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ODYSSEE-MURE

Webinar in the framework of the project
"ODYSSEE-MURE -
Monitoring EU Energy Efficiency First Principle and Policy Implementation"
18 January 2022

Energy Efficiency Funds in Europe

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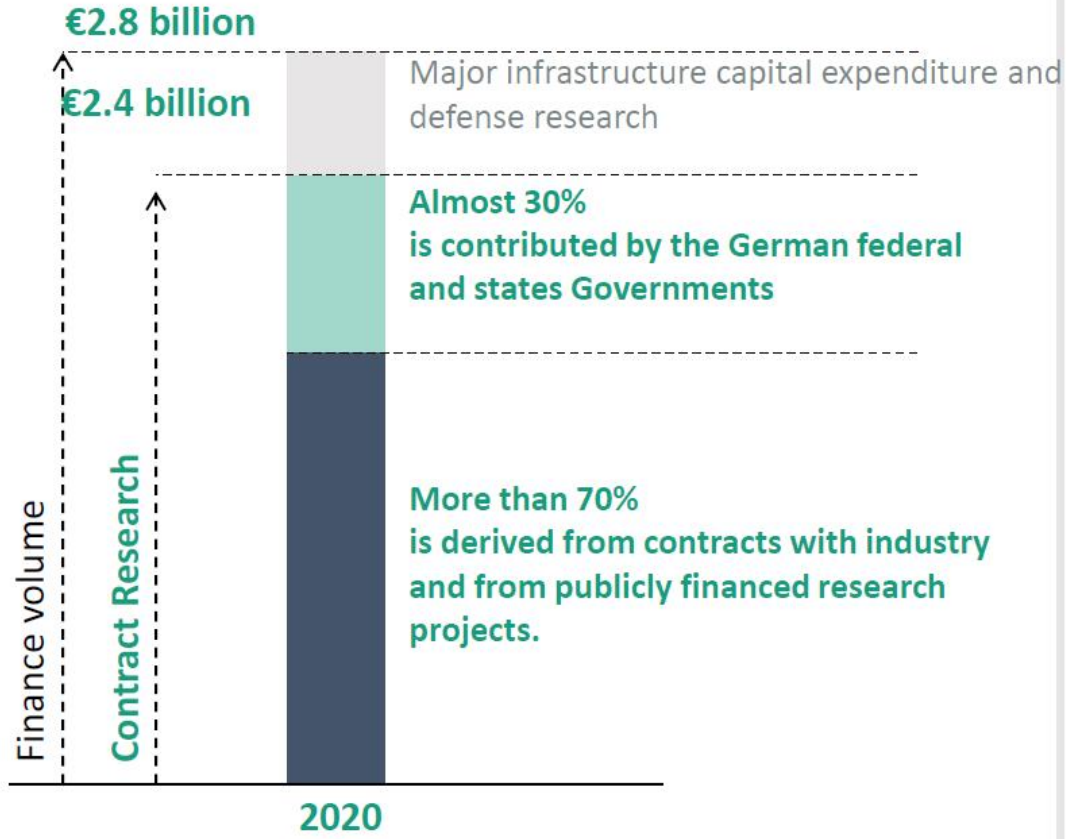

KEY QUESTIONS

- How do Energy Efficiency Funds contribute to financing energy efficiency investment in the EU?
- What are the main challenges in evaluating such overarching energy efficiency policies?
- What could be a suitable evaluation methodology?

This presentation discusses the contribution of Energy Efficiency Funds to the financing of energy efficiency investment in the EU. As an example, the German Energy Efficiency Fund and its evaluation is described more detailed. The presentation is based on the MURE database on energy efficiency policies and a policy brief prepared within the ODYSSEE-MURE project (https://www.odyssee-mure.eu/).

https://www.odyssee-mure.eu/

18 January 2022
Webinar
„Energy Efficiency Funds in Europe“

ABOUT ODYSSEE

Database on energy efficiency indicators and energy consumption by end-use and their underlying drivers in industry, transport and buildings.

Learn more

ABOUT MURE

Database on energy efficiency policies and measures by country in industry, transport and buildings.

Learn more

LATEST NEWS

30 NOVEMBER 2021

On November 30th the Odyssee-Mure project hosted a live webinar: **"Recent energy efficiency trends in the EU"** (by L. Sudries and B. Lapillonne, Enerdata).

28 SEPTEMBER 2021

3 webinars have recently taken place:
- **28 September**: Energy Sufficiency Indicators and Policies
- **4 October**: Energy efficiency, structural change and energy savings in the manufacturing sector, with special focus on Denmark
- **12 October**: Identification of energy savings from the EU ETS through top-down indicators from ODYSSEE-MURE

KEY PUBLICATIONS

POLICY BRIEFS

Short summary of key findings on sectoral energy efficiency trends and policy measures.

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WEBINARS

Webinars on energy efficiency policy monitoring and analysis by key experts.

Learn more

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ENERGY EFFICIENCY AS A KEY PILLAR TO REACH AMBITIOUS ENERGY EFFICIENCY AND CLIMATE TARGETS

- The "**Energy Efficiency First**" principle plays an important role in the European Green Deal and the "Fit for 55" package.
- In the proposal for a recast of the Energy Efficiency Directive, a new Article 3 shall ensure that energy efficiency is broadly considered in policy and investment decisions in the Member States.

A key challenge of a broad application of the Energy Efficiency First Principle is the financing of energy efficiency investment in all sectors (buildings, services, industry, transport).

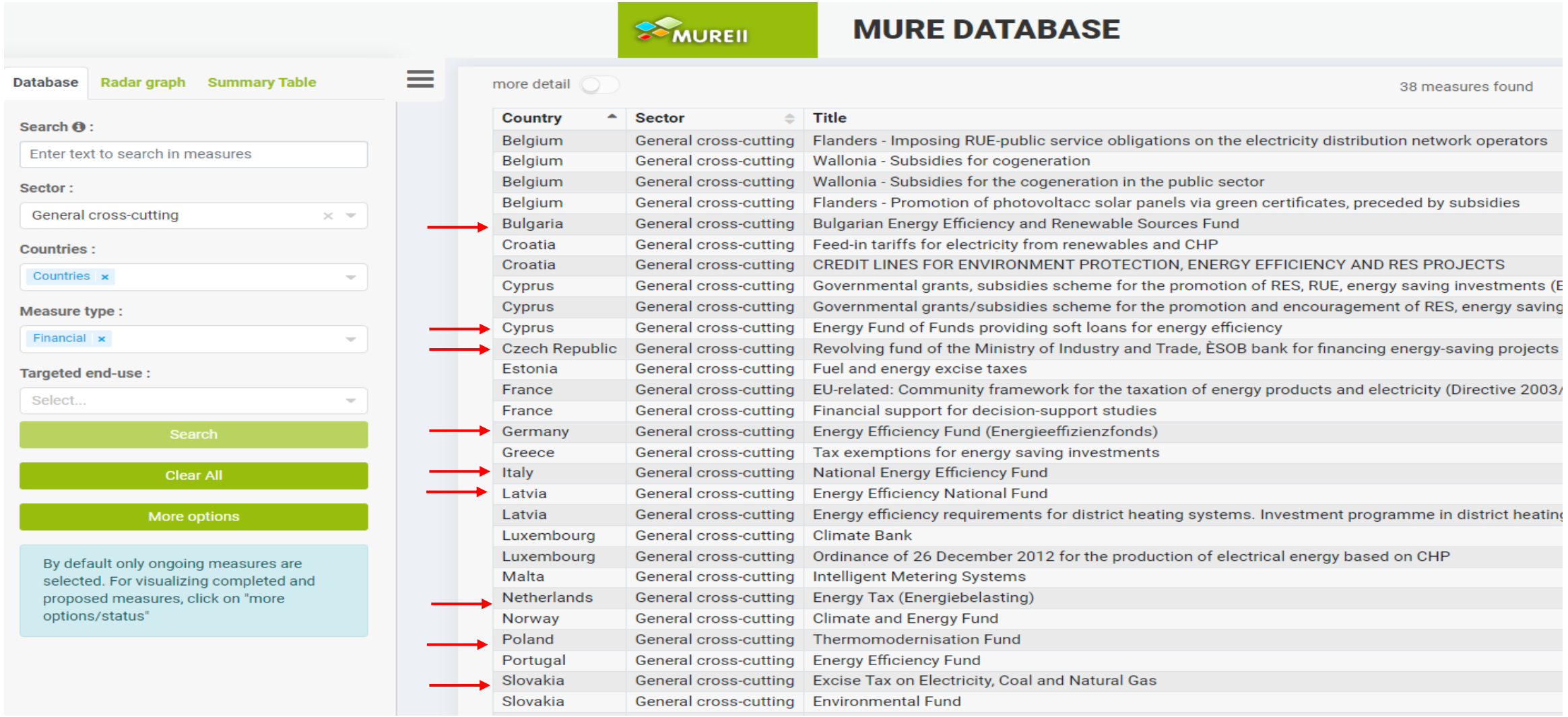
Financing options for energy efficiency investment:

- Public financing (public budget, tax incentives, special funds)
- Pay-as-you-go financing (e.g. by allocating investment costs to energy prices)
- Use of investor capital (e.g. energy performance contracting, crowdfunding)

GENERAL CHARACTERISTICS OF ENERGY EFFICIENCY FUNDS

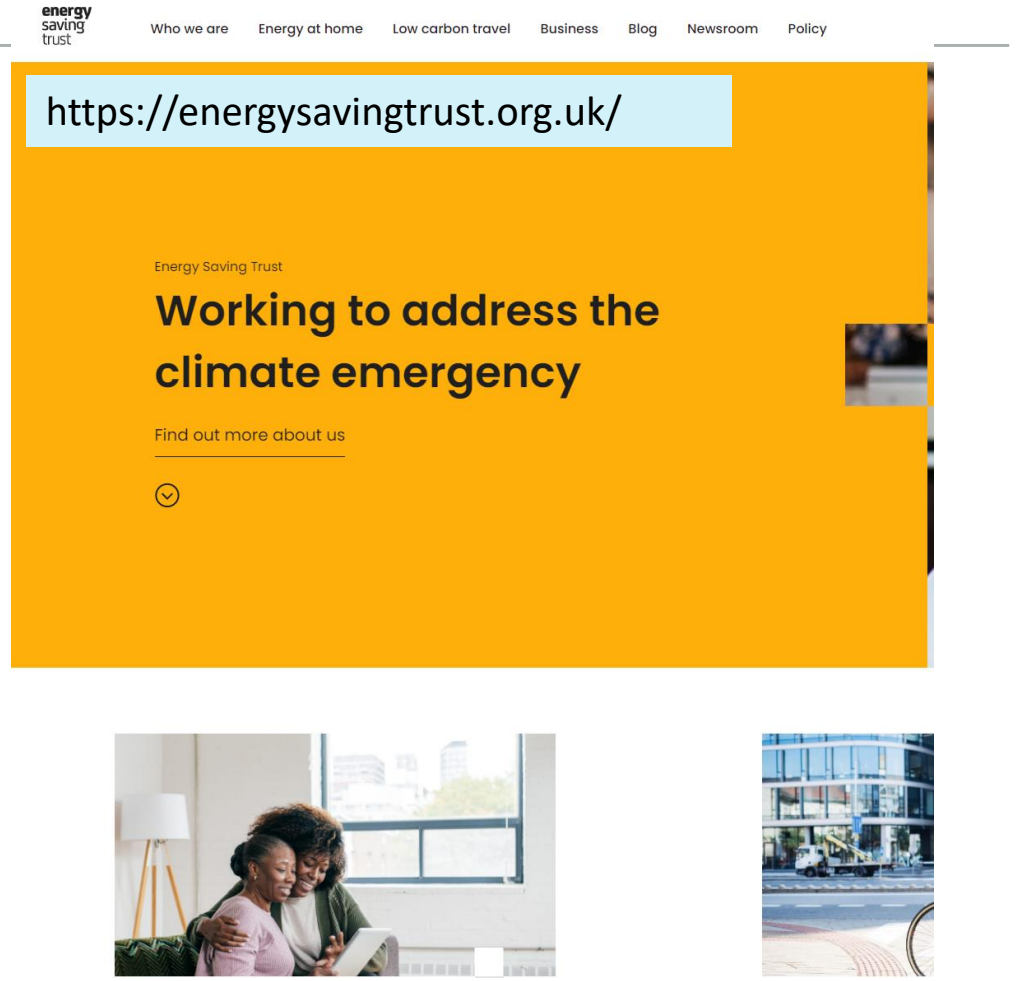
- Financing: mainly through public means, but often independent from volatile public budget (e.g. special funds fed by revenues from EU-ETS or charges on energy prices)
- Broader than traditional grant or subsidy programmes → comprise several progammes and types of instruments (grants, subsidies, information, advice) and often different sectors (buildings, services, industry, transport)
- Organization: different organizational approaches (from own institutional structure to pure financing bodies)
- History: first funds started in the early and mid 1990s in UK, Denmark, Czech Republic and some states of the U.S.; continuous diffusion since early 2000s.
- Focus: early funds only focused on energy efficiency, some later funds also include renewable energies or other

ENERGY EFFICIENCY FUNDS IN MURE



Country	Sector	Title
Belgium	General cross-cutting	Flanders - Imposing RUE-public service obligations on the electricity distribution network operators
Belgium	General cross-cutting	Wallonia - Subsidies for cogeneration
Belgium	General cross-cutting	Wallonia - Subsidies for the cogeneration in the public sector
Belgium	General cross-cutting	Flanders - Promotion of photovoltacc solar panels via green certificates, preceded by subsidies
Bulgaria	General cross-cutting	Bulgarian Energy Efficiency and Renewable Sources Fund
Croatia	General cross-cutting	Feed-in tariffs for electricity from renewables and CHP
Croatia	General cross-cutting	CREDIT LINES FOR ENVIRONMENT PROTECTION, ENERGY EFFICIENCY AND RES PROJECTS
Cyprus	General cross-cutting	Governmental grants, subsidies scheme for the promotion of RES, RUE, energy saving investments (E
Cyprus	General cross-cutting	Governmental grants/subsidies scheme for the promotion and encouragement of RES, energy saving
Cyprus	General cross-cutting	Energy Fund of Funds providing soft loans for energy efficiency
Czech Republic	General cross-cutting	Revolving fund of the Ministry of Industry and Trade, ÈSOB bank for financing energy-saving projects
Estonia	General cross-cutting	Fuel and energy excise taxes
France	General cross-cutting	EU-related: Community framework for the taxation of energy products and electricity (Directive 2003/
France	General cross-cutting	Financial support for decision-support studies
Germany	General cross-cutting	Energy Efficiency Fund (Energieeffizienzfonds)
Greece	General cross-cutting	Tax exemptions for energy saving investments
Italy	General cross-cutting	National Energy Efficiency Fund
Latvia	General cross-cutting	Energy Efficiency National Fund
Latvia	General cross-cutting	Energy efficiency requirements for district heating systems. Investment programme in district heatin
Luxembourg	General cross-cutting	Climate Bank
Luxembourg	General cross-cutting	Ordinance of 26 December 2012 for the production of electrical energy based on CHP
Malta	General cross-cutting	Intelligent Metering Systems
Netherlands	General cross-cutting	Energy Tax (Energiebelasting)
Norway	General cross-cutting	Climate and Energy Fund
Poland	General cross-cutting	Thermomodernisation Fund
Portugal	General cross-cutting	Energy Efficiency Fund
Slovakia	General cross-cutting	Excise Tax on Electricity, Coal and Natural Gas
Slovakia	General cross-cutting	Environmental Fund
Slovenia	General cross-cutting	Ecological Fund of the Republic of Slovenia - ECO-Fund	No	General programme, Financial	2005
Slovenia	General cross-cutting	Incentives for optimization of functioning of energy systems	No	Financial, Market-based Instruments	2017
Spain	General cross-cutting	National Energy Efficiency Fund (NEEF)	No	Financial	2014

OTHER LARGE ENERGY EFFICIENCY FUNDS



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EXAMPLE: THE ENERGY EFFICIENCY FUND (EEF) IN GERMANY

- Established in 2011 to exploit energy savings potential in multiple sectors; in place until 2018
- Pure financing body, no institutional structure
- Financing comes from a special fund which is fed by money from the normal public budget and revenues from EU-ETS
- Yearly budget strongly increased from 77 MEUR/a to 300 – 500 MEUR/a in later years
- 23 energy efficiency programs are funded by the EFF addressing all final energy sectors

Consumers

Companies

Communities

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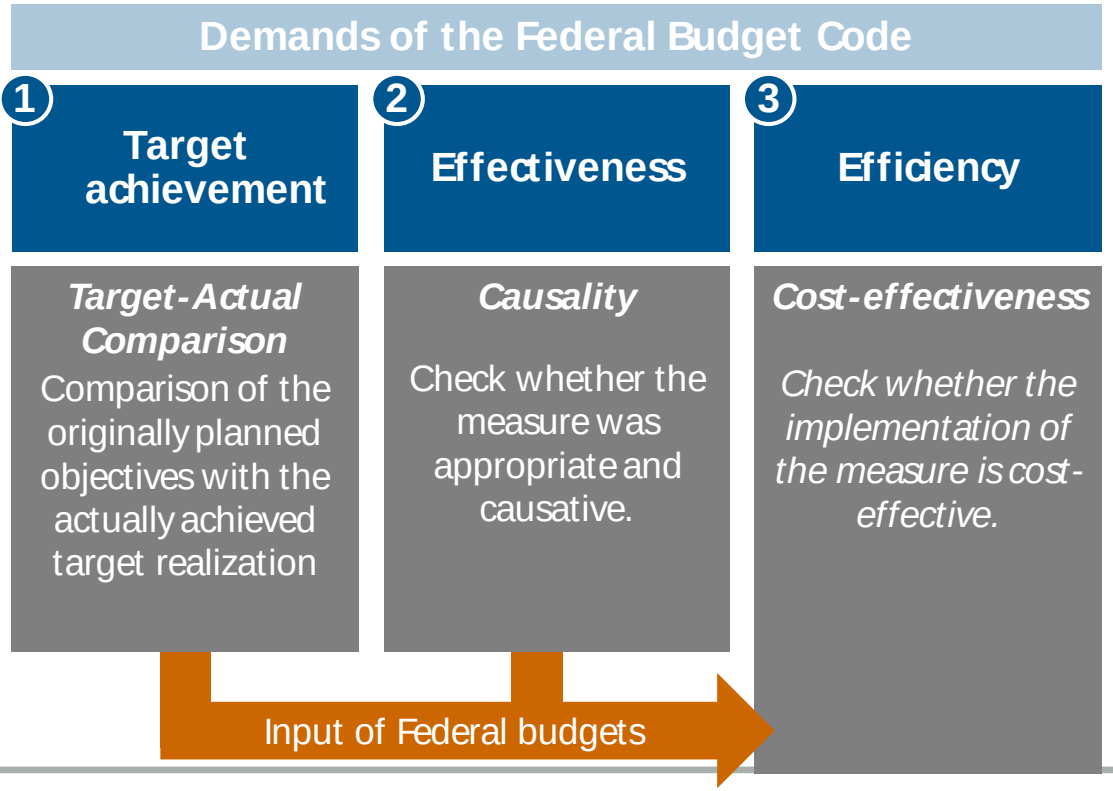
EVALUATION OF THE GERMAN ENERGY EFFICIENCY FUND

- The EEF was evaluated by independent research institutions for the years 2011-2017
- The evaluation was focused on the legal requirements for the evaluation of programs financed from Federal budgets:



THE EVALUATION SYSTEM

OBJECTIVES

Basis for the implementation of the target achievement, effectiveness and efficiency monitoring

- Achievement of energy efficiency and GHG reduction targets
- Exploitation of economic energy savings potentials
- Decreasing energy costs

INDICATORS

Key element of an evaluation system: quantitative and qualitative indicators

- Target achievement (= energy / GHG savings)
- Effectiveness (= difference gross / net savings)
- Efficiency (= cost effectiveness)

METHODS

Core element for data collection and analysis

- Several quantitative and qualitative methods
- Depending on the programme within the fund

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THE IMPACT OF THE GERMAN ENERGY EFFICIENCY FUND (EVALUATION PERIOD 2011-2017)

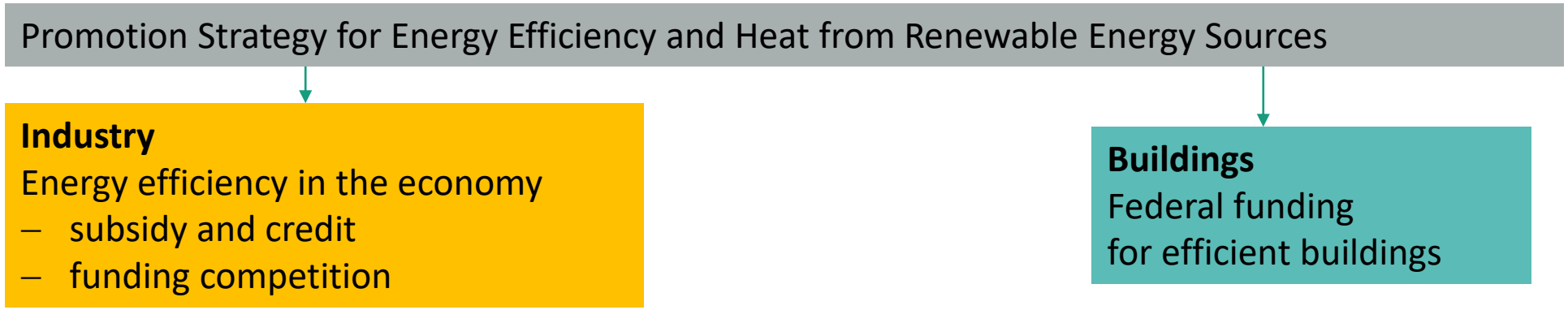
- Cumulated savings in 2017: 3.4 TWh final energy (gross) and 1.2 Mt CO_2 reduction
- Reduction of energy costs: 235 MEUR / a
- Positive contribution to the German energy efficiency and GHG reduction targets
- The evaluation method developed for the EEF was generalized and now forms the general guideline for the evaluation of all energy efficiency programmes in Germany
- Some recommendations from the evaluation for the further development of the EEF were taken up by the Government for a restructuring of the financial support landscape for buildings and industry from 2019

RECOMMENDATIONS FOR THE IMPROVEMENT OF ENERGY EFFICIENCY FUNDS AND SIMILAR FINANCIAL INSTRUMENTS

Overarching Principle	Explanation
Facilitate access	Simplified access to support programmes by streamlining the programme landscape and by establishing central digital access to the energy efficiency programmes, central "support pilots" and regional network nodes.
Improve implementation	Numerous proposals were made at the level of individual measure evaluations, ranging from streamli-ning application processes and shortening processing times to in-creasing the stability of funding and creating new funding areas, within the framework of what is legally permissible.
Strengthen multipliers	Consistent marketing of support programmes, strengthening of target group-specific communication and integration of new sales actors.
Emphasize system orientation	Strengthen results- and profit-oriented funding and create additional opportunities to take advantage of funding.
Increase quality of implementation	Strengthening of quality thinking and sustainability aspects in funding programmes.
Improve follow-up	Provide for consistent target setting in new funding programmes and strengthen continuous monitoring.

RESTRUCTURING OF THE FINANCIAL SUPPORT PROGRAMMES IN GERMANY SINCE 2019

- Cross-cutting structure of the EEF was substituted by sectoral measures bundles for buildings and industry
- The bundling of different types of policies under the umbrella of an overarching programme was maintained and even strengthened by establishing a uniform access ("one-stop shop):



THE "NINE-STEP-APPROACH" FOR THE EVALUATION OF ENERGY EFFICIENCY POLICIES

1. Identification of general characteristics of the policy
2. Identification of framework conditions
3. Review of policy targets: the policy targets are the basis for the definition of indicators
4. Definition of an indicator set based on policy targets
5. Data collection for analysis of defined indicators
6. Data analysis for gross values of indicators
7. Adjustments for baseline and effects like the free-rider or spill-over effect generating net values of indicators
8. Calculation of future projections (ex-ante evaluation)
9. Summation and comparison of different policies in an overarching evaluation project

KEY MESSAGES

- Energy Efficiency Funds are an important instrument for financing energy efficiency investment which are implemented at the level of the EU as well as in 9 EU Member States and other European countries and U.S. states.
- Their main advantages over single financial support programmes are the assurance of longer-term financing through their partial independence from the volatile public budget and their broader cross-technology and cross-sectoral impact.
- The methodological challenge for the evaluation of such an overarching financial policy is that both the impact of the individual actions and their interaction within the fund must be considered.
- Well-designed and harmonized policy evaluations can help to improve existing policy measures for energy efficiency and to design new ones.

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