Support of energy savings in the Framework of OP TAC 2021 – 2027 Czech programme for non-residential buildings

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'Assessing energy savings from deep retrofit programmes'



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Outline

- Overview of Operational Programme Technology and application for competitiveness (OP TAC) 2021 – 2027;
- Priority 4 Shift to low carbon technologies;
- Specific axis 4.1 Support of energy efficiency and CO₂ reduction (Energy savings);

- 2nd call of specific axis 4.1 (Energy savings);
- Evaluation criteria of 2nd call of specific axis 4.1;
- **Ex-ante evaluation of 1**st call of specific axis 4.1.











Overview of the Operational Programme Technology and application for competitiveness 2021 – 2027



Overview of the OP TAC 2021 – 2027

- Managing authority: Ministry of Industry and Trade of the Czech;
- Allocation EUR 3,1 billion European Regional Development Fund;
- Subsidy grant and Financial Instrument (combination primarily aimed at SME, big companies e.g. energy sectors and research and development);
- The main goals are:
 - reducing the burden on the environment
 - mitigation of negative impact of pandemic
 - increase of productivity of enterprises
 - Area all regions except Prague.



OP TAC priorities overview, total 3 136 million Euro



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Specific axis 4.1 Support of energy efficiency and CO₂ reduction (Energy Savings)





Specific axis 4.1 Support of energy efficiency and CO₂ reduction (Energy Savings)

Allocation: roughly EUR 500 million

Indicative target: 3,3 PJ energy savings in final consumption

General Block Exemption Regulation (GBER) – COMMISSION REGULATION (EU) No 651/2014 of 17 June 2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty, version valid from 1st July 2023.



Specific axis 4.1 Support of energy efficiency and CO₂ reduction (Energy Savings)

- Support (State Aid article 38 GBER, 38a GBER, 41 GBER and commission regulation (EU) No 2023/2831 de minimis),
- ➤ The aim of the Specific axis 4.1 is to meet the energy and climate goals, specifically the obligations from Energy efficiency directive 2023/1791/EU in the sense of reducing the level of final energy consumption of the Czech Republic and fulfilling the obligation of new energy savings according to Article 8, as well as the need for a contribution to the meeting of goals in relation to the renovation and construction of buildings according to Directive 2010/31/EU on the energy performance of buildings.

Priority 4 shift to law carbon economy

Specific axis 4.1 – Supported of energy savings measures:

- reducing energy intensity of buildings;
- increase of energy efficiency of technical equipment of the building;
- increase energy efficiency of technologies;
- RES for own consumption (heat pumps, photovoltaic, solar and biomass boilers) within complex projects;

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- Biomass CHP units (combined heat and power);
- Support deep renovations (newly introduced)

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Specific axis 4.1 Support of energy efficiency and CO₂ reduction 2nd call of specific axis 4.1 (Energy savings)





2nd call of specific axis 4.1 (Energy savings)

- ✓ The total allocation of EUR 200 million;
- ✓ Ongoing call;
- ✓ The start date of receipt of applications for support 24. 5. 2024 at 10:00;
- ✓ Planned end date of receipt of applications for support 31. 10. 2025 at 10:00;



2nd call of specific axis 4.1 (Energy savings)

 The latest date for the completion of the physical implementation of the project is 31. 10. 2026.

 As of October 4, 2024, it was filed within II. Calls for a total of 136 applications with total eligible expenses of approximately EUR 117 million and with a requested contribution of approximately EUR 57 million.



The maximum amount of specific eligible cost per annual energy saving in final energy consumption for calculating the subsidy is 1 000 EUR/GJ per year, i.e. the equivalent of 3 600 EUR/MWh;

The maximum amount of eligible cost for organization of tenders pursuant to Act No. 134/2016 Coll. can be EUR 3 200 per application for support.





Support for expenses for the energy assessment and project documentation incurred before the submission of the application and for the organization of the tender will be provided in the de minimis regime according to Commission Regulation (EU) No. 2023/2831 of December 13, 2023, as amended. This support cannot be granted in the area of primary agricultural production. The condition is their creation after 1st January 2021 and compliance with the terms of the Decision on the provision of subsidies.

The share of support under the de minimis regime is 50%.



TECHNOLOGY - GBER article 38	base level of support (counterfactual scenario)	SME	region number a)	region number c)	base level of support (without counterfactual scenario)	SME	region number a)	region number c)
	50,0%	20,0%	15,0%	5,0%	15,0%	10,0%	7,5%	2,5%
		10,0%				5,0%		
		0,0%				0,0%		
BUILDING - GBER article			region number		bonus for 40 % primary energy			
3 8a	base level of support	SME	a)	region number c)	savings			
More measures	30,0%	20,0%	15,0%	5,0%	15,0%			
		10,0%						
		0,0%						

Region number. a) regions - Northwest, Northeast, Central Moravia, Moravia-Silesia

✓ **Region number. c)** Central Bohemia, South-West, South-East.

✓ The total eligible expenses (hereinafter also "CZV") for the project must be at least EUR 25 thousand and at most up to EUR 80 million. The maximum amount of the subsidy is EUR 30 million per enterprise and per investment project, this value must not be circumvented by artificially dividing the project.



The subsidy share of eligible cost (%) – Article 41 GBER						
Type of company	Investment support for energy from renewable sources, hydrogen from renewable sources and highly efficient combined heat and electricity production to cover the own energy management needs of business operations	Support for any other investment covered by Article 41, but not related to the source part, for example the storage of electricity				
	EU share	EU share				
Small enterprises	65 %	50 %				
Medium enterprises	55 %	40 %				
Big enterprises	45 %	30 %				

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Evaluation model – Binary objective evaluation criteria 2nd call of specific axis 4.1 (Energy savings)



Evaluation model - 2nd call of specific axis 4.1

Binary objective evaluation criteria- Exclusion Criteria (YES x NO)

- ➤ In order to successfully meet the criteria of the substantive evaluation, i.e. for the application for support to proceed to the next stage of administration, it is necessary to meet all the exclusion criteria. The fact that an application does not meet some of the exclusion criteria will lead to the rejection of the application. Against this result of the evaluation, the applicant has the option to file a Request for Review see the chapter Request for Review.
- The evaluation will be carried out on the basis of the submitted Energy Assessment, according to Section 9a, par. 1, letter a) d) Act No. 406/2000 Coll., on Energy Management, as amended, prepared in accordance with Decree No. 141/2021 Coll., on the Energy Assessment and on Data Kept in the Energy Consumption Monitoring System, as amended, and on the basis of the annexes required by the managing authority.



Decree on Energy Assessment

Only an energy expert is authorized to prepare an energy assessment;
 Based on the actual energy consumption assessment, energy balance before and after, 2 years average consumption baseline

The Energy Assessment includes:

- cost-benefit assessment;
- economic feasibility assessment;
- ecological feasibility assessment;
- evaluation of the proposed project according to the specifications of the funder;
- evaluation of the measures recommended or implemented.

Criterion number	Exclusion Criteria (YES x NO)	Evaluation	Source of information
1.	The project demonstrated energy savings in final	YES/NO	Energy assessment
	energy consumption according to Table 3 Energy Use		
	Analysis – Project Benefit Balance listed in Annex 3 to		
	Decree No. 141/2021 Coll., on Energy Assessment and		
	Data Kept in the Energy Consumption Monitoring		
	System, as amended.		
2.	The condition of minimum primary energy savings of	YES/NO/Not	Energy assessment
	20% according to point 6 of Article 38a of the GBER was	Relevant	
	met, without the possibility of counting the benefits of		
	the measures under point 7 of Article 38a of the GBER,		
	and at the same time the condition of minimum		
	primary energy savings of 30% was met with the		
	possibility of counting the benefits of measures under		
	point 7 of Article 38a of the GBER, and at the same time		
	the requirements for building renovation under option		
	A1 were met, see Table 1. at the end of this chapter.		
	The above requirements for energy performance must		
	be met by each building included in the application for		
	support.		

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Criterion number	Exclusion Criteria (YES x NO)	Evaluation	Source of information
3.	The condition of minimum primary energy savings of 40 % according to point 6 of Article 38a of the GBER was met, without the possibility of counting the benefits of measures under point 7 of Article 38a of the GBER, and at the same time the requirements for renovation of the building according to option A2 were met, see Table 1. at the end of this chapter. The above requirements for energy performance must be met by each building included in the application for support.	YES/NO/Not Relevant	Energy assessment
4.	The condition of a minimum primary energy saving of at least 30% or an average reduction of at least 30% in direct and indirect greenhouse gas emissions compared to previous emissions for measures outside the renovation of the existing building has been met. The above energy performance requirements must be met by each measure included in the aid application.	YES/NO/Not Relevant	Energy assessment



Criterion number	Exclusion Criteria (YES x NO)	Evaluation	Source of information	
5.	The project achieved an IRR value before tax of less than 20% (without a subsidy) according to Decree No. 141/2021 Coll. on the Energy Assessment and on the data kept in the Energy Consumption Monitoring System, as amended, see Annex No. 8 to this Decree.	YES/NO	Energy assessment	
6.	The project meets all the relevant specific conditions of the Call, on which the energy specialist commented. A list of specific conditions of the programme, on which the energy experts comments, is given in Annex 8.a Specific conditions of the Call.	YES/NO	Specific conditions annex to Call No. 8. a	
7.	The project meets all the specific conditions of the Call on which the applicant has commented. A list of specific programme conditions on which the applicant comments is given in Annex 8.b Specific Conditions of the Call.	YES/NO	Specific conditions annex to Call No. 8. b	

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Criterion number	Exclusion Criteria (YES x NO)	Evaluation	Source of information
8.	The economic activities related to the measures in	YES/NO	Completed Annex No. 7
	question within the project do not significantly harm		Assessment of the
	environmental objectives within the meaning of		implementation of
	Article 17 of Regulation (EU) 2020/852 of the		environmentally
	European Parliament and of the Council of 18 June		sustainable investments
	2020 on the establishment of a framework to facilitate		and verification of
	sustainable investment, and amending Regulation		infrastructure in terms of
	(EU) 2019/2088 (hereinafter referred to as the		climate impact, Energy
	"Taxonomy Regulation") and Commission Delegated		Assessment and Annex to
	Regulation (EU) 2021/2139 of 4 June 2021		Calls No. 8 and 8. b
	supplementing Regulation (EU) 2020/852 of the		
	European Parliament and of the Council, as regards		
	the establishment of technical screening criteria for		
	determining under what conditions an economic		
	activity qualifies as contributing substantially to		
	climate change mitigation or adaptation and whether		
	that economic activity does significant harm to any of		
	the other environmental objectives ('screening		
	criteria').		

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Criterion number	Exclusion Criteria (YES x NO)	Evaluation	Source of information
9.	The project is in line with the development of the 2050	YES/NO	Completed Annex No. 7
	greenhouse gas emission reduction targets within the		Assessment of
	meaning of the Communication from the Commission		Environmentally
	- Technical guidance on climate proofing of		Sustainable Investment
	infrastructure in the period 2021 – 2027		Fulfilment and Climate
	(2021/C373/01).		Impact Proofing of
			Infrastructure, Energy
			Assessment and Annex to
			Call No. 8.
10.	Budget economy	YES/NO	Energy assessment,
	The maximum amount of total eligible expenditure for		overall cumulative budget
	the calculation of the subsidy does not exceed CZK		of the project and
	25,000/GJ per year, i.e., the equivalent of CZK		MS2021+.
	90,000/MWh (the difference between the final energy		
	consumption before and after the implementation of		
	the project from the adjusted energy balance relating		
	to the relevant energy saving measures of the project,		
	which is listed in a separate annex to the Energy		
	Assessment – indicator required to be fulfilled).		
	All exclusion criteria submitted to the application	VES/NO	
	received a YES rating	TESTNO	

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TABLE 1 REQUIREMENTS FOR THERMAL AND TECHNICAL PROPERTIES OF BUILDINGS ACCORDING TO THE REQUIRED AMOUNT OF SUPPORT

Building renovation rate	A1	A2
Required value of primary energy from non-renewable energy sources for the situation after implementation of the		80 kWh/m²/vear
proposed measures		
Required values of the heat transfer coefficient for the changed building elements covered by the aid in the case of rer	novation measures	of existing buildings
with a predominant design internal temperature $ heta_{ m im}$ in the range of 18 to 22 °C inclusive		
Description of construction	Heat transfer co	efficient [W/(m ² . K)]
Outer wall	0,15	0,15
Steep roof with a slope of over 45 $^{\circ}$	0,15	0,15
Flat and pitched roof with a slope of up to and including 45 $^\circ$	0,11	0,11
Ceiling with floor above the outdoor area	0,15	0,15
Ceiling under an unheated attic (with a roof without thermal insulation)	0,12	0,12
Wall to unheated attic (with roof without thermal insulation)	0,15	0,15
The floor and wall of the heated space are adjacent to the soil	0,22	0,22
Ceiling and wall from heated to unheated space	0,3	0,3
Ceiling and inner wall made of heated to tempered space	0,38	0,38
Ceiling and wall outside from a tempered space to the outside	0,38	0,38
Floor and wall of tempered space adjacent to the soil	0,45	0,45
Filling of openings in the outer wall and steep roof, from the heated area to the outside (windows), except for doors Uw	0,9	0,9
Slanted opening filling with an inclination of up to 45° from the heated space to the outside (roof windows) Uw	1,1	1,1
Filling of industrial skylights Ug	1,2	1,2
Door panel of an opening from the heated space to the outside (including the frame) Ud	1	1
Gate – filling of an opening with dimensions over 6 m ² used for the entry of Ugate equipment	1,2	1,2
Metal frame of the opening filling	1,5	1,5

✓ Option A2 – Energy saving from deep retrofits of buildings.

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TABLE 1 REQUIREMENTS FOR THERMAL AND TECHNICAL PROPERTIES OF BUILDINGS ACCORDING TOTHE REQUIRED AMOUNT OF SUPPORT

Building renovation rate	A1	A2	
Light-weight facades (LOP), evaluated as an			
assembled assembly including load-bearing			
elements, with a relative area of the translucent			
filling of the opening		0,2 + 0,85. <i>fw</i>	
$fw = A_w /A$, in m ² /m ² ,			
is the total area of the curtain wall, in m ² ;	0,2 + 0,85. <i>fw</i>		
Aw is the area of the translucent filling of the			
opening used mainly for lighting the interior,			
including the relevant parts of the frame in the			
curtain wall, in m ²			

In the case of other interior design temperatures, the relation is used: $U = U20 \cdot e1$ Where U is the heat transfer coefficient as required in the table in $W/(m^2 \cdot K)e1 = 16/(\theta i m \cdot 4)$ where $\theta i m$ is the design temperature of the interior

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Ex-an	Ex-ante evaluation of energy saving projects by type of prevailing measure - 1 st call of specific axis 4.1 - Energy savings (Projects with a signed decision to provide a subsidy 31.12.2023)							
The type o sav	f prevailing of energy ⁄ings measure	Number of projects [-]	Eligible cost [CZK]	Subsidy [Kč]	Annual final energy consumption before measures [MWh]	Annual energy savings [MWh]	The average share of eligible cost in the total eligible cost of the project [%]	Weighted annual of eligible cost on annual energy savings [CZK/GJ]
Installation source fo consump solar syst photo	of a renewable energy or the company's own tion (use of biomass, ems, heat pumps and ovoltaic systems)	63	479 721 275	239 653 165	20 725	11 356	75,53%	13 799
Installation using el energy company taking into	of a cogeneration unit ectrical and thermal (, or cooling for the r's own consumption, account its operating conditions	1	4 977 777	3 235 555	771	72	62,73%	19 204
Implemen reduce th buildings (shell, repla of ope construction demonstrat	ntation of measures to he energy demand of (insulation of the outer comment and renovation ening fillings, other n measures that have a ble effect on the energy	236	2 612 219 742	1 429 255 772	85 795	45 459	71,67%	19 486
dema	nd of the building)	Roughly 100 projects should reach deep repoyation standard						
Implementation of measures to reduce the energy demand of buildings (installation of air conditioning with waste heat recovery) / modernization of lighti systems, heating of buildings ar industrial areas	Itation of measures to ne energy demand of gs (installation of air ning with waste heat modernization of lighting neating of buildings and dustrial areas	26	574 462 494	277 460 629	24 989	9 888	64,54%	14 190
Reducing increasing t production	the energy intensity / the energy efficiency of on and technological processes	433	5 049 718 501	2 425 180 729	272 471	113 733	96,50%	21 138
Others in e / int moderniza and re	energy consumption - troduction and ation of measurement egulation systems	5	78 265 458	32 574 271	10 609	5 032	69,15%	7 931
Тс	otal /average	764	8 799 365 246	4 407 360 121	415 360	185 540	85,80%	19 697

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