

Block 4: Monitoring the Impact of Public Investment

Module 4.1. Monitoring and evaluation, indicators

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#### **MODULE DESCRIPTION**



# The module presents the monitoring and evaluation of an efficiency and impact of the Public Investment



#### CONTENT



- Evaluation methodology and monitoring process
- Ex-ante evaluation
- Ex-post evaluation
- Monitoring and evaluation in the project partners countries



### EVALUATION METHODOLOGY AND MONITORING PROCESS



The evaluation of the impact of public investment is mainly patterned on the incoming reports i. g. submitted tenders (offers).

The development of the monitoring process is based on using a variety of methods, such as the following ones:

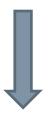
- desk reports
- expert assessments
- combination of interviews and focus groups
- relevance tables



### EVALUATION METHODOLOGY AND MONITORING PROCESS



The evaluation methodology starts with preparatory analyzed data based on actual situation and performance, prospects and forecasts.



Baseline study

**Indicators** 

ex - ante evaluation



#### **EX-ANTE EVALUATION**



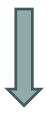
Ex-ante evaluation is a process that is carried out in a preparatory phase of a development. The goal of this evaluation is to assess the efficiency and expected impacts, and to improve its quality. It focuses on assessment of intervention logic, strategic objectives, link of planned activities to other existing mechanisms, proposed indicators and system of evaluation.



### EVALUATION METHODOLOGY AND MONITORING PROCESS



The evaluation methodology can be completed with an outcome of the performance and the results of the ex-ante evaluation.



Impact study

**Indicators** 

ex - post evaluation



#### **EX-POST EVALUATION**



Ex-post evaluation is a process that is carried out after an implementation (in the final implementation stage). The goal of this evaluation is to assess overall performance of the achieved results and impacts (compared to what was planned/expected), efficiency of used resources, sustainability of the results, and to provide conclusions and recommendations for future plans.





#### Partner: Technology Promotion Burgenland Ltd. (TOB), Austria



How is the implementation of financial schemes monitored and evaluated? What is the process? How often the evaluation takes place?

Ex-ante evaluation	
Ex-post evaluation	The funding organisations evaluate their programmes regularly.
Other (please describe)	

• Who carries out the evaluation - the financial scheme operator, or an external organization?

#### Usually external experts.

What methodologies / guidelines / instruments are used to carry out the evaluation?

Based at the funding schemes and the foreseen goals the evaluation method is determined.





What indicators and criteria of efficiency are used?



Depending at the program the indicators are given. Usually saving of KWh or production or renewable energy (KWh).

Do financial scheme operators monitor and evaluate also industry investment induced by public money?

All the industry investments which are supported by public money have to be evaluated, at least when the program is finished.



# INFORMATION ON NATIONAL LEVEL IN PROJECT PARTNERS REGIONS





Source of information	Link / PDF / Video document
KPC - Kommunalkredit Public Consulting	https://www.publicconsulting.at/?langs
Evaluation Reports (de)	witch=1





#### Partner: IRENA - Istrian Regional Energy Agency L.t.d, Croatia



How is the implementation of financial schemes monitored and evaluated? What is the process? How often the evaluation takes place?

Ex-ante	
evaluation	

Operational Programme Competitiveness and Cohesion 2014 - 2020

National level - The Environmental Protection and Energy Efficiency Fund (EPEEF):

Ex-ante evaluation is used in the programming phase and before the placement of any financial instrument an ex-ante analysis containing the needs of the market is harmonized by the EU Commission.

#### Ex-post evaluation

Operational Programme Competitiveness and Cohesion 2014 - 2020 (performed by EU Commission only)

Istria County: "The monitoring and evaluation of financial programs is carried out for the duration and ex-post"

At the end of the fiscal year, data on grants are collected and an analysis is carried out. Except for credit lines lasting up to 7 years, the ex-post method is most commonly used for assigned one-off grants. In most cases, the recipient's control number is selected and on-the-spot checks are carried out to determine the intended use of the resources and the effects that have been achieved.

National level - The Environmental Protection and Energy Efficiency Fund (EPEEF):

Ex-post evaluation is used during project implementation, and after implementation. The effects of and funded projects are monitored for 5 years.

CBRD - Croatian Bank for Reconstruction and Development:

Ex-post evaluation quarterly or a minimum of one time per year.







Other (please describe)

Istria County gives the data on subsidies (state aid and de minimis) to the Ministry of Finance's State Aid Registry, which serves the continuous monitoring of the level of aid. This provides full information on the levels of subsidies for customers.

Who carries out the evaluation - the financial scheme operator, or an external organization?

Regional level - Istrian County:

Evaluation is carried out by persons in charge of a particular type of financial support.

National level - The Environmental Protection and Energy Efficiency Fund (EPEEF): Evaluation is carried out internally, but also by external evaluators through technical assistance. Technical assistance is available at all times.

CBRD - Croatian Bank for Reconstruction and Development:

Evaluation is carried out internally and together with an external evaluator, depending on the financial program.

Ex-post method based on internally defined reporting and tracking rules.





What indicators and criteria of efficiency are used?



Regional level - Istrian County:

Number of repayments of loans, number of newly opened businesses / enterprises, increase of production, higher employment.

National level - The Environmental Protection and Energy Efficiency Fund (EPEEF): Achieved energy savings, installed KWh from RES, new jobs, CO2 emissions reductions etc.

CBRD - Croatian Bank for Reconstruction and Development: Usually the indicators are the number of funded entrepreneurs, the number of newly created jobs and regional representation.

What other indicators and criteria would you recommend?

Regional level - Istrian County: Depends on the type of support, usually the ones from question 4.4 are sufficient.

National level - The Environmental Protection and Energy Efficiency Fund (EPEEF): The ratio between Energy Saving and Investment Value.

TAKING COOPERATION FORWARD



CBRD - Croatian Bank for Reconstruction and Development: Additional indicators depend on the goal that is to be achieved with a particular financial instrument.



Do financial scheme operators monitor and evaluate also industry investment induced by public money?

Regional level - Istrian County:

The Istrian County has the authority to monitor only the investments financed by its own budget.

It is not possible to check financial documentation of a company other than for checking if the grants/subsidies provided by Istria County are used properly.

National level - The Environmental Protection and Energy Efficiency Fund (EPEEF): Yes, the EU funds and funds from the State budget.

CBRD - Croatian Bank for Reconstruction and Development: Monitoring and evaluation is encouraged by HBOR's developmental function.



### INFORMATION ON NATIONAL LEVEL IN PROJECT'S PARTNERS REGIONS





#### **CROATIA**

Source of information	Link / PDF / Video document
Rulebook on Methodology for Monitoring, Measurement and Verification of Energy Saving + Annex I (Official Gazette 71/2015) (cr)	https://narodne- novine.nn.hr/clanci/sluzbeni/2015_06_71_1368.html
Environmental Protection and Energy Efficiency Fund evaluation report	http://www.fzoeu.hr/hr/koristenje_sredstava
Croatian Bank for Reconstruction and Development:  • Financial statements • Pregled financiskih izvješća grupe HBOR (cr)	<ul> <li>https://www.hbor.hr/en/financial-performance-2</li> <li>https://www.hbor.hr/naslovnica/hbor/financijsko-poslovanje/</li> </ul>
Izvješće o Obavljenoj Reviziji Učinkovitosti (cr) [pdf]	http://www.revizija.hr/datastore/filestore/57/izvjes ce_o_obavljenoj_reviziji_ucinkovitosti_upravljanja_sr edstvima_eu_fondova_u_rh.pdf



### INFORMATION ON NATIONAL LEVEL IN PROJECT PARTNER REGIONS





#### **CROATIA**

Source of information	Link / PDF / Video document
Privredna Banka Zagreb - Financijska Izvješća	https://www.pbz.hr/hr/financijska-izvjesca-press
<ul> <li>Financial instruments under Operational Program Competitiveness and Cohesion 2014-2020 / Financijski Instrumenti u OPKK 20142020. (cr)</li> <li>Preliminary analysis of the use of financial instruments in ESI funds for areas of energy efficiency, renewable energy sources, sustainable urban and territorial development, R&amp;D (en) [pdf]</li> <li>Ex-ante pre-analysis of financial instruments in the field of business competitiveness, employment and social entrepreneurship (en) [pdf]</li> <li>Summary of findings and conclusions of ex-ante evaluation of financial instruments in the field of business competitiveness, employment and social enterprise (cr) [pdf]</li> </ul>	<ul> <li>https://strukturnifondovi.hr/dokumenti/?doc_id=6         40&amp;fondovi=esi_fondovi</li> <li>https://strukturnifondovi.hr/wp-         content/uploads/2017/03/Sa%C5%BEetak-         preliminarne-analize_TO1_TO4_TO7_eng.pdf</li> <li>https://strukturnifondovi.hr/wp-         content/uploads/2017/03/2_FINAL_Ex-ante-         Assessment-Report_v.1.2_change_log_19-04-         2017.pdf</li> <li>https://strukturnifondovi.hr/wp-         content/uploads/2017/03/1_FINAL_Sa%C5%BEet         ak-ex-ante-studije_TO3_v1.2_19-04-2017-1.pdf</li> </ul>









### INFORMATION ON NATIONAL LEVEL IN PROJECT PARTNER REGIONS





#### **CZECH REPUBLIC**

Source of information	Link / PDF / Video document
EX-ANTE HODNOCENÍ OPERAČNÍHO PROGRAMU ŽIVOTNÍ PROSTŘEDÍ PRO BUDOUCÍ PROGRAMOVÉ OBDOBÍ 2014-2020 (cz) [pdf]	[pdf]





Partner: Network for Energy & Environmental Technology (NEUeV), Fraunhofer Center for International Management and Knowledge Economy (FhG-MOEZ), Germany

How is the implementation of financial schemes monitored and evaluated? What is the process? How often the evaluation takes place?

Ex-ante evaluation	
Ex-post evaluation	Normally carried out every two years before the new decision about the
	policy needs to be done by the city council
Other (please	
describe)	

Who carries out the evaluation - the financial scheme operator, or an external organization?

Economic Development Office of the city of Leipzig.





What methodologies / guidelines / instruments are used to carry out the evaluation?



Database of approved and implemented projects is analyzed and trends compared to the former evaluation results.

- What indicators and criteria of efficiency are used?
- number of applications
- subsidy requested
- thematic focusing
- information about company requesting funds (employees, business sector...)

Results of applications and project funding:

By December 2016, 239 applications had been received from 184 businesses, and 190 applications for 109 businesses had been approved. The average subsidy is about 2,610€. Since the beneficiaries purchase goods and services from other Leipzig companies, the funding actually helps a much larger number of firms. And as funding is limited to 0% of the project value specified in the application and is capped, the value of orders placed is at least twice as high.







Fourteen of the 51 existing companies in Leipzig used funding to create new jobs. Their total headcount rose from 312 to 330 (+5.8%) as a result of the SME Support Program, a higher rate than the 4.9% increase in the total number of employees subject to social insurance in Leipzig over the same period. Twenty-one companies benefited from start-up funding. Five companies are using funding to open new branches in Leipzig and thus create 46 jobs. Overall, the SME Support Program has contributed to 106 new jobs in Leipzig.

Do financial scheme operators monitor and evaluate also industry investment induced by public money?

Public investments e.g. in start-ups are recognized.



# INFORMATION ON NATIONAL LEVEL IN PROJECT'S PARTNER REGIONS





#### **GERMANY**

Source of information	Link / PDF / Video document
Monitoring project for sustainable municipalities (de)	https://difu.de/publikationen/difu-berichte- 12017/monitor-nachhaltige-kommune- baukasten-fuer-kommunen.html
Leipzig awarded European Energy Award (de)	https://www.european-energy- award.de/kommunen/liste-der-eea- kommunen/details/eea/leipzig





#### Partner: South Transdanubian Regional Innovation Agency Nonprofit Ltd. (STRIA), Hungary



How is the implementation of financial schemes monitored and evaluated? What is the process? How often the evaluation takes place?

Ex-ante	evaluation

Ex-ante evaluation was made for the entire Operational Program. We have no ex-ante evaluation regarding the specific constructions.

**Ex-post evaluation** 

There is no ex-post evaluation, not even a mid-term evaluation.

Other (please describe)

The coordination of the implementation of all Operational Programs is carried out by the Prime Minister's Office. The Prime Minister's Office has a budget for analyses of specific constructions. There have been no analyses on energy-related calls yet.

Who carries out the evaluation - the financial scheme operator, or an external organization?

The Managing Authority carries out the evaluation of each submitted projects. The Managing Authority ensures that the evaluation is carried out by persons with appropriate expertise. The terms of the evaluations are determined by the Managing Authority on a case-by-case basis depending on the elements of the calls for proposals. In the process of the decision making, the Ministry of National Development is involved as a professional expert.



What methodologies / guidelines / instruments are used to carry out the evaluation?

The eligibility and content evaluation of the applications must be made according to the order of arrival of the applications. During the evaluation, the evaluators have to decide whether an application is eligible for support or not. If there is a piece of information in the application form, which is not clear or which is contradictory, and the call provides an opportunity to clarify the question, the Managing Authority can make a clarifying question.

The evaluator completes a quality assessment, which contains the evaluation criteria set out in the calls for proposals. When the evaluator has completed the evaluation, he/she closes the electronic assessment sheet in the monitoring and information system.

What indicators and criteria of efficiency are used?

The eligibility criteria focus mainly on the general objective factors. Through these objective factors we examine the appropriateness of the completed declarations, the compliance with EU regulations, the location of the investment, the average statistical staff, the compliance with SME sector's parameters and the relevance of attached documents.





In the framework of the quality assessment we monitor the compliance with the purposes of the call, the reality of the budget, the annual reduction of greenhouse gases, the cost of the renewable project part (specific cost of a solar system, biomass, heat pump system), and the economic indicators such as the ratio of operating profit, income, invested asset, and equity.

Do financial scheme operators monitor and evaluate also industry investment induced by public money?

The financial scheme operators are responsible only for the monitoring of those investments, which are financed partially or wholly from EU funds.



# INFORMATION ON NATIONAL LEVEL IN PROJECT'S PARTNER REGIONS





Source of information	Link / PDF / Video document
Hungary's National Energy Efficiency Action Plan until 2020	https://ec.europa.eu/energy/sites/ener/files/documents/hungaryActionPlan2014_en.pdf
National Energy Efficiency Action plan IV, Hungary [pdf]	https://ec.europa.eu/energy/sites/ener/files/documents/hu_neeap_2017_en.pdf





Partner LP: Chamber pf Commerce, Industry, Craft and Agriculture of Venice, Rovigo Delta Lagunare (CCIAA DL), Italy



How is the implementation of financial schemes monitored and evaluated? What is the process? How often the evaluation takes place?

Ex-ante evaluation	Preparatory phase of each ERDF/ESF Program.
Ex-post evaluation	Preparatory phase of each ERDF/ESF Program.
Other	Preparatory activities to elaborate the Regional Energy Plan and
(please describe)	follow-up.

Who carries out the evaluation - the financial scheme operator, or an external organization?

The evaluation is carried out by a Regional Department in strict cooperation with universities, municipalities and associations.







What methodologies / guidelines / instruments are used to carry out the evaluation?

The methodology applied is the one suggested by DG REGIO.

What indicators and criteria of efficiency are used?

Not available.

Do financial scheme operators monitor and evaluate also industry investment induced by public money?

As far as we know, no evaluation of these topics has been undertaken.





Partner: Emilia - Romagna Region (RER), Italy



How is the implementation of financial schemes monitored and evaluated? What is the process? How often the evaluation takes place?

Ex-ante evaluation	Preparatory phase of each ERDF/ESF Programme
Ex-post evaluation	The same then above
Other (please describe)	Preparatory activities to elaborate the Regional Energy Plan and follow - up

Who carries out the evaluation - the financial scheme operator, or an external organization?

External and independent organization (PWC).





What methodologies / guidelines / instruments are used to carry out the evaluation?



Ex ante valuation.

What indicators and criteria of efficiency are used?

Output and Results indicator for Low carbon Economy. Each indicator needs a starting level (Baseline) and a final target (Target).

(			
Type of indicator	Indicator	Unit	
Result	Reduction on Industry Energy consumption	GWh	
Output	Number of Companies receiving financial support	Nr of Companies	
Output	GHG emission reduction	Tons of equivalent CO <sub>2</sub>	
Output	Energy Savings	GWh	
Output	Additional Renewable energy power	MW	
Output	Reduction of particular matter emission (PM10)	Kg PM10	
Output	Reduction of NO <sub>x</sub> emissions	Kg NO <sub>x</sub>	







Do financial scheme operators monitor and evaluate also industry investment induced by public money?

No.



### INFORMATION ON NATIONAL LEVEL IN PROJECT'S PARTNER REGIONS





#### Veneto (LP)

Source of information	Link / PDF / Video document
Piano Energetico Regionale - Fonti Rinnovabili - Risparmio Energetico - Efficienza Energetica (PERFER) evaluation report (it)	http://www.regione.veneto.it/web/energia/adozione-documento-dipiano-rapporto-ambientale

#### Emilia Romagna

Source of information	Link / PDF / Video document
ARPAE - Regional Agency for Prevention, Environment and Energy in Emilia Romagna	https://www.climate- kic.org/partners/arpae/
ERVET - Regional Agency for Economic Development (it)	http://www.ervet.it/





#### Partner: Regional Development Agency ARLEF SA in Legnica (RDA ARLEG), Poland



How is the implementation of financial schemes monitored and evaluated? What is the process? How often the evaluation takes place?

The Polish system of evaluation, developed in a mature form in 2007 for the needs of the financial perspective 2007-2013, is highly decentralized. In accordance with the principle of subsidiarity, competence in ordering and carrying out evaluation studies was conferred on the institutions most interested in conclusions and recommendations at the appropriate levels of implementation.

Such an organization of the evaluation process allows the evaluation to be as close as possible to the problems that have arisen, while at the same time ensuring, through the involvement of a wide range of stakeholders, the proper identification of research topics, which in turn leads to a fuller exploitation of its results.

In the perspective of 2007-2013 the evaluation system was defined by Guidelines No. 6 on evaluation of operational programs for 2007-2013.

In the current programming period, the system's detailed documents include Guidelines for the system of evaluation of the cohesion policy. The document integrates both systemic issues, defining the shape of the evaluation system, and indicates the ways in which the research results are to be used and the responsibilities of individual units.





The most important actors of the system of evaluation of the cohesion policy in Poland are:



- National Evaluation Unit (until 2013 National Evaluation Unit),
- evaluation units located within the institutions managing the operational programs and within the framework of the first- and second-level intermediate bodies.

Moreover, analyses and evaluation studies are also carried out by some institutions coordinating horizontal issues, such as the Department of Information and Promotion of the Ministry of Investment and Development (MR), which evaluates promotion activities, or the Department of Coordination of European Union Funds (MR), which focuses on institutional and systemic issues. The activities of the evaluation units are supported by other stakeholders of the evaluation process as part of the work of the steering groups and by the monitoring committees. The responsibilities of the main institutions are set out below.





#### **National Evaluation Unit**

The National Evaluation Unit (KJE), located in the structure of the Strategy and Development Policy Coordination Department of the Ministry of Development, is responsible for coordination of the entire evaluation system (activities of other evaluation units). Moreover, the tasks of the unit include the implementation of evaluation studies at the level of NSRFs/UPs (National Strategic Reference Framework/Partnership Agreement) and coordination of the process of building an evaluation culture in the Polish administration. Pursuant to the amended Act on Principles of Development Policy Implementation, the National Evaluation Unit is also responsible for the implementation of evaluation of national strategies within the competence of the minister in charge of regional development, as well as for drafting standards and recommendations for national evaluation documents. Thus, the KJE was established as a coordination center for the evaluation of national development policies.

#### **Evaluation units**

With the decentralization of the cohesion policy implementation system in Poland, it was decided to decentralize the evaluation process. Evaluation units, located within each operational program (both national and regional), are key actors of the evaluation system in Poland and are responsible for the organization of the evaluation process within the program. Managing authorities have the right to delegate evaluation competence to lower levels of implementation (intermediate bodies level). Within the framework of most operational programs, steering groups were created whose task is to support evaluation units in the implementation of the evaluation process. According to the data for 2013, almost 160 people were employed in the evaluation surveys in the whole system. In the new programming period, the evaluation system will include 6 evaluation units of Managing Authorities (MA) for national programs, 16 regional MA units and evaluation units of Intermediate Bodies. Due to the coordination of activities related to the European Social Fund, a special role is played in the system by the evaluation unit at the MA POKL/POWER.

One of the tasks of the Self-Government of the Lower Silesian Voivodship is to conduct evaluation and research, i.e. the process of evaluating the effects of the implementation of programs and projects financed from the European Funds. The evaluation shall examine their quality and effectiveness. Usually it is conducted through evaluation studies, commissioned by institutions participating in the implementation of the funds. The aim of the evaluation is to improve the process, i.e. to correct the implementation of EU funds while they are still in progress to achieve their objectives as much as possible, or to assess the extent to which the program or project was effective and efficient once it had been completed.







### 1. <u>EX-ANTE EVALUATION OF THE DRAFT REGIONAL OPERATIONAL PROGRAMME FOR THE LOWER SILESIAN VOIVODSHIP 2014-2020</u>

As an Annex to the draft and to the relevant Regional Operational Program of the Lower Silesian Voivodship 2014-2020.

The document was created as part of a project co-financed by the European Union - the European Regional Development Fund and the Lower Silesian Voivodship Self-Government as part of the Technical Assistance of the Regional Operational Program for the Lower Silesian Voivodship for the years 2007-2013.

### Ex-ante evaluation

### 2. <u>Ex-ante analysis of the possibilities of using repayable and mixed financial</u> instruments in the Lower Silesian Voivodship in the EU programming period 2014-2020

The research was carried out within the framework of the project "Analyses, expert opinions and evaluations of the ROP for the LSV in 2012-2013" co-financed by the European Union - the European Regional Development Fund and the budget of the Lower Silesian Voivodship within the framework of Technical Assistance of the Regional Operational Program for the Lower Silesian Voivodship for 2007-2013.

The above mentioned documents were prepared before the final approval of the documents of the Regional Operational Program for the Lower Silesian Voivodship 2014-2020.







Ex-post evaluation	In February 2018, the Management Board of the Company changed its name to an Evaluation Plan for the Regional Operational Program for the Lower Silesian Voivodship 2014-2020 was prepared.  The evaluation plan contains indicative timeframes for the commencement and completion of evaluation studies. In the case of an external evaluation, the survey starts with the signing of a contract with the contractor, and in the case of an internal evaluation - with the commencement of research work.  However, the end of the survey is understood as the acceptance of the final report from the evaluation.  This document presents the research to be carried out, the scope of RDPD 2014-2020 and indicative deadlines (quarter, year).
Other (please describe)	The evaluation plan for the Regional Operational Program for the Lower Silesian Voivodship 2014-2020 includes the implementation of research: On-going evaluation. Mid-term evaluation





Who carries out the evaluation - the financial scheme operator, or an external organization?



The entity responsible for the implementation of individual studies of the Evaluation Plan is the Evaluation Unit of ROP OVD 2014-2020 in cooperation with the units responsible for the management and implementation of Regional Operational Program for the Lower Silesian Voivodship 2014-2020.

The documents will be prepared by selecting the entities conducting the evaluation in accordance with the Public Procurement Law. Internal and hybrid evaluations will also be possible.

The evaluation plan shall provide an estimate of the costs of preparing the evaluation documents.

One study was carried out:

"Current evaluation of criteria and project selection system of ROP HRD 2014-2020", October 2017.





What methodologies / guidelines / instruments are used to carry out the evaluation?



Depending on the type of test, see below. pt. 4.1 Ex-post evaluation methodologies will be differentiated.

So far, one study has been conducted "Current evaluation of criteria and project selection system of ROP OVD 2014-2020". In accordance with this document, the following diagram was used:

- 1. Preliminary desk research analysis study of websites and comprehensibility of text.
- 2. Field studies.
- 3. Panel of experts.
- 4. Synthesis of the research results and preparation of the final report.

The concept of the survey was based on two foundations:

- Analysis using a theory-based evaluation approach, using the logical model of public intervention, and
- System analysis.





#### In case of test:

"Evaluation of the impact of measures undertaken within the framework of priority axis 3 Low carbon economy ROP OVD 2014-2020 on the reduction of greenhouse gas and dust emissions".

### Overview of the methodology:

Due to the main objective of the study (assessment of the impact of particular types of investments on the amount of emissions in the whole region), it is necessary to apply the mixed approach. The first stage will be to reconstruct the intervention logic (selection of types of measures, allocation division, scope of projects, catalogue of beneficiaries, requirements for projects, project selection system) and to verify the adopted assumptions by estimating the impact of supported investments. Quantitative assessment of the impact of individual projects (the so-called bottom-up approach), based largely on project monitoring indicators and data (e.g. emissions, primary energy consumption, share of renewable energy), will make it possible to compare the cost-effectiveness of different projects in different sectors in a first stage.

The next stage will be the preparation of a regional model of emissions (top-down approach) allowing to estimate the impact of both the investments of the 3rd axis of the ROP on the emissions of gases and dust in the region, as well as other factors.

The model should also take into account emission forecasts in the so-called zero scenario (without intervention in the 3rd IP), and thus make it possible to show the effect of implemented projects, even if emissions increase in the whole region. The model should also take into account the impact of the topographical location and the emission flows from neighboring areas.

Due to the concentration of certain activities on urban areas (public transport, energy efficiency in the public and residential sectors), the evaluation will distinguish the impact of investments on the emission level (bottom-up approach) in the Wrocław, Wałbrzych and Jelenia Góra agglomerations.





What indicators and criteria of efficiency are used?



The criteria will be differentiated according to the survey.

According to the Evaluation Plan, for example, the survey criteria are given below.

### **Cross-sectional testing:**

- 1. Current evaluation of criteria and project selection system of ROP OVD 2014-2020: test criteria: Relevance, consistency, anticipated effectiveness.
- 2. on-going evaluation of the implementation of horizontal policies under ROP HRD 2014-2020: test criteria: Efficiency, usefulness.
- 3. mid-term evaluation with regard to substantive progress of ROP OVD 2014-2020 for the needs of the mid-term review, including the implementation of the framework provisions and the performance reserve: test criteria: Efficiency, effectiveness, usefulness.
- **4.** a summary evaluation of the system test criteria: Efficiency, effectiveness, durability,
- **5.** evaluation summarizing the substantive progress and results of ROP HRD 2014-2020: test criteria: Efficiency, effectiveness, usefulness, durability,
- **6.** Evaluation of the application of the integrated territorial approach in ROP HRD 2014-2020: test criteria: Efficacy, usefulness, accuracy,
- 7. Ex-ante evaluation of the implementation of the operational program 2021+: test criteria: Relevance, predicted performance, predicted shelf life.





### Infrastructure research:



test criteria: Effectiveness, efficiency, estimated impact, sustainability.

- 2. Evaluation of environmental, social and economic effects of investments supported under the priority axis Environment and resources of ROP HRD 2014- 2020+: test criteria: relevance, impact, stability, usefulness.
- 3. Evaluation of the effects of transport investments implemented under ROP OVD 2014-2020+: test criteria: effectiveness, impact, durability.

### **Economic research:**

- 1. Evaluation of the progress of support for SMEs in the Lower Silesian Voivodship in the perspective 2014-2020: test criteria: relevance
- 2. Effects of support for competitiveness, innovativeness and internationalization of SME in the Lower Silesian Voivodship in the perspective 2014-2020: test criteria: relevance, effectiveness, efficiency, utility, stability
- 3. The effects of ICT applications support for public services (eGovernment, eCulture and eHealth) in the 2014-2020 perspective test criteria: Efficiency, relevance, effectiveness, usefulness, durability.
- 4. Study of the effects of support granted with the use of financial instruments under ROP HRD 2014-2020:

test criteria: Efficiency, relevance, effectiveness, usefulness, durability





Ad hoc studies and analyses for the needs of the implementation of ROP HRD 2014-2020:



- 1. ad hoc evaluations test criteria: no indication,
- 2. to update the ex-ante evaluation of the use of financial instruments test criteria: no indication,
- 3. Analyses necessary for the implementation of ROP HRD 2014-2020: test criteria: no indication.

Research for monitoring, evaluation and updating of smart specializations:

1. Research and analysis within the framework of monitoring, evaluation and updating of intelligent specializations: test criteria: no indication.





Partner: Lubelskie Voivodeship (LV), Poland



How is the implementation of financial schemes monitored and evaluated? What is the process? How often the evaluation takes place?

Ex-ante evaluation	Yes
Ex-post evaluation	Yes
Other	
(please describe)	

Who carries out the evaluation - the financial scheme operator, or an external organization?

### External organization

What methodologies / guidelines / instruments are used to carry out the evaluation?

Research, analysis, interviews, etc.





What indicators and criteria of efficiency are used?

#### Indicators of material progress (product):

- 1. Number of units for generating electricity from RES.
- 2. Number of reconstructed units generating electricity from RES.
- 3. The number of units for generating thermal energy from RES.
- 4. The number of reconstructed units of thermal energy production from RES.
- 5. Number of units of heat and electric energy production from renewable sources built as part of cogeneration.
- 6. The number of reconstructed units of heat and electric energy production from RES under cogeneration.
- 7. Additional ability to generate electricity under highefficiency cogeneration.
- 8. Additional heat production capacity under highefficiency cogeneration conditions.
- 9. Number of enterprises receiving support (CI1).
- 10. Number of built installations for the production of bio components.
- 11. Number of built biofuels installations.
- 12. Length of newly built power networks for renewable energy sources.
- 13. Length of modernized power

#### **Result indicators:**



- 2. Additional capacity to generate energy from renewable sources (CI30).
- 3. Additional capacity to generate electricity from renewable sources.
- 4. Additional heat production capacity from renewable sources.
- 5. Electricity production from newly built installations using RES.
- 6. Production of electricity from new generation capacity of installations using RES.
- 7. Production of electricity from newly built / new generation capacities of installations using RES.
- 8. Thermal energy production from newly built / new generation capacities of installations using RES.
- 9. Thermal energy production from newly built installations using RES.
- 10. Thermal energy production from new generation capacities of installations using RES.
- 11. Volume of bio components produced in second and third generation.
- 12. Volume of biofuels produced in the second and third generation.





#### Indicators of material progress (product):

- 1. Number of enterprises receiving support (CI1).
- 2. Number of enterprises that improved energy efficiency as a result of support.
- 3. Number of energetically modernized buildings.
- 4. Usable area of buildings subjected to thermomodernization.
- 5. Number of built units for generating electricity from renewable energy sources.
- 6. The number of reconstructed units generating electricity from RES.
- 7. Number of units for generating thermal energy from RES.
- 8. Number of reconstructed units of heat energy production from RES.
- 9. Number of electricity and heat generating units built as part of cogeneration.
- 10. Number of rebuilt power and heat generating units under cogeneration.
- 11. Number of units of thermal and electric energy production from renewable sources built as part of cogeneration.
- 12. Number of reconstructed units of heat and electric energy production from RES under cogeneration.
- 13. Additional ability to generate electricity under highefficiency cogeneration.
- 14. Additional thermal energy production capacity under highefficiency cogeneration conditions

#### Result indicators:

- 1. The amount of thermal energy savings.
- 2. The amount of electricity saved.
- 3. Reduction of final energy consumption as a result of projects implementation
- 4. Estimated annual decrease of greenhouse gas emissions (CI34).
- 5. Additional capacity to generate energy from renewable sources (CI30).
- 6. Additional capacity to generate electricity from renewable sources.
- 7. Additional heat production capacity from renewable sources.
- 8. Electricity production from newly built / new capacity creative installations using RES.
- 9. Electricity production from newly built installations using RES
- 10. Production of electricity from new generation capacity of installations using RES
- 11. Thermal energy production from newly built / new generation capacities of installations using RES.
- 12. Thermal energy production from newly built installations using RES.
- 13. Thermal energy production from new generation capacity of installations using renewable energy sources.





Do financial scheme operators monitor and evaluate also industry investment induced by public money?

No



# INFORMATION ON NATIONAL LEVEL IN PROJECT'S PARTNER REGIONS





### **POLAND**

### Legnica

Source of information	Link / PDF / Video document
Report on the implementation of the Development Strategy of the Lower Silesian Voivodeship 2020	https://irt.wroc.pl/pliki/raport_z_realizacji_srwd_2020/index.html
Strategia Rozwoju Województwa Dolnośląskiego 2020 (pl) [pdf]	http://www.umwd.dolnyslask.pl/fileadmin/user_upload/ Rozwoj_regionalny/SRWD/SRWD_2020-final.pdf
Ex-ante evaluation of the draft Regional Operational Program for the Lower Silesian Voivodship 2014-2020 (pl) [pdf]	http://www.ewaluacja.gov.pl/media/24574/Ewaluacja%2 <u>0ex-ante%20projektu%20Regionalnego%20Programu%20Operacyjnego%20Wojew%C3%B3dztwa%20Dolno%C5%9Bl%C4%85skiego%202014-2020.pdf</u>
Ex-ante analysis of the possibilities of using repayable and mixed financial instruments in the Lower Silesian Voivodship in the EU programming period 2014-2020 (pl)	https://www.ewaluacja.gov.pl/strony/badania-i- analizy/archiwum-2004-2015/analiza-ex-ante-w-zakresie- mozliwosci-zastosowania-zwrotnych-i-mieszanych- instrumentow-finansowych-w-wojewodztwie- dolnoslaskim-w-okresie-programowania-ue-2014-2020/



## INFORMATION ON NATIONAL LEVEL IN PROJECT'S PARTNER REGIONS





Lubelskie

Source of information	Link / PDF / Video document
Regional Operational Programme of Lubelskie Voivodeship 2014-2020 ROP VL 2014-2020 / Regionalny program operacyjny Województwa Lubelskiego na lata 2014-2020 (pl)	https://rpo.lubelskie.pl/dokument-20- regionalny_program_operacyjny.html



### **SOURCE DOCUMENTS**



Source of information	Link / PDF / Video document
JICA guideline for project evaluation - Practical methods for project evaluation [pdf]	https://www.jica.go.jp/english/our_work/eva luation/tech_and_grant/guides/pdf/guideline 01-01.pdf  https://www.jica.go.jp/english/our_work/eva luation/tech_and_grant/guides/pdf/guideline 03-02.pdf
EX-ANTE HODNOCENÍ OPERAČNÍHO PROGRAMU ŽIVOTNÍ PROSTŘEDÍ PRO BUDOUCÍ PROGRAMOVÉ OBDOBÍ 2014-2020 (cz) [pdf]	[pdf]





### Thank you for your attention

