHP) collectively played a role in shaping the fiscal landscape.

The year 2022 witnessed a series of challenges as the European Central Bank (ECB) pursued a course of increasing interest rates. This had a cascading effect on borrowing conditions, adversely impacting companies, households, and the state in Slovenia and the broader EU. Concurrently, as interest rates rose, banks gradually reduced their excess reserves.

Notably, the third quarter of 2022 saw a marginal reduction in the share of non-performing loans, declining to 2%, albeit slightly higher than the EU-27 average of 1.8% (refer to Table 4). This nuanced financial landscape reflects the delicate balancing act in the face of economic dynamics and policy adjustments.

	2018	2019	2020	2021	2022
General government surplus/deficit (% of GDP)	0.7	0.7	-7.7	-4.6	-3.0
General Government Debt (% of GDP)	70.3	65.4	79.6	74.5	69.9

Table 1: Financial status of the government sector[3].

As of the close of 2022, the banking system held a predominant share, constituting two-thirds of the financial assets within the Slovenian financial system. Reflecting its dynamism, the balance sheet total of banks experienced a 4.9% increase, reaching EUR 50.6 billion—a key metric indicating the development of the banking sector.

The fluctuation in the balance sheet total from 2021 to 2022 is associated with a confluence of factors, notably the uptick in nominal GDP and a tempered growth rate in the balance sheet total. Despite maintaining stability during 2021 and 2022, the overall development of the Slovenian

[3] https://www.stat.si/StatWeb/Field/Index/1/86

financial system still lags behind its EU counterparts. A comparative analysis reveals that, in 2022, the balance sheet total of banks relative to GDP was approximately 30% of the EU average (Slovenia: 87% of GDP; EU-27: 275% of GDP).

A discernible trend in the financial landscape is the ongoing consolidation within the banking system. Since 2004, the market has seen a reduction from 33 to a mere 14 individual banks, with exits and mergers accounting for this transformation (see Table 3). This consolidation trend persists, evident in recent events such as the 2023 merger of Nbanka with NLB, and the anticipated merger of NKBM with SKB Banka in the coming year. This evolutionary process underscores the adaptive nature of the Slovenian banking sector.

Table 2: Basic data on the banking sector in Slovenia (Banka Slovenije[4])

	2018	2019	2020	2021	2022
Balance sheet total of banks (relative to GDP) (in %)	85.0	83.5	94.4	92.8	86.5
Balance sheet total (in billion EUR)	38.8	41.2	44.7	48.3	50.6
Herfindahl-Hirschman index for credit institutions (based on total assets)[5]	1,020	1,008	1,008	1,189	…
ROA (in %)[6]	1.39	1.49	1.1	1.21	1.1
ROE (in %)	11.09	12.26	9.57	11.38	10.74
Combined loans to households and companies (in million EUR)[6]	18,548	19,580	19,462	20,565	22,625
Combined deposits to households and companies (in million EUR)[6]	25,521	27,123	30,468	32,951	35,494
Number of banks and savings banks[6]	16	16	15	15	15
Number of employed in the banking sector[6]	9,683	9,535	9,553	8,683	8,749
Year-on-year growth in loans to the non-banking sector (December of each year) (in %)	3.0	5.8	0.2	6.3	10.0
Share of non-performing loans (in %)[7]	6.8	3.7	3.2	2.2	2.0
Volume of market capitalization of shares in relation to GDP[8]	13.8	14.6	14.7	18.2	12.9

The **capital market** in Slovenia is small and illiquid and as such lags behind other EU countries. Market capitalization of shares in relation to GDP decreased in 2022 to 12.9% compared to 18.2% in 2021 while the EU-27 average of market capitalization of shares was 70.7% in 2022 (see Table 2). The most common financial instruments on the Slovene capital market are transferrable securities (shares and bonds), money market instruments (treasury bills, certificates of deposits), mutual and umbrella funds, financial derivative instruments (options, futures, swaps) and emission coupons[2]. The market largely consists of government bonds while financing of companies through

[4] https://bankaslovenije.blob.core.windows.net/publication-files/
[5] https://www.ecb.europa.eu/press/pr/date/2021/html/ecb.pr210526_annex~b5ce7a6554.en.pdf
[6] https://www.zbs-giz.si/podatki-bancnega-sektorja/
[7] https://www.umar.gov.si/fileadmin/user_upload/razvoj_slovenije/2023/slovenski/POR2023-splet.pdf
[8] https://www.umar.gov.si/fileadmin/user_upload/razvoj_slovenije/2023/slovenski/POR2023-splet.pdf

shares and bonds is still negligible compared to other sources of financing[9]. The new Capital Market Development Strategy[10] envisages faster development of the capital market by improving availability of financing sources for small and medium enterprises (SMEs), promotion of digitization and financial education.

Table 3: List of institutions in the banking sector in Slovenia[11]

Significant banks	• Nova Ljubljanska banka d.d. • Nova Kreditna banka Maribor d.d. (to be merged with SKB banka d.d.) • Gorenjska banka d.d. • UniCredit Banka Slovenija d.d. • Banka Intesa Sanpaolo d.d. • N banka d.d. (merged with Nova Ljubljanska banka d.d.) • Addiko Bank d.d. • Banka Sparkasse d.d.
Less significant banks	• SKB banka d.d. • Deželna banka Slovenije d.d. • Delavska hranilnica d.d. (savings bank) • Hranilnica Lon d.d. (savings bank) • Primorska hranilnica Vipava d.d. (savings bank) • SID – Slovenska izvozna in razvojna banka (is supervised by Banka Slovenije, Insurance Supervision Agency and Ministry of Finance and is specialised in the promotion of exports and development)
Branches	• BKS Bank AG • RCI Banque Societe Anonyme

Financing of the deep renovation of buildings:

Deep renovation of buildings in Slovenia is defined as a major renovation with more than 60 % primary energy savings according to the Commission Recommendation (EU) 2019/786 of 8 May 2019[12] According to LTRS only public buildings are required to be renovated according to the deep renovation standard.

The financing for the renovation of buildings slightly differs among sectors:

- **Residential buildings**: grants and loans financed from energy-efficiency contribution and funds from the Climate Change Fund (CCF) distributed through Eco fund, cohesion policy funding, Recovery and Resilience Plan (RRP) (for more see Chapter 1.2), loans by Eco fund and commercial banks (for more see Chapter 1.5), to some extent also through energy supplier and energy service company (ESCO) programs (for more see Chapter 1.6).
- **Public buildings**: the main source of funding is cohesion policy funding (grants). In the multi-annual financial framework 2014-2020 grants covered up to 49 % of eligible costs

[9] https://www.umar.gov.si/fileadmin/user_upload/razvoj_slovenije/2023/slovenski/POR2023-splet.pdf
[10] https://www.gov.si/novice/2023-03-02-vlada-sprejela-strategijo-razvoja-trga-kapitala-v-sloveniji/
[11] https://bankaslovenije.blob.core.windows.net/publication-files/annual-report-2022.pdf
[12] https://eur-lex.europa.eu/eli/reco/2019/786/oj

while the rest is secured through ESCOs financing via public-private partnerships (PPP), own financing and loans provided by SID bank or commercial banks. Additionally, the renovations are funded through the RRP (for more see Chapter 1.2), energy-efficiency contribution and funds from the CCF (only for buildings whose renovation cannot be financed from the Cohesion fund, PPPs and similar) distributed through Eco Fund. To some extent, the public buildings renovations are also financed through energy efficiency (EE) obligation scheme by energy suppliers and distributors.

- **Service sector buildings**: the main source of funding is the EE contribution distributed as grants through Eco Fund (alternative policy measures), cohesion funding 2014-2020 for SMEs in tourism. Companies need to also contribute their own funds either from their own funds, loans obtained from Eco Fund, SID Bank or other commercial banks. Some also complete renovations in partnership with ESCO and/or participate in the EE obligation scheme.

	Households	Public Buildings	Service sector buildings
Cohesion funding 2014-2020	X	X	X
Alternative policy measures	X	X	X
Climate Change Fund	X	X	
Recovery and Resilience Plan	X	X	
Loans by Eco fund, SID bank, commercial banks	X	X	X
PPPs, ESCOs, EE obligation scheme	X	X	X

Table 4: Overview of the main financing sources of energy-renovation of buildings in Slovenia

To achieve the set EE goals in the buildings sector, investments amounting to EUR 8,540 million (excluding VAT) are required in the period 2021-2030. Out of which EUR 825 million are required for the energy renovation of buildings in the public sector, EUR 1,081 million in the private service sector and EUR 6,634 million in the residential sector (all without VAT)[13].

In line with the National Energy and Climate Plan (NECP) and LTRS 2050 goals, the following energy renovations are foreseen until 2030:

- residential buildings: 16.062 million m^2 of single and 7.271 million m^2 of multi-apartment buildings
- public buildings: 2.3 million m^2
- private sector service buildings: 4.1 million m^2

Under the National Energy and Climate Plan (NECP), Slovenia has pledged to annually renovate 3% of the floor area owned and utilized by the central government. However, preliminary data for

[13] https://www.energetika-portal.si/fileadmin/dokumenti/publikacije/dseps/dseps_2050_final.pdf

2022 reveals that the targeted objective of renovating 3% of the central government's floor area was not met. In the seven-year span from 2014 to 2022, a total of 68,617 square meters underwent renovation. While this represents a noteworthy effort, it accounts for only 27% of the cumulative goal set for the specified period. The data underscores the need for increased momentum and strategic measures to align future renovation initiatives with the ambitious objectives outlined in the NECP.[14]

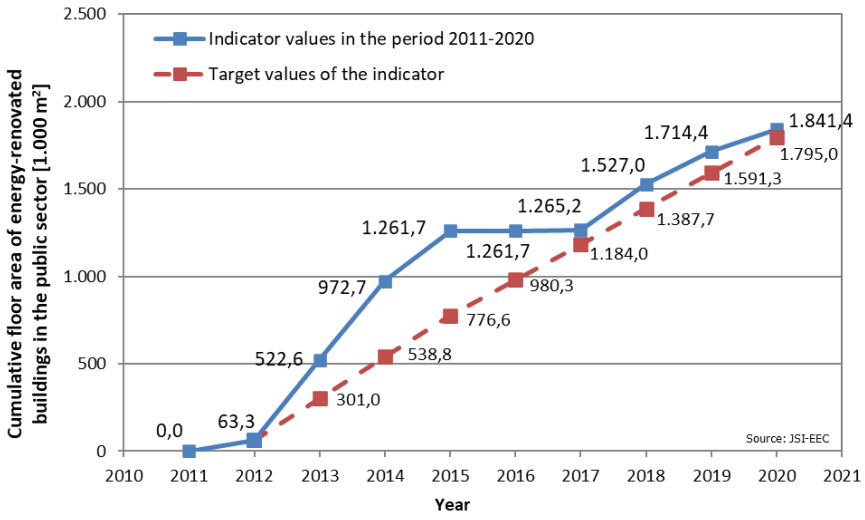
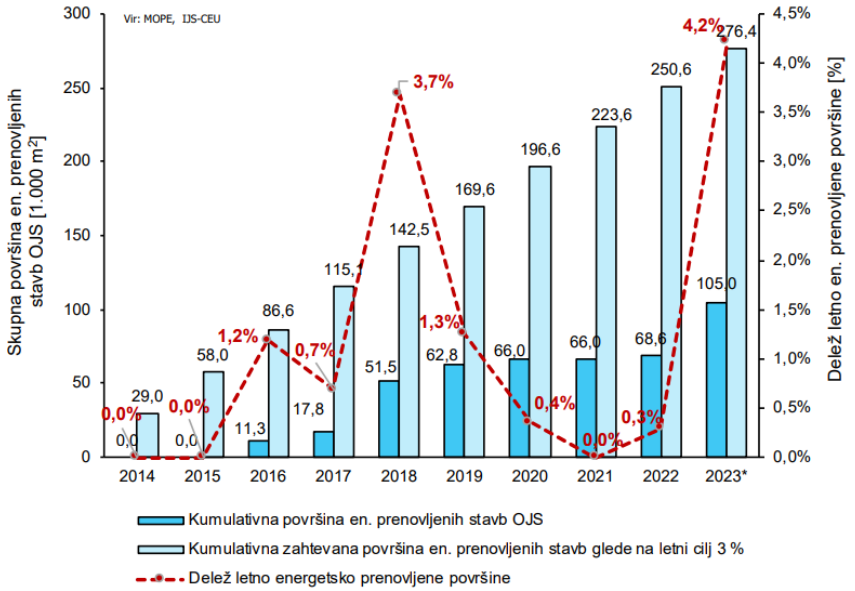


Figure 1: Cumulative floor area of energy-renovated buildings in the public-sector [1.000 m2].



[14] https://podnebnapot2050.si/wp-content/uploads/2023/10/02_POKazalci_D3_Stavbe_Del1_BPVisocnik.pdf

1.3. Public support schemes

- *ESIF grant support, financial instruments - their impact/results so far*
- *National/Regional EE funds - their impacts/results so far*
- *Availability of technical support for preparation of projects and one-stop shops for project developers (from information to turnkey solutions)*

Multiple public support schemes encouraged investments in EE in Slovenia. Schemes can be divided based on the sources of funding or by the institution responsible for the distribution of funds.

Sources of funding:

- European structural and investment funds - Cohesion Fund (EU level)
- Climate Change Fund (national level)
- Energy efficiency contribution – alternative policy measures (national level)
- Recovery and Resilience Facility (EU level)
- ELENA Technical Assistance / European Investment Bank (EU level)

National/regional institution responsible for the implementation (i.e., these institutions distribute the above-mentioned funds but, in many cases, also provide their own financing):

- Eco Fund
- Ministry of the Environment, Climate and Energy
- Slovenian Regional Development Fund
- SID bank

Table 5: Public support schemes by the source of funds

Cohesion funding (EU level)	***Operational Program for the Implementation of the EU Cohesion Policy 2014-2020*** (OP ECP)[15] - Deep energy renovation of buildings in municipalities, wider public sector and buildings owned by the central government - Grant co-financing of deep renovation projects implemented primarily via energy performance contracting EnPC model and PPP, otherwise through public procurement - EUR 56 million of grants supported the renovation of 0.7 million m^2 of building floor area which contributes to an annual reduction of 21 kt/year of CO_2 emissions ***Implementation plan of the EU Cohesion Policy 2021-2027***[16]**:**

[15] https://www.eu-skladi.si/sl/dokumenti/kljucni-dokumenti/op_slo_web.pdf
[16] https://evropskasredstva.si/app/uploads/2022/12/Program-evropske-kohezijske-politike-sprejeta-verzija-12.-12.-2022.pdf

	- Two ministries are responsible for the implementation of specific goal *RSO 2.1 Promotion of energy efficiency and reducing GHG emissions*, respective implementing measures and allocated funds[17]: ○ *The Ministry of the Environment, Climate and Energy:* ▪ Energy renovation of public buildings (EUR 51.5 million) ▪ Energy renovation of buildings in the private service sector (EUR 15 million) ▪ Energy renovation of private multi-apartment buildings (EUR 13.2 million) ▪ Grants and awareness raising for low-income households (EUR 15 million) ▪ Preparation of projects for the energy renovation of public buildings (co-financing of documentation) (EUR 8 million)
Recovery and Resilience Facility (EU level)	The Government of RS has used the *Recovery and Resilience Facility* (RRF) to prepare and finance its *Recovery and Resilience Plan (RRP)*. The initial plan comprised 34 reforms and 52 investments in four pillars (green transition, digital transformation, smart sustainable and inclusive growth and healthcare and social security) aimed at mitigating the economic and social consequences of the COVID-19 pandemic in Slovenia. The funds allocated were EUR 1.78 billion in grants and EUR 705 million in loans. In October 2023 Slovenia's RRP was amended. The revised plan, which now includes the REPowerEU chapter, is worth EUR 1.61 billion in grants and EUR 1.07 billion in loans. The total value of European funds for the implementation of the RRP amounts to 2.68 billion euros[18]. Within Green Transition (one of the four pillars of the Plan) the Component *C1.K2: Sustainable renovation of buildings* addresses EE with two measures: • C1.K1.IG: Investments in increasing EE in industry (EUR 0.2 million) • C1.K2.IB: Sustainable renovation of buildings (EUR 66.1 million)[19]
ELENA Technical Assistance / European Investment Bank (EU level)	In the past, three projects were implemented using the ELENA Technical Assistance provided by European Investment Bank (EIB): (1) **GovDer project**[20] (January 2018 – December 2021): the Ministry of Infrastructure obtained grants from the ELENA Fund to provide technical assistance for the preparation of economic and technical documentation for the deep energy renovation of buildings in the narrow and wider public sector (mostly in the healthcare sector). The ELENA Fund provided EUR 1.4 million (90% of co-financing) while the rest EUR 0.157 million (10% of co-financing) had to be secured by the eligible beneficiaries. The program helped finance comprehensive energy retrofits of 17 buildings where each project consisted of one or several buildings. In total 162,462 m^2 of the building space was renovated with expected annual energy savings of 21.5 GWh, annual reduction of CO_2

[17] https://evropskasredstva.si/app/uploads/2023/03/INP_23_1_P.pdf

[18] https://www.gov.si/novice/2023-10-17-svet-evropske-unije-odobril-spremembo-slovenskega-nacrta-za-okrevanje-in-odpornost/

[19] https://www.gov.si/assets/organi-v-sestavi/URSOO/Predlog-spremembe-Nacrta-za-okrevanje-in-odpornost-vkljucno-z-novim-poglavjem-REPowerEU.pdf

[20] https://www.gov.si/en/registries/projects/govder-government-deep-energy-renovation/

	emissions of 6,674 tCO_2eq and created 437 FTE jobs. A leverage factor of 56 was achieved.[21] (2) **PM4PM project** (October 2016 – June 2020): Goriška Local Energy Agency (GOLEA) led the project and helped raise funds for financing of sustainable investments (building renovations, district heating, street lighting, clean transport and local energy-efficient utilities). The ELENA Fund provided EUR 2.03 million (90% of co-financing) while the rest EUR 0.225 million (10% of co-financing) was secured by the eligible beneficiaries to finance projects across 23 different municipalities worth at least EUR 45 million[22]. The program helped finance comprehensive energy retrofits of 80 buildings with around 130,448 m^2 of building space. The expected annual energy savings of 22.34 GWh, annual reduction of CO_2 emissions of 8,172 tCO_2eq and annual final RES production at 13.36 GWh. A leverage factor of 24 was achieved. This project especially helped promote Energy Performance Contracting (EnPC) among local and national stakeholders and helped develop the market[23]. (3) **Energy renovation of Ljubljana** (January 2013 – December 2016): The ELENA Fund provided EUR 0.98 million (90% of co-financing) while the rest EUR 0.157 million (10% of co-financing) had to be secured by the beneficiaries to finance the retrofit of 76 public buildings and more than 170 smaller EE investments. The projects were expected to contribute annual energy savings of 114 GWh, annual reduction of CO_2 emissions of 8,864 tCO_2eq and annual RES heat and electricity generation of 0.25 GWh. A leverage factor of 50 was achieved[24]. (4) **ELENA Sustainable Energy – East Slovenia (SE-ES)[25]** (April 2021 - March 2024): The ELENA Fund provided EUR 1.9 million (90% of co-financing), while the rest EUR 255,146 (10% of co-financing) was secured by Municipality of Kranj. The main goal is to prepare the documentation for the implementation of renovation of buildings, installation of RES devices, etc. The project is expected to contribute annual energy savings of 22.9 HWh, annual reduction of CO2 emissions of 1,842 tCO_2eq annual supply of 4.3 GWh[26]. EIB also provided financing (loans) to SID Bank[27], Eco Fund[28] and Slovenian Regional Development Fund which further helped finance projects related to EE in buildings[29].

[21] https://www.eib.org/attachments/documents/61-project-factsheet-govder.pdf

[22] https://www.golea.si/elena/

[23] https://www.eib.org/attachments/documents/elena-project-factsheet-pm4pm.pdf

[24] https://www.eib.org/attachments/documents/elena-completed-eol-en.pdf

[25] https://www.kranj.si/elena-energija-sustainable-energy-east-slovenia-se-es

[26] https://www.eib.org/attachments/documents/project-factsheet-se-es-en.pdf

[27] https://www.eib.org/en/projects/loans/index.htm?q=sid+&sortColumn=loanParts.loanPartStatus.statusDate&sortDir=desc&pageNumber=0&itemPerPage=25&pageable=true&language=EN&defaultLanguage=EN&loanPartYearFrom=1959&loanPartYearTo=2023&orCountries.region=true&countries=SI&orCountries=true&orSectors=true

[28] https://www.eib.org/en/projects/loans/all/20090793

[29] https://www.eib.org/en/projects/loans/index.htm?q=&sortColumn=loanParts.loanPartStatus.statusDate&sortDir=desc&pageNumber=0&itemPerPage=25&pageable=true&language=EN&defaultLanguage=EN&loanPartYearFrom=1959&loanPartYearTo=2023&orCountries.region=true&countries=SI&orCountries=true&orSectors=true

Climate Change Fund (CCF) (national level)	CCF is managed by the Ministry of Environment, Climate and Energy. The funds come from the proceeds from sales of GHG emission coupons and are used to co-finance measures for mitigation and adaptation to the consequences of climate change[30]. Every few years a new program outlining the use of proceeds is prepared. According to the CCF program 2022-2023, financial incentives are available for[31]: - Companies to invest in EE measures (EUR 5 million) - Sustainable construction of near zero-energy buildings (EUR 22.7 million) - Energy renovation of buildings (EUR 2 million) - Investments in higher EE in buildings (EUR 0.052 million) - Replacement of old heating devices with new heating devices on wood biomass or with heat pumps (EUR 55.751 million) - Measures reducing energy poverty (EUR 0.190 million) - Incentives for low-income households for measures in buildings (EUR 24 million) - Incentives for citizens for new investments in the use of RES and EE (EUR 15 million) - Incentives to achieve greater EE and a degree of self-sufficiency in the field of almost zero-energy buildings (EUR 3.000 million) Recently, the CCF plan 2023-2026[32] was adopted. The resources are budgeted for: - for the EE renovation of public buildings (narrow and wider public sector) and buildings of significant meaning (EUR 79.5 million) - for the EE renovation of residential buildings (EUR 15.5 million) - for EE or RES measures reducing energy poverty (EUR 22.5 million)
Energy Efficiency Contribution (national level)	Energy Efficiency Contribution is paid by the final consumer of energy (i.e., electricity, natural gas, district heat, solid, liquid or gaseous fuels). It came into force in 2014 with the *Decree on energy savings requirements*[33] and was set at 0.08 cents per kilowatt-hour on all energy in 2017. The contribution is paid to the operator and is used by Eco Fund to support measures contributing to EE and the use of RES.

Table 6: Public support schemes by national institution

Eco Fund (https://www.ekosklad.si/)	Eco Fund finances investments in measures contributing to increased EE, use of RES and construction of nearly zero-energy buildings. The grants are mainly financed from the Energy Efficiency Contribution and from the CCF. It also provides soft (environmental) loans which are financed from dedicated property funds, interest income and additional loans from the EIB - the last EUR 50 million EIB loan was granted in 2011 to help finance EE projects in SMEs[34]

[30] http://pisrs.si/Pis.web/pregledPredpisa?id=ZAKO8058

[31] https://www.uradni-list.si/files/RS_-2022-138-03397-OB-P001-0000.PDF

[32] http://vrs-3.vlada.si/MANDAT22/vladnagradiva.nsf/GLA_PRE_KAT?OpenView&ExpandView&RestrictToCategory=00704%20-%202023%20/%20000359

[33] http://www.pisrs.si/Pis.web/pregledPredpisa?id=URED6636

[34] https://www.eib.org/en/projects/loans/all/20090793

	while the application process for the new EUR 50 million loan is already ongoing[35]. Eco fund also manages the Aid scheme targeted at low-income households: (a) incentives with 100% reimbursement of eligible investment costs for energy renovations of multi-apartment buildings and the replacement of old solid fuel heating equipment, (b) ZERO project: low-income households are entitled to a visit by an energy consultant and a package for the implementation of free or low-cost EE measures and (c) ZERO 500 project where Cohesion funds are used for the implementation of EE and RES measures in single- or two-dwelling buildings[36]. Eco fund expects additional Cohesion funds to finance grants for energy renovation of multi-apartment buildings in the next financial period 2021-2027[37].
Ministries: Ministry of the Environment, Climate and Energy (https://www.gov.si/en/state-authorities/ministries/ministry-of-the-environment-climate-and-energy/)	Different ministries are responsible for the implementation of measures outlined in development programs (see Table 5: Public support schemes by source of funds). Additionally, ministries also use the funds from the state budget to finance energy renovation of buildings. For example, the Ministry of the Environment, Climate and Energy manages Cohesion funds allocated for the renovation of buildings within Cohesion policy 2021-2027 (see Table 5: Public support schemes by source of funds). Since 2016, the Project Office for Energy Renovation of Buildings has operated within the Ministry which was responsible for the allocation of grants to the public sector, monitors the implementation, and has implemented project GovDer.
SID bank (https://www.sid.si/)	SID bank manages the Fund of Funds (FoF) for the use of European cohesion funds, and provides direct financing from own financial resources as well as indirect financing through other commercial banks. For more see chapter *1.5 Green loans*.
Slovenian Regional Development Fund (https://www.srrs.si/)	Slovenian Regional Development Fund (SRDF) is financed from its interest income as well as funds from the state budget and technical assistance from the EC. Currently, it also benefits from EUR 30 million EIB loan to help accelerate the recovery of SMEs, mid-caps and municipalities after the COVID-19 pandemic[38]. Two programs managed by the SRDF offer financing for EE for: - Legal entities (i.e., companies): https://www.srrs.si/programi-spodbud/podjetnistvo-b/

[35] https://www.ekosklad.si/informacije/o-skladu/poslovni-nacrt/poslovna-politika-eko-sklada-2021-2025

[36] https://unfccc.int/documents/626622

[37] https://www.ekosklad.si/informacije/o-skladu/poslovni-nacrt/poslovna-politika-eko-sklada-2021-2025

[38] https://www.eib.org/en/press/all/2021-325-eib-to-provide-eur30-million-to-slovenia-s-srdf-for-faster-covid-19-recovery-of-smes-mid-caps-and-municipalities

	- Municipalities or local communities: https://www.srrs.si/programi-spodbud/lokalna-infrastruktura-c/

Table 7: Investments and non-refundable financial incentives for measures in the field of buildings, transport and other sectors[39]

Sector/Year	Encouraged investments [million EUR]								Disbursed funds [million EUR]								Reduction of emissions [kt CO_2/year]							
	2014	2015	2016	2017	2018	2019	2020	2021	2014	2015	2016	2017	2018	2019	2020	2021	2014	2015	2016	2017	2018	2019	2020	2021
Households	**105,2**	**101,6**	**122,4**	**100,6**	**115,7**	**182,3**	**173,2**	**160,4**	**18,1**	**17,7**	**21,8**	**18,0**	**25,1**	**39,6**	**41,5**	**37,4**	**21,3**	**14,7**	**16,7**	**20,5**	**25,9**	**57,1**	**58,7**	**53,1**
Energy efficiency Contribution	94,4	84,3	91,4	89,3	88,2	127,0	122,0	108,6	15,1	13,6	14,5	14,3	15,2	20,9	23,9	19,8	14,4	8,3	9,7	14,7	11,5	21,8	24,7	19,5
Climate Change Fund	10,8	17,3	27,9	1,6	20,7	55,3	51,2	51,8	2,5	3,8	6,0	0,5	7,2	18,1	17,0	17,1	2,1	1,8	3,1	0,5	8,5	29,3	27,5	27,0
Energy Efficiency Contribution/ Climate Change Fund	/	/	3,2	9,7	6,7	/	/	/	/	/	0,8	2,4	1,8	/	/	/	/	/	0,4	1,8	1,2	/	/	/
ENSVET	/	/	/	/	/	/	/	/	0,5	0,2	0,6	0,9	0,9	0,6	0,6	0,5	4,8	4,5	3,6	3,6	4,7	6,1	6,5	6,6
Public sector	**74,0**	**47,0**	**0,0**	**2,2**	**71,0**	**61,5**	**51,3**	**85,4**	**48,6**	**30,0**	**0,0**	**0,8**	**23,1**	**21,4**	**16,3**	**26,2**	**7,6**	**3,8**	**0,0**	**0,1**	**6,2**	**4,0**	**3,6**	**4,0**
Cohesion fund	65,1	47,0	/	1,2	56,8	34,0	28,8	43,6	46,4	30,0	/	0,3	17,8	12,5	9,9	15,7	7,1	3,8	/	0,0	5,6	3,2	2,8	3,1
Energy efficiency Contribution	8,8	/	/	1,0	14,2	27,5	22,5	41,9	2,2	/	/	0,5	5,3	8,9	6,4	10,5	0,4	/	/	0,1	0,6	0,8	0,8	0,9
Private services	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,1**	**0,4**	**8,6**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,1**	**1,6**	**0,0**	**0,0**	**0,0**	**0,0**	**0,0**	**0,3**	**1,0**	**4,0**
Energy efficiency Contribution	/	/	/	/	/	0,1	0,4	8,6	/	/	/	/	/	0,0	0,1	1,6	/	/	/	/	/	0,3	1,0	4,0
Industry	**1,5**	**0,7**	**0,0**	**0,0**	**0,1**	**7,3**	**30,4**	**24,5**	**0,5**	**0,3**	**0,0**	**0,0**	**0,0**	**1,4**	**5,8**	**4,1**	**1,8**	**1,0**	**0,0**	**0,0**	**1,6**	**1,3**	**4,8**	**4,8**
Cohesion fund	1,5	0,7	/	/	/	/	/	/	0,5	0,3	/	/	/	/	/	/	1,8	1,0	/	/	/	/	/	/
Energy efficiency Contribution	/	/	/	/	0,1	7,3	30,4	24,5	/	/	/	/	0,0	1,4	5,8	4,1	/	/	/	/	1,6	1,3	4,8	4,8
Transport	**4,2**	**7,5**	**9,7**	**15,0**	**23,9**	**34,3**	**67,7**	**89,7**	**0,4**	**2,5**	**2,8**	**3,2**	**5,9**	**9,8**	**8,7**	**9,9**	**0,0**	**0,1**	**0,2**	**0,5**	**0,8**	**1,1**	**2,7**	**2,8**
Energy efficiency Contribution	4,0	5,3	7,1	14,3	21,9	28,1	66,6	87,4	0,3	0,7	1,1	2,6	4,2	5,0	7,8	8,3	0,0	0,1	0,2	0,3	0,6	0,4	2,7	2,8
Climate Change Fund	0,2	2,2	2,5	0,8	2,0	6,2	1,2	2,3	0,1	1,8	1,7	0,6	1,7	4,8	0,9	1,6	/	/	/	0,1	0,2	0,8	0,0	0,0
Total	**184,8**	**156,9**	**132,1**	**117,9**	**210,6**	**285,4**	**322,9**	**368,6**	**67,6**	**50,5**	**24,6**	**22,0**	**54,1**	**72,2**	**72,5**	**79,2**	**30,8**	**19,6**	**16,8**	**21,1**	**34,5**	**63,8**	**70,8**	**68,7**

[39] https://podnebnapot2050.si/wp-content/uploads/2022/06/PO2022_Zvezek1_Cilji_KON_2022-06-15F.pdf

RESPONSIBLE INSTITUTION	CODE	TITLE	TARGET GROUP	TYPE OF INSTRUMENT	OBJECTIVES	PERIOD	AVAILABLE FUNDS	SOURCE OF FUNDS	STATUS QUO
Slovenian Regional Development Fund	0301-1/2022-SRRS-16	Public call for co-financing of local and regional public infrastructure projects	municipalities	soft loans	(among others) efficient use of resources such as energy, emissions, materials	20. June 2022 - 31. December 2023	EUR 4 million	own funds which were partially obtained from the EIB	Open
Slovenian Regional Development Fund	3021-1/2022-SRRS-14	Public tender for entrepreneurship - B Energetika MSVP 2022 [40](	legal entities, cooperatives	soft loans	EE, emission efficiency	until 31. December 2023	EUR 3 million	own funds which were partially obtained from the EIB	Open
Ministry of the Environment, Climate and Energy	JP_EP_NOO_2022	Public invitation for energy renovations of buildings of exceptional administrative or social importance within the framework of the RRP, development area "Green Transition", component 2: Sustainable renovation of buildings (C1 K2)	public buildings of exceptional administrative and social importance	soft loans, grants	EE, static renovation	December 2022-April 2024	EUR 53.55 million in grants and EUR 19.45 million in soft loans; EUR 48.02 million (energy renovation), EUR 18.03 million (static renovation);	RRF	Open
Eco Fund	LIFE IP-2023-1	Public tender for non-refundable financial incentives for joint investment pilot projects of deep energy renovation of older multi-apartment buildings, co-financed by ESCOs	citizens, legal entities	grants, private capital (on-bill financing)	EE, RES, e-mobility, seismic renovation	June 2023 - December 2023	EUR 500,000	EE Contribution	Open

[40] https://www.uradni-list.si/_pdf/2022/Ra/r2022103.pdf#page=13

Ministry of Infrastructure	NOO_TSS_2022	Public tender for co-financing of the upgrade of technical building systems	municipalities, public sector (universities and institutes)	grants	EE (through upgrade of technical building systems)	12/01/2023-13/01/2025	EUR 10 million	RRF	Open
Ministry of the Environment, Climate and Energy	NOO_VSSVJL_2022	Public tender for co-financing the energy renovation of multi-apartment buildings in public ownership	central government, wider public sector, municipality, public housing funds	grants	energy renovation of multi-apartment buildings in public ownership	23/12/2022-18/11/2024	EUR 5 million	RRF	Open
Energetika Celje, d.o.o.	CE-URE 2023	Public tender for the allocation of non-refundable financial incentives 2023 for greater utilization of gas and heat distribution systems and more efficient use of energy		grant	EE and generation of energy savings	12/05/2023-30/09/2023	30.000	Funds are provided in the budget of the Municipality of Celje for the year 2023.	Closed
Eco Fund	106FS-PO23	Public call for financial incentives for new investments in EE and RES for business entities	legal entities, legal entities under public law	grant	EE, RES	25/08/2023-	EUR 6 million	EE Contribution	Open
Eco Fund	110SUB-OBPO23	Public call for non-refundable financial incentives for new joint investments of greater EE in older buildings with three or more individual parts of the building	citizens, legal entities	grant	EE, RES	04/08/2023-	EUR 6 million	EE Contribution	Open
Eco Fund	104SUB-SO22	Public call for non-refundable financial incentives/assistance for self-supplying electricity devices and for self-supplying electricity devices with battery electricity storage	citizens, legal entities	grant	RES	30.12.2023	EUR 10 million	CCF 2022–2023	Open

Eco Fund	103SUB-SOG22	Public call for non-refundable financial incentives for joint heating investments in older buildings with three or more individual parts	citizens, legal entities	grant	EE, RES	30/12/2023-	EUR 1 million	EE Contribution	Open
Eco Fund	100SUB-LS22	Public call for non-refundable financial incentives to local communities for new investments in the use of RES and greater EE of buildings	local communities	grant	EE, RES	10/06/2023-	EUR 1 million	EE Contribution	Open
Eco Fund	99SUB-OB22	Public call for non-refundable financial incentives to citizens for new investments in the use of RES and greater EE of residential buildings	citizens	grant	EE, RES	20/05/2022-	EUR 43 million	EE Contribution, CCF	Open
Eco Fund	91FS-sNESPO21	Public call for financial incentives to the economy for almost zero-energy buildings	legal entities	grant, soft loans	EE, RES	30/12/2023-	EUR 1.22 million	CCF 2021–2023	Open
Eco Fund	86SUB-SOCOB21	Public call for non-refundable financial incentives for socially disadvantaged citizens to replace old heating devices with new wood biomass heating devices in residential buildings	socially disadvantaged citizens	grant	EE, RES	02/04/2021-	EUR 500.000	CCF 2020–2023	Open
Eco Fund	75SUB-EPPO19	Public call for non-refundable financial aid to companies to carry out an energy audit or to introduce an energy management system	legal entities	grant	EE	07/06/2019-	EUR 500.000	EE Contribution	Open

Eco Fund	70OB2370OB23	Public call for crediting citizens' environmental investments	citizens	soft loans	RES, EE	14/07/2023-	EUR 15 million		Open
Eco Fund	71PO23	Public call for crediting environmental investments	legal entities	soft loans	RES, EE	23/06/2023-	EUR 7 million		Open
Eco Fund	69ONS22	Public call for crediting municipalities' environmental investments in the construction of new almost zero-energy buildings	municipalities	soft loans	RES, EE	10/02/2023-	EUR 7 million		Open
Eco Fund	68LS22	Public call for crediting environmental investments of local communities	municipalities	soft loans	RES, EE	10/02/2023-	EUR 7 million		Open
SID Bank	SID_banka_2019	Loans for financing projects of comprehensive energy renovation of public buildings	ESCOs, public sector	soft loans	EE	until 31. December 2023	EUR 25 million	FoF (ESIF funds)	Open

1.4. Fiscal policies

In Slovenia, fiscal instruments are less commonly used as a tool to stimulate EE/RES measures for buildings. More information on existing fiscal measures that directly or indirectly contribute to the attractiveness of EE/RES measures in buildings is provided in the table below.

General overview of fiscal system	Decentralised/**centralized** The fiscal system in Slovenia is still quite centralized. The local government (i.e., municipalities) share is only 18.82%[41] and they do not have sufficient level of fiscal authority to be able to create dedicated funds to encourage investments in the energy renovation of buildings.
Key institutions regulating the fiscal system	Ministry of Finance: has a central role, creates and implements the financial system and microeconomic policy in Slovenia Court of Audit: controls state accounts, the state budget and public spending Fiscal Council whose tasks are determined by *Fiscal Rule Act* Other regulators and supervisors: government, the parliament, Bank of Slovenia, Securities Market Agency, the Insurance Supervision Agency, the Office for Money Laundering Prevention
Relevant laws	*Public Finance Act*[42] *Fiscal Rule Act*[43] *Excise Duty Act*[44] *Rules on the application of tax incentives for investments in the digital and green transition*[45]
Currently used fiscal instruments to support EE/RES measures for buildings Impacts/results Monitoring methods	Direct impact: • **Tax reduction**: a reduced 9.5% VAT can be used for the construction, renovation and repair of buildings that are considered part of the social policy as well as for the restoration and repair services of private residential buildings. If the value of the supplied materials exceeds 50% of the total value of the service provided without VAT this is not considered a service and the reduced tax rate does not apply[46]. • **Green and digital transition tax deduction:** was implemented with "*Rules on the application of tax incentives for investments in the digital and green transition*" and applies to the tax period starting in January 2022. Legal entities paying tax can claim a reduction of the tax base in the amount of 40% of the amount representing green and digital investments[47]. The investment allowances can be used

[41] https://op.europa.eu/en/publication-detail/-/publication/9f03e88e-9600-11e8-8bc1-01aa75ed71a1/language-en
[42] http://pisrs.si/Pis.web/pregledPredpisa?id=ZAKO1227
[43] http://www.pisrs.si/Pis.web/pregledPredpisa?id=ZAKO7056
[44] http://www.pisrs.si/Pis.web/pregledPredpisa?id=ZAKO7128
[45] http://www.pisrs.si/Pis.web/pregledPredpisa?id=PRAV14601
[46] https://www.fu.gov.si/fileadmin/Internet/Davki_in_druge_dajatve/Podrocja/Davek_na_dodano_vrednost/Opis/Stopnje_DDV.docx
[47] http://pisrs.si/Pis.web/pregledPredpisa?id=ZAKO4687

	up to a maximum of 63% of the actual tax base. Its purpose is to encourage transition to climate neutrality where the importance of investments in EE of buildings is recognised. The tax relief applies to investments in different building materials with specific energy characteristics[48]. Indirect impact: • **Environmental tax on CO_2 emissions**: its purpose is to internalise the external costs due to CO_2 emissions. By imposing additional fees on fossil fuels this instrument also contributes to competitiveness of RES. In 2022, EC has introduced a new Emissions Trading *System* ("ETS 2") also for buildings which is expected to further motivate the transition from fossil fuels use in buildings to RES. • **Energy efficiency contribution**: end customers pay a contribution of 0.08 cents per kWh which is used by Eco Fund to finance implementation of alternative measures in line with the EED (e.g., EE measures in buildings and transport, financial incentives for households and businesses) • **RES and CHP contribution**: is another contribution paid for by the end customers. The funds are used for the public support scheme and subsidizing the production of electricity from RES and high-efficiency cogeneration of electricity and heat. • Currently no fiscal instruments reducing the number of incentives on fossil fuels has been implemented
Applicability/potentials for introduction of fiscal policies for supporting RES/EE measures in private buildings	Through legislative changes more autonomy should be given to local autonomies for them to be able to create their own source of fiscal income and to use the funds to create specialised funds encouraging investments in the energy renovation of buildings.
Availability of support mechanisms for preparation of projects with this instrument (information/consultation service, capacity building, technical assistance)	There are no dedicated support mechanisms for above mentioned fiscal instruments.

48 https://www.fu.gov.si/fileadmin/Internet/Davki_in_druge_dajatve/Podrocja/Dohodnina/Dohodek_iz_dejavnosti/Opis/Olajsava_za_digitalni_in_zeleni_prehod.docx

1.5. Green and climate bonds

Currently, Slovenia offers two distinct types of green bonds: corporate bonds issued by private and public corporations (including commercial banks and SID bank), and government bonds issued by the Republic of Slovenia. It is crucial to note two important disclaimers. Firstly, the green bond issued by SID bank is not commercial but fully owned by the Republic of Slovenia. Secondly, while the government bond is labeled as 'sustainable,' it is not explicitly 'green.' It is earmarked exclusively for financing projects adhering to stringent green and social project eligibility criteria (further details below).

It's worth highlighting that, due to existing legislation constraints, there are currently no municipal green bonds available. However, the landscape may evolve in the near future, as changes in support mechanisms are under consideration. The Capital Market Development Strategy in Slovenia outlines plans to provide additional support for the development of the bond market. This includes fostering corporate green bonds in line with Environmental, Social, and Governance (ESG) criteria, municipal bonds, and government bonds.

To achieve these goals, various measures are anticipated, such as amendments to the Securities Act to enhance the recognition of the advantages of (green) bonds as a novel financing source for corporate entities. Implementation of such measures is slated for the period between 2023 and 2026, reflecting a forward-looking approach to strengthen and diversify Slovenia's bond market.

Government green bonds	
National policy	**National legislation**: Issuance of green bonds is subject to the Public Finance Act[49]. **Slovenian Sustainability Bond Framework 2023**[50] governs the issuance of Slovenian Sovereign Green, Social or Sustainability Bonds (SSSBs) (hereinafter "Framework"). **Slovenian Sovereign Sustainability Bond Framework 2021**[51] **EU legislation**: the Procedure 2021/0191/COD[52] (Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on European green bonds) is currently awaiting reading from the Parliament.
Fiscal treatment (public debt or not)	Yes, it is treated as public debt[53].
Key institutions	**Ministry of Finance** manages the proceeds of issued SSSBs and is responsible to ensure that each potential investment meets all the relevant evaluation processes and value-for-money tests required under the *Public Finance Act* and reporting to investors.

[49] http://www.pisrs.si/Pis.web/cm?idStrani=prevodi

[50] https://www.gov.si/assets/ministrstva/MF/Zakladnistvo/Trajnostna-obveznica-slo/Okvir-Republike-Slovenije-za-trajnostno-obveznico-Januar-2023-dostopno-v-angleskem-jeziku.pdf

[51] https://www.gov.si/assets/ministrstva/MF/Zakladnistvo/Dolg-RS/Okvir-Republike-Slovenije-za-trajnostno-obveznico.pdf

[52] https://eur-lex.europa.eu/resource.html?uri=cellar:e77212e8-df07-11eb-895a-01aa75ed71a1.0006.02/DOC_1&format=PDF

[53] https://www.gov.si/assets/ministrstva/MF/Zakladnistvo/Dolg-RS/Porocilo-o-dolgu/Porocilo-o-upravljanju-z-javnim-dolgom-Republike-Slovenije-za-leto-2021.pdf

	Sustainability Bond Working Group ("SSSBs Working Group") was established by the government. It comprises of representatives from multiple ministries (e.g., Finance, Environment and Spatial Planning, Infrastructure, Education and Sports, Health, Government Office for Development and Cohesion Policy). Its role is to evaluate, select and monitor eligible green and social projects and report on the annual impacts[54].
National standards/methodology	Slovenian Sovereign Sustainability Bond Framework 2021 and 2023 (see above for more)
Use of EU/global standards (e.g., GBS, Climate Bond Standard)	The Framework has been prepared in accordance with the ICMA Green Bond Principles 2021[55], Social Bond Principles 2021[56] and Sustainability Bond Guidelines 2021[57]. Additionally, it also considers EU Green Bond Standard. The eligibility criteria for the selection of green projects that are to be financed is that they are to comply with the EU Taxonomy regulation. Where applicable, the use of proceeds for specified green and social bond project categories is also aligned with the Technical Screening Criteria of the EU Taxonomy and its Delegated Act.
Past/current use of bonds **Market volume** **Key projects**	Bonds were issued to help fund state expenditures with high environmental and social impact. In June 2021 the government issued EUR 1 billion sustainability bond **RS88** with maturity of 10 years and additional EUR 50 million sustainability bond in February 2022. According to the Slovenian sustainability bond report[58], no projects categorised under "Green Buildings and Energy Efficiency" category were chosen for financing. A full list of projects financed from the Sustainability Bond is available here. In January 2023, the RS issued a second set of sustainable bonds RS91 worth EUR 1.25 billion with maturity of 10 years[10]. According to the *Municipal Financing Act*[59] municipalities are currently not allowed to issue bonds. However, according to the *Strategy for the Development of the Capital Market in Slovenia until 2030*[10] this could change in the future. The government intends to allocate the proceeds within two budget years after the budget year of issuance. The net proceeds from issuing sustainability bonds are to be used to (re)finance expenditure that fulfil both the Eligible Green Project criteria and the Eligible Social Projects criteria. Among the eligible green categories are also green buildings and EE such as construction and acquisition of new EE buildings, renovation of existing public sector buildings to improve EE, measures against energy poverty and EE public lightning[60].
Standardized documentation	n/a
Impact indicators **+ Inclusion of socioeconomic impacts and evaluation and KPIs**	Possible impact indicators: - Estimated ex-ante annual energy savings (in MWh) - Annual GHG emissions in tons of CO2 equivalent saved - Number of households with improved class of energy use

[54] https://www.gov.si/assets/ministrstva/MF/Zakladnistvo/Trajnostna-obveznica-slo/Okvir-Republike-Slovenije-za-trajnostno-obveznico-Januar-2023-dostopno-v-angleskem-jeziku.pdf

[55] https://www.icmagroup.org/assets/documents/Sustainable-finance/2021-updates/Green-Bond-Principles-June-2021-140621.pdf

[56] https://www.icmagroup.org/assets/documents/Sustainable-finance/2021-updates/Social-Bond-Principles-June-2021-140621.pdf

[57] https://www.icmagroup.org/assets/documents/Sustainable-finance/2021-updates/Sustainability-Bond-Guidelines-June-2021-140621.pdf

[58] https://www.gov.si/assets/ministrstva/MF/Zakladnistvo/Trajnostna-obveznica-ang/Slovenian-Sustaiability-Bond-Report-June-2022.pdf

[59] http://pisrs.si/Pis.web/pregledPredpisa?id=ZAKO4615

[60] https://www.gov.si/assets/ministrstva/MF/Zakladnistvo/Trajnostna-obveznica-slo/Okvir-Republike-Slovenije-za-trajnostno-obveznico-Januar-2023-dostopno-v-angleskem-jeziku.pdf

	- Reduction of annual primary energy consumption in public buildings - Surface of energy refurbished buildings owned/used by the central government The Framework also proposes possible social impact indicators (used for assessment of Social Bonds and Sustainability Bonds[61]). The full list is available here.
Availability of support mechanisms	SSSBs Working Group consists of representatives from nine ministries. Their role is to oversee the implementation of the Sovereign Sustainability Bond Framework, identify eligible green and social bond projects, approving the annual allocation reports and approving eligible green and social impact report.

Commercial green bonds

	SID Bank	NLB Bank	GEN-I Sonce
National policy	n/a	n/a	n/a
Fiscal treatment (public debt or not)	Not treated as public debt.	Not treated as public debt.	Not treated as public debt.
Key institutions	SID Bank, Sustainanalytics (independent second party opinion), JSI EEC (independent evaluator of environmental effects of green projects)	NLB Bank, Sustainanalytics (independent second party opinion)	SID Bank, company GEN-I Sonce d.o.o., Nova Ljubljanska Banka (organised the issuing of bonds)
National standards/ methodology	*Framework for issuing green bonds 2018*[62]	*NLB Green Bond Framework*[63]	n/a
Use of EU/global standards (e.g., GBS, Climate Bond Standard)	*Green Bond Standard (GBS) 2018* by ICMA[64]. SID bank followed the ICMA GBS principles and its five components: use of funds, project evaluation and selection process, asset management, reporting and external inspection. This was also verified by independent expert Sustainalytics.	The bank followed ICMA GBP 2021 pillars: use of proceeds, process for project evaluation and selection, management of proceeds, reporting, external review and reporting. The eligibility criteria for the use of proceeds considers EU Taxonomy Regulation and the EU Taxonomy Climate Delegated Act. They also acquired second opinion by independent party - Sustainalytics on alliance of framework with the GBP and to acquire EU Taxonomy Alignment Assessment.	Green Bond Principles (GBP) by ICMA.

[61] Sustainability Bonds are to help (re)finance projects that fall within eligible Green or Social Project categories.

[62] https://www.sid.si/sites/www.sid.si/files/documents/investitorji/green_framework_-_final_slovenski_-30.11.2018.pdf

[63] https://www.nlb.si/nlb/nlb-portal/eng/investor-relations/debt-instruments/nlb-green-bond-framework.pdf

[64] https://www.icmagroup.org/sustainable-finance/the-principles-guidelines-and-handbooks/green-bond-principles-gbp/

Past/current use of bonds **Market volume** **Key projects**	**Green Bond name**: SEDABI 12/12/2023 **Description**: In December 2018, SID bank issued the first green bond in the amount of EUR 75 million to finance green projects. This was also the first green bond ever issued in the RS that followed GBP principles issued by International Capital Market Association[65]. **Use of proceeds**: 67.4% of all funds were allocated to green projects in the category of clean transport, 21.4% of funds to projects in the category of RES, 8.8% to sustainable management of resources and waste and 2.3% for EE[66]. **Eligible categories**: RES, EE, pollution prevention and control, environmentally sustainable management of living natural resources and land use, clean transport, sustainable management of water and wastewater, products, production technologies and processes that correspond to an ecologically efficient and/or circular economy and green buildings. **Energy efficiency:** • in residential, public and commercial buildings (with at least a 20% improvement in EE), • in industrial processes, except for industrial processes that use fossil fuels, • setting up cogeneration plants (including cogeneration based on	**Green Bond name**: 4NC3 **Description:** In June 2023, NLB Bank issued green bonds with due date in June 2027. The bank issued EUR 500 million worth of bonds. The investors placed more than EUR 1.8 billion. **Use of proceeds:** Currently no information on the use of proceeds is available. **Eligible categories**: RES, green building, EE, clean transportation, sustainable water and wastewater management, pollution prevention and control. **Energy efficiency:** • Manufacturing of rechargeable batteries (e.g., lithium-ion batteries), • Battery packs and accumulators for transport, stationary and off-grid energy storage • Construction of facilities that store	**Green Bond name**: GES1 **Description:** In March 2017, company GEN-I Sonce d.o.o. issued green bond worth EUR 14 million with due date in 2024. The funds have been used to finance RES projects and projects increasing EE. Specifically, the funds have been used to finance the construction of multiple micro solar panels. SID bank, who helped develop the financial instrument, invested EUR 9 million while NKBM bank provided EUR 5 million. **Use of proceeds:** By the end of 2019, the company has invested EUR 8 million in the construction of 1,287 self-sufficient solar power plants, 57 heat pumps and 8 non-self-sufficient solar power plants[68].

[65] https://www.sid.si/sites/www.sid.si/files/documents/mediji/sporocilo_za_javnost_zelena_obveznica_4.12.2018_1.pdf

[66] https://www.sid.si/sites/www.sid.si/files/documents/porocilo_o_okoljskih_ucinkih_zelene_obveznice_sid_banke_za_leto_2020.pdf

[68] https://gen-i.si/media/gtkhn5aq/gen-i-trajnostno-porocilo-2019.pdf/

	biomass from waste products, except production based on fossil fuels). **Green buildings:** • residential buildings with energy consumption of no more than 35 kWh/m2 per year • Non-residential (public and commercial) buildings, which are among the 15% most energy efficient non-residential buildings in Slovenia[67]	electricity and return it later in the form of electricity • Installation of electric heat pumps • Installation, maintenance and repair of EE equipment including LED street lamps **Green buildings:** • Buildings built before 31 December 2020 with EPC label ≥ 'A' or belonging to the top 15% of the national building stock based on primary energy demand (PED) • Buildings built after 31 December 2020 with energy performance of at least 10% better than the threshold for Nearly Zero-Energy Buildings (NZEB) based on primary energy demand (PED) in the local market • Buildings that have been refurbished, resulting in a reduction of PED of at least 30% and validated through an Energy Performance Certificate • Buildings that have been refurbished meeting the criteria for major renovations under applicable building regulations • New, existing or refurbished buildings with at least one of the following certifications: BREEAM 'Excellent' or above; LEED 'Gold' or above; DGNB 'Gold' and/or above; HQE 'Excellent' and/or above.	
Standardized documentation	n/a	n/a	n/a

[67] https://www.sid.si/sites/www.sid.si/files/documents/investitorji/green_framework_-_final_slovenski_-30.11.2018.pdf

Impact indicators + Inclusion of socioeconomic impacts and evaluation and KPIs*	Proposed indicators (only for categories EE and green buildings): - Reduction/prevention of greenhouse gas emissions (GHG) on an annual basis in tons of CO2 equivalent - Annual production of energy from RES in MWh/GWh (electricity) and GJ/TJ (other energy) - Capacity of plant(s) for obtaining energy from RES and resources that were (were) constructed or renovated in MW - Annual energy savings in MWh/GWh (electricity) and GJ/TJ (saving other energy) - Reduction/prevention of GHG emissions on an annual level in tons of CO2 equivalent - Percentage of achieved EE - Number of green buildings - Energy consumption (kWh/m2/year) JSI EEC has prepared the estimated environmental impact of projects financed by SID bank's green bond. The Green Bond Principles on selection of projects have been adopted. For reporting ICMA Handbook – Harmonized Framework for Impact Reporting has been used.	Proposed indicators (only for categories EE and green buildings): - Estimated annual energy savings in MWh - Estimated annual reduced and/or avoided emissions in tonnes of CO2 equivalent - Estimated ex-ante annual energy consumption in kWh/m2 - Estimated annual energy savings in MWh/GWh - Estimated annual reduced and/or avoided emissions in tonnes of CO2 equivalent	Proposed indicators: - Energy savings due to increased EE - Reduction of CO_2 emissions - Increase in production of energy from RES
Availability of support mechanisms	As of now, no specific support mechanism has been established to reinforce the development of green bonds in Slovenia.		

1.6. Green loans

Key financial institutions on the market, available products, trends and market volume in the past 3-5 years years (if information is available)

(1) Eco fund distributed more than 13,000 investments to citizens, municipalities and legal persons amounting to around EUR 393 million of green, EE loans. To finance these lending activities, Eco fund has taken out EIB loan (see Chapter 1.2) and used its own financial resources. The EE loan interest rates for consumers[69] are EURIBOR i.r. + 1.3% i.r., for legal entities[70] EURIBOR + at least 1.0% ir. and for municipalities EURIBOR + 0 % i.r.[71].

(2) SID Bank is a promotional development and export bank 100% owned by the Republic of Slovenia. It provides green loans to enterprises, big enterprises, municipalities and the public sector. It provides financing through:

- Fund of funds *(sl. Sklad skladov):* the fund was established in 2017 in cooperation with the Ministry of Economic Development and Technology to assist the use of European Cohesion funds. Through the FoF, SID bank provides loans, guarantees, and equity financing to companies and the public sector via other financial intermediaries (commercial banks, savings banks, public funds). Long-term loans for energy renovation of public buildings are available to the public sector and ESCOs. The public sector can also acquire loans for urban development projects.
- **Indirect financing through commercial banks** to which SID bank provides a share of funds**:** companies can also acquire loans from other commercial banks for projects related to RES and efficient use of energy. Loans have a favourable interest rate compared to regular loans, maturity between 1 – 15 years with the possibility of moratorium, no minimum and maximum value of credit value, possibility to start financing projects that already started or completed with funding of up to 85% of eligible project costs. There are four banks currently participating: Addiko Bank, Gorenjska banka, NKBM, NBanka.
- Financing of regional and social development: in cooperation with three commercial banks (Intesa Sanpaolo Bank, NLB, NKBM), SID bank offers loans from its own funds for infrastructure investments and investments in regional development. Renovation, construction or purchase of special buildings is financed (e.g., elderly homes, apartments for young people, non-profit apartments).
- **Green bonds (see chapter 1.**4)

Commercial banks: some commercial banks in Slovenia offer green loans to consumers. Around half of all banks and savings banks in Slovenia offer green loans with slightly favourable conditions – five banks and bank Intesa Sanpaolo offering green loans in cooperation with Eco Fund. These loans differ in the purpose of financing and slightly lower interest rates. Namely:

[69] https://ekosklad.si/uploads/2f40c174-3d3e-470a-9435-88bfaa52d233/Obvestilo_o_zaklju%C4%8Dku_Javnega_poziva_za_kreditiranje_Okoljskih_nalo%C5%BEb_ob%C4%8Danov_67OB22.pdf

[70] https://www.ekosklad.si/gospodarstvo/pridobite-spodbudo/objava/javni-poziv-71po23-kreditiranje-okoljskih-nalozb

[71] https://www.ekosklad.si/javni-sektor/pridobite-spodbudo/objava/javni-poziv-za-kreditiranje-okoljskih-nalozb-obcin-v-gradnjo-novih-skoraj-nic-energijskih-stavb-69ons22

• Fixed interest rate: 2.8% per annum • Variable interest rate: 3M EURIBOR + 1.0% annually Most banks offer slightly lower interest rates, namely by 0.1-0.2 percentage points. There is only one bank offering an interest rate lower by 0.5 percentage points. Only two banks offer fixed interest rates, all other offer variable interest rate that is linked to Euribor. Some banks do offer lower credit costs and insurance for the loan. The maturity of the loan is up to 30 years depending on the type and size of the project[72].
Project evaluation methods (use of economic assessments tools), monitoring of performances by financial institutions (if information is available)
Not publicly available. Some available information on evaluation of the impact of green loans is provided below. NLB Bank requires proof of the targeted use of funds. They require energy certificate of the building before and after renovation, project plan for the energy renovation, and a detailed description of the development activities of the project[73]. Eco fund assesses the impact of green loans with the following parameters: annual CO_2 emission reduction [t/year], annual reduction of NO_X emissions [t/year], annual SO_2 emission reduction [t/year], Produced amount of electricity [kWh/year], Heat produced [kWh/year], Reduction of biomass consumption [t/year], Reduction of liquid petroleum gas consumption [t/year], Reduction of natural gas consumption [Sm3/year].
Availability of support mechanisms for preparation of projects with this instrument (information/consultation service, capacity building, technical assistance)
Eco Fund provides detailed information on green loans for each public call that potential applicants can use to facilitate the application process. For example: instructions for using the approved cost or elements considered for the creditworthiness of the applicant and the insurance adequacy[74]. Furthermore, since 2023 a system of administrative assistance in filling out applications to obtain incentives from the Eco Fund was established. Assistant is paid 10 EUR/application.

[72] https://www.ekosklad.si/prebivalstvo/pridobite-spodbudo/seznam-spodbud/izolacija-fasade/izolacija-fasade-kredit-3
[73] https://www.nlb.si/zeleni-krediti-za-podjetja#
[74] https://www.ekosklad.si/gospodarstvo/pridobite-spodbudo/objava/javni-poziv-71po23-kreditiranje-okoljskih-nalozb

Table 8: Overview of selected commercial banks offering green loans in Slovenia

Bank	Link	Available products i.e., green loans	Conditions	Offer
Addiko Bank d.d.	link	Offering loans from the assets of SID Bank	**Target group:** companies **Fields:** Borrowing and spending the loan is strictly targeted at investment contributing to the environmental protection and EE (among others) SID Bank's funds can be used to finance up to 85% of (eligible) project costs	Favourable interest rates Possibility of deferring the principal payment (moratorium) **Loan repayment**: from 1-10 years Targeted use of funds
Nova Ljubljanska Banka d.d.	link - companies link - households	Green loans with own funds or in cooperation with other partners e.g., Plan-net Solar d.o.o.	**Target group:** companies, households **Fields:** investments in EE of commercial buildings, loan for reduction of carbon footprint, energy production from RES (also in cooperation with other companies)	Favourable interest rates Loan repayment: from 1-10 years Targeted use of funds No credit approval cost
Intesa San Paolo	Link - households	Offering green loans in cooperation with Eco Fund	**Target group:** households **Fields:** investments increasing EE, production of energy from RES	Variable interest rate: three-month Euribor + 1.0%, fixed interest rate: 2.8% Loan repayment: up to 10 years Targeted use of funds One-time cost of credit approval amounting to 1.5% of the approved credit amount Cost of credit management apply
NKBM	Link - households	Offering green loans	**Target group:** households **Fields:** investments increasing EE, production of energy from RES, building of EE house	Favourable interest rates Loan maturity: up to 31 years Targeted use of funds No credit approval cost

.

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

In Slovenia, different types of Energy Efficiency Services (EES) are available: **Energy Performance Contracting (EnPC)**, **Energy Supply Contracting (ESC)** and **Comprehensive EnPC**. A comparison of the three types of EES is provided in the table below. Additionally, there are less common EES types of services: (1) **Integrated Energy-Contracting (IEC)** which combines EE measures with ESC where the effects of implemented measures are measured in the short-term; (2) **Operating Contracting (OC)/EnPC light** which contributes to energy savings through organisational measures that require low or no investments in technical equipment, and (3) **Green EnPC** which focuses on the reduction of GHG emissions[75].

EnPC	ESC	Comprehensive EnPC
The contractual agreement between the customer and the provider of EES Both parties enter into a contractual agreement where the provider implements measures improving EE, and checks and monitors implemented measures throughout the contract.	Contractual agreement for the efficient supply of energy The customer remunerates the investments (e.g., new, supplementary or additional appliances for energy supply) to the supplier by paying for the supplied energy (e.g., the price for heat or cold, electricity) Contracted and measured in megawatt hours [MWh] delivered	In addition to the implemented EES comprehensive structural measures on the building envelope, such as insulation and window replacement, are provided. The customer pays for the share of investment through a grant, a combination of EnPC with subsidy programmes.

Table 9: Comparison of energy-efficiency services available in Slovenia.

National policies and laws	**Energy Act**: http://www.pisrs.si/Pis.web/pregledPredpisa?id=ZAKO6665
	Act on Energy Efficiency: http://www.pisrs.si/Pis.web/pregledPredpisa?id=ZAKO8136
	
	National Energy and Climate Plan (NECP)[76] was adopted in February 2020 and is transposing Article 18 (Energy services) and Article 19 (Other measures to promote EE) of the Directive 2012/27/EU (EED)[77]. Previously, NEEAP (2017)[78] already established a stimulating support environment for intensive uptake of EnPC and proposed key measures to achieve the set objectives by 2020. Continuation and upgrade of measures related to EnPC were outlined in NECP (2020) which are:
	Directly related measures:
	- Energy contracting (EPO)
	  ○ design appropriate financial products for EnPC service providers
	  ○ support the development of EnPC through appropriate support measures, such as: training, additional expert and technical assistance in the project preparation, quality assurance programme for EPO projects, preparation of tools for evaluation of EnPC projects
	  ○ extend the instrument from the public sector to other sectors, in particular, residential buildings
	  ○ establish a mechanism to promote the emergence of energy service companies, with particular attention to SMEs (SID bank, etc.)
	- Financial incentives for energy efficiency and RES use in residential buildings
	- Renovation financing instruments for multi-owner buildings
	- Energy efficiency rebate schemes: Eco fund loans and incentives from other green home loan providers for the housing sector
	- Establishment of a guarantee scheme
	- Energy management in the public sector
	- Public sector energy efficiency return schemes

[75] https://qualitee.eu/wp-content/uploads/QualitEE_2-04_CountryReport_SI.pdf
[76] https://energy.ec.europa.eu/system/files/2020-06/si_final_necp_main_en_0.pdf
[77] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32012L0027
[78] https://www.energetika-portal.si/fileadmin/dokumenti/publikacije/an_ure/an_ure_2017-2020_final.pdf

	- Non-repayable investment financial incentives for energy rehabilitation of public sector buildings aimed at increasing the share of projects implemented through energy contracting - Ensure quality of building energy renovation projects in the public sector - Project office for energy renovation of public buildings - Incentives for the introduction of energy management systems in industry - Non-repayable investment financial incentives for energy rehabilitation of public sector buildings aimed at increasing the share of projects implemented through energy contracting Indirectly related measures: - Amendments and supplements of regulations for the energy efficiency of buildings - Renovation of cultural heritage buildings and other specific groups of buildings - Creating sustainable criteria of buildings - Mandatory division and calculation of heat costs in multi-household buildings - Energy Advisory Network – ENSVET - Sharing incentives between owners and tenants in multihousehold buildings - Restricting the use of fossil fuels for heating in buildings - Develop a financing plan for the sustainable renovation of buildings - Establishment of a portal of energy properties of buildings Speed up implementation of programmes for informing, raising awareness and training of different target groups on the benefits and practical aspects of the development and use of EEI technologies and the use of RES **Long-term energy renovation strategy for 2050**[79] was adopted in February 2021 and is transposing Article 4 (energy efficiency strategy) of Directive 2012/27/EU (EED)[80]. Reduction of GHG emissions by 70 % by 2050 compared to 2005 and 66 % of RES use in the final energy use excluding electricity and district heat in energy use in buildings are the key goals. Additionally, the objective of LTRS is that by 2050 74 % of single-dwelling buildings and 91 % of multi-apartment buildings are energy renovated. Most of the renovations of public sector buildings are to be implemented using the private capital of ESCOs providing EES. Other relevant strategic documents and programs: - National energy and climate plan (NECP): https://www.energetika-portal.si/fileadmin/dokumenti/publikacije/nepn/dokumenti/nepn_5.0_final_feb-2020.pdf - Operational Programme for the Implementation of the EU Cohesion Policy in the period 2014 – 2020: https://www.eu-skladi.si/kohezija-do-2013/ostalo/op-final-en - National Recovery and Resilience Plan: https://www.gov.si/en/registries/projects/the-recovery-and-resilience-plan/about-the-recovery-and-resilience-plan/ - Operational Programme for the Implementation of the EU Cohesion Policy in the period 2021-2027: https://www.eu-skladi.si/portal/sl/po-2020/priprava-programskih-dokumentov-1/podstran-1 Legal foundation for the implementation of EnPC through PPP: - Public-Private Partnership Act: http://pisrs.si/Pis.web/pregledPredpisa?id=ZAKO4323 - Certain Concession Contracts Act: http://www.pisrs.si/Pis.web/pregledPredpisa?sop=2019-01-0287 (only for projects above EUR 5.19 million value) Entities in the public sector using EnPC also have to consider the following documents: - The European System of National and Regional Accounts – ESA 2010 (Maj 2013) - Eurostat Guidance Note: The Impact of Energy Performance Contracts on Government Accounts (August 2015) - Manual on Government Deficit and Debt – Implementation of ESA 2010 (2016) - A Guide to the Statistical Treatment of Public Private partnerships (September 2016) - Eurostat Guidance Note: The Recording of Energy Performance Contracts in Government Accounts (September 2017) - A Guide to the Statistical Treatment of Energy Performance Contracts (Maj 2018)

[79] https://energy.ec.europa.eu/system/files/2021-08/sl_ltrs_2020_en_0.pdf

[80] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32012L0027

	- Clarification on the application of a guide to the statistical treatment of PPPs (June 2022) **European Code of Conduct for EnPC (EU level)**: is a set of values and principles that are considered fundamental for the successful implementation of the EnPC project in the MS. In June 2020, the Code had 240 signatories in Europe among which 154 EnPC suppliers, 15 EnPC suppliers' national associations, 1 European association and 70 other actors active within the EnPC market[81]. In Slovenia, there are 6 signatories out of which 3 are key providers of EnPC services and 2 are facilitators. Due to the small size of the EnPC market, there is currently no EnPC Association that could administer the Code. For this reason, JSI EEC is playing the role of Code administrator in Slovenia.
Regulating bodies	The Ministry of Environment, Climate and Energy[82] is responsible for the implementation of tasks related to the EES and other administrative tasks and measures contributing to reliable energy supply, increasing EE and energy savings, and increasing the use of energy from RES. The ministry is responsible for the preparation and implementation of national energy policy, formulating the legislative and other acts for the energy sector, implementing measures to attain energy and climate objectives (e.g., through increased use of RES and improving EE), cooperating within bilateral and multilateral regional energy frameworks to stimulate the environment for national, regional and entrepreneurial cooperation and to manage the energy sector database information system and elaboration of economic analysis for the energy sector.[83]

The market actors in Slovenia are grouped in the table below according to their importance and sector. Clients from the public or semi-public sector mainly focus on the renovation of public buildings and street lighting while clients from the private sector (e.g., commercial, industry) focus on the lightning, PV and combined heat and power projects. Around 660 companies supply electricity, gas and steam, and 160 energy distributors or retail energy sales companies are obligated parties in the framework of the EED energy savings obligation scheme. Out of eight ESCO companies[84] three dominate the EnPC market in Slovenia, therefore the market is considered non-competitive. There are 5 project facilitators in Slovenia while there are no associations[85].

	Public / Semi-public	**Private sector**
Key actors	Ministry of Environment, Climate and Energy Local energy agencies/Consultants Local authorities Ministry of Cohesion and Regional Development	Energy supply and energy performance contracting facilitators Energy Service Companies, investors Commercial banks (Nova Ljubljanska banka, Gorenjska banka, Delavska hranilnica …)
Primary	Slovenian Development Bank (SID Bank) Eco Fund Ministry of Finance Associations of municipalities	Investment funds Insurance companies
Secondary	Housing Fund of the Republic of Slovenia Ministry of Economy, Tourism and Sport	Chamber of Commerce Chamber of Construction and Building Materials Industry of Slovenia Associations of housing owners Association of the building managers

[81] https://www.efiees.eu/eu-epc-coc/

[82] https://www.gov.si/drzavni-organi/ministrstva/ministrstvo-za-okolje-podnebje-in-energijo/o-ministrstvu/direktorat-za-energijo/

[83] https://qualitee.eu/wp-content/uploads/QualitEE_2-04_CountryReport_SI.pdf

[84] https://www.energetika-portal.si/podrocja/energetika/energetska-prenova-javnih-stavb/esco-ponudniki/

[85] https://qualitee.eu/wp-content/uploads/QualitEE_2-04_CountryReport_SI.pdf

EES are delivered through different models. The client (entity from the public sector, service sector, industry, residential sector or SMEs) can either perform certain energy improvements on its own or hire contractors such as:

- specialized companies that provide energy solutions
- suppliers of energy products and energy
- equipment suppliers
- consulting companies, engineering companies
- Energy Service Companies (ESCOs)

Contractors are delivering EES also through PPP and EnPC. More information on each model and legal form is provided below.

Market maturity, trends, volume

The EnPC market has been developing in Slovenia since 2002. In the years between 2017 and 2019, the public sector market focused on the renovation of buildings in major municipalities such as Ljubljana and Maribor. For this reason, the market was characterised as "developed with slow growth"[86]. According to JRC, the public sector contracts (guaranteed savings model) were among the largest (>EUR 2 million) and longest in the EU.
Initially, the market was expected to stagnate in the following years as major renovations already took place in the biggest cities, due to the lack of initiatives in the central government, and because the private EnPC market failed to take off. However, according to the EU Survey 2022, some growth is expected in the national public sector and private sector (in the private sector the number of contracts is unknown). The market is currently most developed in the public sector while the private market is expected to grow in the following years (see Table XX).

	Public	Private	Overall	Comment
Number of contracts	12	1		No national data on private sector
Overall size m€	36	0.5		(Public: 1700 MWh/a Private: 1600 MWh/a)
Typical* size m€	3	0.5		
Typical* duration	15	5 -10		
Typical* payback	12-20	8		Depending on grant support
Typical* % of baseline	35	40		
Typical savings* MWh/year	1000	500		
Typical savings* m€/year	0.1	0.05	0.075	

Source: EU Survey 2022

Table XX: Market size and EnPC contract characteristics (EU Survey 2022)[87].

Table XX provides a comparison of market trends for the period 2019-2021 and 2022-2024 for both the public and private sectors. While the provision of funds and standardization of processes drive market growth in the public sector, the growth in the private sector occurs due to rising energy prices and OPEX optimisation[87].

[86] https://op.europa.eu/en/publication-detail/-/publication/a1782e0f-2f49-11ee-9e98-01aa75ed71a1/language-en
[87] https://op.europa.eu/en/publication-detail/-/publication/a1782e0f-2f49-11ee-9e98-01aa75ed71a1/language-en

	Public sector	Private sector	Comments
Trend 2019-2021	Rapid take off /(Stable)	Slow take off / (Stable)	Public: Combination of grants (Cohesion Funds) and private financing, standardized implementation framework Private: Energy prices (OPEX optimisation)
Perspective 2022-2024	Stable / (Rocketing)	Slow take off / (Rocketing)	Public: Development of new financial instrument (Cohesion funds); Private: Energy prices, new financing instruments (OPEX optimisation)

Source: EU Survey 2022. Estimates in between brackets refer to Ljubljana.

EnPC contracts in Slovenia have a capital outlay of EUR 1-5 million and a contract length of 15 years as deep energy renovation projects prevail. For the public sector, the EnPC model contract is provided off-balance.

Financing

EnPC is generally financed by providers, however, many financing sources and instruments are used for financing. Experts in Slovenia ranked the financing sources for EnPC project (see table XX).

- **Public sector**: The most commonly used financing sources in the public sector are grants, provider funds and debt financing[86]. Typically, 51% of the project's funds are secure EnPC provider with its own capital or debt financing while the rest is covered by either client's own state-budget funds (between 0-9%) or an EU grant (40-49%). Renovation projects in the public sector completed through EnPC achieve 14% higher final energy savings and 27% lower renovation costs compared to public procurement ones. (7)
- **Private sector**: The most common financing sources in the private sector are EnPC provider funds, debt financing, leasing, special purpose vehicles and grants. In Ljubljana (local level), financing was also provided through forfeiting, guarantees and guarantee funds. Cohesion funds and private financing drove the renovation of buildings in the public sector between 2020-2021 and will further drive the development in 2022-2023[86].
- **EnPC providers**: finance their activities through national or international equity financing and (international) forfeiting. The largest EnPC providers use *International Financial Reporting Standards* accounting rules. (7)

	Public (0-3)	Private (0-3)	Overall (0-3)	Comment
Client funds	1-3	1		
Provider funds	3	2		
Third-party Public funds	0-3	1		
Third party Private funds	0-2	0		
Private financing inst.	1.5	1.5		
Public financing inst.	0.5	0.5		
Debt financing	2	2		
Guarantees and guarantee funds	1.5	1		
Equity financing	1	1		
Mezzanine financing	1	1		
Project financing	1.5	1.5		
Leasing	0	2		
Special Purpose Vehicles	1.5	2		
Grants	3	2		
Forfaiting	1.5	1.5		
Other				

Source: EU Survey 2022.

Table XX: Relevance of different contract models in the public and private sectors of the MS[88].

The clients who wish to renovate buildings through EnPC can finance the measures through a combination of different financial resources. Some are available only to clients in the form of grants while others are also available to ESCOs in the form of loans.

National:

- SID Bank: loans for EE projects for the public sector and ESCOs (for more see Chapter 1.5)

[88] https://op.europa.eu/en/publication-detail/-/publication/a1782e0f-2f49-11ee-9e98-01aa75ed71a1/language-en

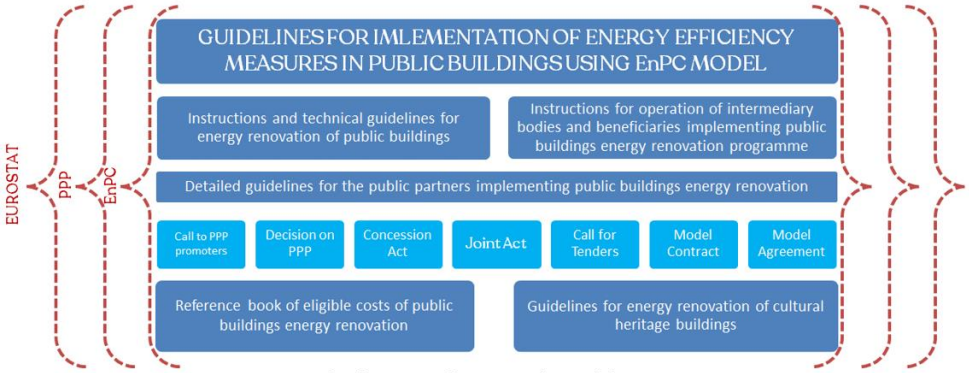
<table>
<tr><td></td><td>

Eco fund: public support schemes for EE and EES-related measures. However, these funds are not available directly to EnPC providers. Such examples are soft loans to legal entities and sole traders, soft loans to households, grants to municipalities for investments in public buildings, and grants to households for investments in residential buildings (for more see Chapter 1.2).
Climate Fund 2023-2026 (for more see Chapter 1.2):
Equity and non-equity, green bonds (for more see Chapter 1.5)
Public funds

International:

ELENA technical assistance by EIB (see Chapter 1.2 for more)
EIB (see Chapter 1.2 for more)
Cohesion fund (for the public sector) (see Chapter 1.2 for more)
Other: Private Finance for Energy Efficiency, European Bank for Reconstruction and Development, European fund for strategic investments (EFSI), Invest EU, Just Transition Mechanism, ReactEU European Investment Fund, private investors (capital investments in ESCO), forfeiture (foreign investment funds)

</td></tr>
<tr><td>Legal forms</td><td>
Generally, EES can be completed through their own performance (i.e., a company replaces lightning and reduces energy consumption), delivered through a contractual agreement with ESCO company or through public-private partnerships. Private and public sectors have different requirements; thus, some contract models are more prevalent in one than the other. Table XX provides an overview of how relevant certain models are in the public and private sectors based on expert opinion.
At the national level:
- Public sector: guaranteed savings model
- Private sector: (to some extent) guaranteed savings model
At the local level:
- Public sector: guaranteed savings model, shared savings model
- Private sector: supply contracts, (to some extent) shared savings model
<table>
<tr><th></th><th>Public</th><th>Private</th><th>Overall</th><th>Comment</th></tr>
<tr><td>EnPC with guaranteed savings (contractor guarantees energy savings, clients take the financial risk)</td><td>2.5</td><td>1</td><td>1.5</td><td></td></tr>
<tr><td>EnPC with shared savings (both parties share the savings, contractor take financial risk)</td><td>1.5</td><td>1.5</td><td>2</td><td></td></tr>
<tr><td>Build-own-operate-transfer (BOOT)</td><td>1.5</td><td>2</td><td>2</td><td></td></tr>
<tr><td>Contract energy management (chauffage)</td><td>1.5</td><td>2</td><td>2</td><td>Supply contacts are more common than EnPC in the private sector</td></tr>
<tr><td>Facility management</td><td>1.5</td><td>2</td><td>2.5</td><td></td></tr>
<tr><td>Consultancy and technical guarantee</td><td>0.5</td><td>1.5</td><td>1.5</td><td></td></tr>
<tr><td>Energy efficiency improvement contracts?</td><td>0</td><td>0.5</td><td>0</td><td></td></tr>
<tr><td>PPPs</td><td>3</td><td>1.5</td><td>2.5</td><td>PPPs operate in combination with EnPC in the public sector</td></tr>
<tr><td>Other</td><td>0</td><td>1</td><td>0</td><td>In the private sector there are some power purchase agreements</td></tr>
</table>
Source: EU Survey 2022. Estimates in between brackets refer to Ljubljana
PPP model is used in the public sector as the liabilities can also be booked off-sheet which does not increase the debt and deficit of the government sector. There are multiple benefits of delivering EES through PPP such as quality improvement, rationalization of operations, no available public resources for financing of the project, and transfer of knowledge, technology and experience from the private to the public sector. With PPP, the client in the public sector also distributes the risks of the project with a private partner. According to the Long-term Renovation Strategy for 2050, EUR 825 million (without VAT) investment in energy-efficient renovation of buildings in the public sector is required in the period 2020-2030. With NECP Slovenia has also committed to renovate 3% of floor area used or owned by the central government each year. In the past, Cohesion
</td></tr>
</table>

	fund was the main source of funds stimulating renovation of buildings in public sector. With the new financial period, the Cohesion fund and RRF are expected to play an important role (see Chapter 1.2 for more).
Support mechanisms	The Ministry of Infrastructure, now Ministry of Environment, Climate and Energy, standardised EES in the public sector introducing EnPC in the framework of PPP as the primary implementation financing model[89].  *Standardization of EnPC in the public sector* The model documents, contracts and project implementation guidelines for the implementation of EnPC EES comprise: • Instructions and technical guidelines for energy renovation of public buildings: http://www.energetika-portal.si/fileadmin/dokumenti/podrocja/energetika/javne_stavbe/ntueps_feb2018.pdf • Instructions for operation of intermediary bodies and beneficiaries implementing public buildings energy renovation programme: http://www.energetika-portal.si/fileadmin/dokumenti/podrocja/energetika/javne_stavbe/ndopeps_feb2018.pdf • Detailed guidelines for the public partners implementing public buildings energy renovation: http://www.energetika-portal.si/fileadmin/dokumenti/podrocja/energetika/javne_stavbe/pujpeps_feb2018.pdf • Call to public-private partnership promoters: http://www.energetika-portal.si/fileadmin/dokumenti/podrocja/energetika/javne_stavbe/01-oris_poziva_promotorjem.pdf • Decision on public-private partnership: http://www.energetika-portal.si/fileadmin/dokumenti/podrocja/energetika/javne_stavbe/02-oris_odlocitve_o_javno-zasebnem_partnerstvu.pdf • Concession act: http://www.energetika-portal.si/fileadmin/dokumenti/podrocja/energetika/javne_stavbe/03-oris_koncesijskega_akta.pdf • Call for tenders: http://www.energetika-portal.si/fileadmin/dokumenti/podrocja/energetika/javne_stavbe/05-oris_razpisne_dokumentacije.pdf • Model contract: http://www.energetika-portal.si/fileadmin/dokumenti/podrocja/energetika/javne_stavbe/06-oris_vzorca_pogodbe.pdf • Model agreement: http://www.energetika-portal.si/fileadmin/dokumenti/podrocja/energetika/javne_stavbe/07-oris_sporazuma.pdf • Reference book of elegible costs of public buildings energy renovation: http://www.energetika-portal.si/fileadmin/dokumenti/podrocja/energetika/javne_stavbe/puseps_feb2018.pdf

[89] https://circabc.europa.eu/ui/group/95bd741f-bbaa-462f-92f8-0d1e1c9f15d5/library/81b9e6f1-9163-4101-b167-e26ca3195e58

	• Guidelines for energy renovation of built cultural heritage: http://www.energetika-portal.si/fileadmin/dokumenti/podrocja/energetika/javne_stavbe/smernice_kd_23.2.2017.pdf • Web portal Trajnostnaenergija.si providing information, contract templates, best practices etc. on EES: https://www.trajnostnaenergija.si/Trajnostna-energija/Varcujte/Energetsko-pogodbenistvo/Modeli-energetskega-pogodbenistva/Pogodbeno-zagotavljanje-energije Public Buildings Energy Renovation Projects Implementation Unit supporting deep renovations in the public sector was established in 2015 and operates within the Ministry of Environment, Climate and Energy. Within the unit are experts from the fields of construction, law and economics, engineering: https://www.energetika-portal.si/podrocja/energetika/energetska-prenova-javnih-stavb/projektna-pisarna/ Delivery of EES through the EnPC has been underpinned by the technical support of ELENA projects (see Chapter 1.2 for more) too.

1.8. Citizen-led initiatives

1.8.1. Crowdinvesting

National policies, laws and regulating bodies	Act on the Implementation of the Regulation (EU) on European Crowdfunding Services Providers for Business[90] Securities Market Agency is responsible for the implementation of the REGULATION (EU) 2020/1503[91]
Market maturity/volume, trends	Crowdfunding (CF) for EE and renovation of buildings is not developed in Slovenia. CF as a financing tool was tested in some pilot projects and successfully implemented to raise funds for the construction of solar power plants on buildings. See the description of the three projects below. **Project 1**: Crowdfunding, as an innovative funding tool, was tested in the Municipality of Velenje. Within the e-Central project (Interreg Central Project) CF was used in a pilot aimed at renovation of the University building in Velenje to increase its EE and reduce the costs of maintenance, energy consumption and operation. However, they were unable to test the method due to restrictive Slovene legislation regulating the financing of local communities. The pledged amount of money to be raised was EUR 10,000. They were able to collect only a small share of renovation costs through CF while the rest were collected using traditional financing method. More about the project: https://programme2014-20.interreg-central.eu/Content.Node/Municipality-of-Velenje-crowdfunding.html **Project 2**: Zadruga sončnih elektrarn, z.o.o. used CFD to finance the construction of solar power plants built on buildings of public interest (e.g., schools, kindergartens, large office buildings). The target group were individuals who were able to invest any amount of financial resources in an individual project with guaranteed corresponding monthly interest along with the repayment of the principal. They already carried out their first CF campaign and successfully raised the targeted amount. The initial goal was to collect EUR 100,000 and they collected EUR 103,000. The funds were used to finance the construction of a solar power plant with 154.8 kW that would produce around 178,135 kWh/year and contribute to around 69,829 tons/year reduction of CO_2 emissions. More about the project: https://www.zses.si/vlozek-v-soncno-elektrarno/

[90] http://www.pisrs.si/Pis.web/pregledPredpisa?id=ZAKO8617

[91] https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32020R1503

	Project 3: Moja elektrarna has been using CF since 2014 to build solar panels in Slovenia. They have built 30 solar power plants which helps reduce emissions by almost 10,000 tons per year. The minimum investment is EUR 1,500 at a 3 % annual interest rate.
Current compliance of CF platforms with the EU crowd investing directive	Most CF projects (unrelated to the deep renovation of buildings) in Slovenia use internationally established CF platforms such as Kickstarter, Indiegogo and Adrifund[92]. There are some Slovene platforms for CF: • **Adrifund**: https://www.adrifund.com/ • **Equito** (allegedly also developed a CF platform it is, however, not publicly available): https://equito.si/viri-financiranja/mnozicno-financiranje/ The e-Central project, which aimed to renovate a building with CF, outsourced individual contractor who developed an online platform to test co-financing. The project was, however, not successfully implemented and no further information is available[93]. Zadruga sončnih elektrarn, z.o.o. did not use any specific platform for fundraising. They provided all the information about the project on their website[94]. The minimum investment was set at EUR 500 which was the equivalent of one solar module. Next a loan agreement was concluded between the parties, contractual interest for borrowed funds set at between 3-5 % per year and loan maturity set for each individual project. The collected funds were transferred to a specific project account which is only used for the project implementation through CF[95].
Project evaluation methods by CF platforms and post-monitoring/reporting of impacts by CF project developers	Zadruga sončnih elektrarn, z.o.o. did not yet provide any reports on the outcomes of CF project. On the project description website, they provide information on the amount of electricity the solar panels are expected to produce as well as the expected reduction of CO_2[94]. Methodology is not publicly available. The same applies for other projects.
Availability of support mechanisms for preparation of projects with this instrument (information/consultation service, capacity building, technical assistance)	n/a

1.8.2. Energy communities and cooperatives

In Slovenia, there are three types of energy communities: (1) Citizen Energy Community, (2) Renewable Energy Community and (3) Self-supply Community. These types of communities have evolved from two different laws which have transposed EU legislation and developed simultaneously. This has caused some duplication and confusion in the field.

Electricity Supply Act (ZOEE) provides the foundation for development of ***Citizen Energy Communities*** in the legal form of cooperative. It is, however, not limited to the production of electricity from RES as in the case of the other two types of communities. This type of community

[92] https://mladipodjetnik.si/podjetniski-koticek/pridobivanje-sredstev/mnozicno-financiranje-in-slovenci
[93] https://programme2014-20.interreg-central.eu/Content.Node/Pilot-Action-3-Slovenia.html
[94] https://www.zses.si/izdelek/mse-zses-2-mse-zses-3-mse-zses-4-mse-zses-5-in-mse-zses-6/
[95] https://www.zses.si/crowdfunding/

is also not known to be well spread. On the other side, the *Act on the Promotion of the Use of Renewable Energy Sources* (ZSROVE) encouraged development of two further types of communities. ***Renewable Energy Community as a legal entity*** requires legal entity to be established (e.g., cooperative, limited liability company, joint-stock company) – the most commonly used type of legal entity in Slovenia is cooperative. Different stakeholders can also form an energy community based on a contract. This type of community is called ***Self-supply community***. More information on each type, laws, market maturity and support mechanisms can be found in the table below.

National policies and laws	Electricity Supply Act (ZOEE)[96]	Act on the Promotion of the Use of Renewable Energy Sources (ZSROVE)[97]
Regulating bodies	Ministry of Infrastructure Electricity distribution operator SODO Operators of the distribution system Energy Agency in the Slovenian energy market Borzen – Slovenian Power Market Operator	
Types of citizen-led initiatives	**"Citizen Energy Community" (slo. *Energetska skupnost državljanov*)**	(1) **"Renewable Energy Community as a legal entity"** (slo. *Skupnost OVE, ki je pravna oseba*) (2) **"Self-supply community"** (slo. *skupnostna samooskrba)*: production of electricity from RES to fully or partially cover the needs of at least two end consumers connected to the self-sufficient community with at least one RES devices.
Description	• Technologically neutral i.e., electricity produced from fossil fuels as well as RES • Providing environmental, economic or social benefits to the community for its members or partners or for the local community in which it operates, and not to generate financial profits • May participate in production, including production from RES, electricity supply, consumption, aggregation, energy storage, EES or the provision of electric car charging services, or provides other energy services to its members or partners; • Established by members who are connected to the distribution system in Slovenia	• Both are limited on RES technologies i.e., energy can only be produced from RES (biomass, photovoltaics, district heat) • Providing environmental, economic or social benefits to the community for its members or partners or for the local community in which it operates, and not to generate financial profits (1) **Renewable Energy Community** as a legal entity is established by partners or members which are situated in the vicinity of projects that the legal entity owns and develops. (2) **Self-supply community** produces electricity from RES to fully or partially cover the needs of at least two end consumers connected to the self-sufficient community with at least one RES devices.

[96] http://pisrs.si/Pis.web/pregledPredpisa?id=ZAKO8141&d-49683-p=4

[97] http://www.pisrs.si/Pis.web/pregledPredpisa?id=ZAKO8236

	where citizenship is not a condition	
Members/stakeholders	• Local authorities including municipalities, small businesses, citizens	• Citizens, legal entities with the exception of legal persons that perform economic activity and are not SMEs, local authorities including municipalities
Legal/formal forms	Citizen energy community is established as a cooperative to which Cooperatives Act (ZZad)[98] applies.	(1) **Renewable Energy Community which is a legal** entity has to be established as a legal entity (e.g., cooperative, limited liability company). Cooperatives are subject to Cooperatives Act (ZZad)[Error! Bookmark not defined.]. (2) **Self-supply community** can be established based on a contract or by establishing a legal entity.
Market maturity/volume	It is not clear how many entities are registered and subject to this law. Most communities, registered as cooperative, are subject to ZSROVE.	As of now, there are around ten »**Renewable Energy Communities** as a legal entity« established as cooperatives in Slovenia. In 2022, there were 27 new **self-supplied communities** established supplying 102 individuals[99] with energy produced from RES. The first Renewable Energy Community in Slovenia was established in the Village Luče in Savinjska dolina Compile project[100] financed from Horizon 2020. In the following years, a number of connected devices for self-supply of communities is expected to increase. The first device with 14 kW was connected to the grid in 2019. In 2020, there were four devices with a joint power of 86 kW, in 2021 there were 25 devices with a joint power of 1,100 kW and in 2022 further 29 PV plant with a joint power of 2,000 kW were connected to the grid. By the end of 2022 there were in total 59 PV plant with a joint power of 3,200 kW operating[101]. Currently, the biggest obstacle is that energy communities are unable to connect their RES plant to the grid.
Availability of support mechanisms		In 2022, the contact point for the promotion of use of RES was established in-line with the ZSROVE and Decree on determining the tasks of the contact point for the promotion of use of renewable energy[102]. Borzen's RES Support

[98] http://pisrs.si/Pis.web/pregledPredpisa?id=ZAKO217

[99] https://www.agen-rs.si/documents/10926/38704/AZE_Poro%C4%8Dilo_o_stanju_energetike_v_Sloveniji_2022-final3/a85b584b-ca2b-481f-bb84-a396bc4e2dba

[100] https://main.compile-project.eu/sites/pilot-site-luce/

[101] https://www.agen-rs.si/documents/10926/38704/AZE_Poro%C4%8Dilo_o_stanju_energetike_v_Sloveniji_2022-final3/a85b584b-ca2b-481f-bb84-a396bc4e2dba

[102] http://www.pisrs.si/Pis.web/pregledPredpisa?id=URED8461

		Centre is responsible for tasks of the contact point. It supports the applicant through the entire process from submission of the request to the issuance of a final decision[103]. A handbook containing information on the topic has been developed and is available here. Contact Point also maintains a list of providers of RES investments and is available here. In practice, the contact point is still not very operational i.e., no strong community where coordination of multitude of actors is necessary and unique solutions are required. According to ZSROVE, the ministry will adopt an enabling program to promote and facilitate the development of RES community every three years which includes development of tools for easier access to financing and information, eliminating administrative and other obstacles impeding the formation of RES communities, etc. The program is expected to be delivered in September 2023. Currently, Eco fund provides loans and non-refundable[104] financial incentives for financing of energy communities. According to ZSROVE, the distribution of grants for RES devices for self-sufficiency is going to be passed from Eco Fund to the Support Centre, which is responsible for the investing support system[105].
	Within 2021-2027, EUR 29. Ministry of the Environment, Climate and Energy	

[103] https://www.borzen.si/sl/Domov/menu1/To%C4%8Dka-OVE

[104] https://www.ekosklad.si/gospodarstvo/pridobite-spodbudo/objava/javni-poziv-104sub-so22-nepovratne-financne-spodbude-pomoci-za-naprave-za-samooskrbo-z-elektricno-energijo-in-za-naprave-za-samooskrbo-z-elektricno-energijo-z-baterijskim-hranilnikom-elektricne-energije-2

[105] https://www.gov.si/novice/2022-09-22-pojasnila-v-zvezi-z-energetsko-samooskrbo/