

Austria – Federal programme “Aid for environmental protection measures”

Umweltförderung im Inland (UFI)

About the measure

Policy instrument	Sector	Starting date and status
Financial (grants, subsidies, loans, others)	Tertiary + industry	1986 – on-going

UFI is a subsidy scheme targeting investments to increase energy efficiency or reduce CO₂ emissions in industry and the tertiary sector. In addition the scheme is targeted at increasing air quality and reducing waste and noise pollution. This case study focuses on the evaluation on the energy efficiency and renewable related parts of the scheme. The scheme is funded via the general federal budget.

The rules and funding of the scheme are laid down in a respective Federal Law. The program

is supervised by the Federal Ministry for Sustainability and Tourism and is implemented and managed by Kommunalkredit Public Consulting, which is a company specialized in the administration of funding schemes.

Companies can get subsidies of up to 30% on the environmentally relevant excess investment costs of the respective actions. If an action has received funding by UFI the resulting savings cannot be claimed in the Austrian Energy Efficiency Obligation Scheme.

Expected energy savings in 2020	Benchmark
In the Austrian NEEAP 2011 the contribution of the scheme was roughly estimated at 11 PJ of cumulated savings (2014-2020). The Austrian NEEAP 2017 reports 25.1 PJ (cumulative) saved in 2020 from actions implemented in 2014 and 2015.	The expected savings as reported in NEEAP 2011 represented 5% of the total Article 7 target for Austria. The contribution to the target achievement of Article 7 of the EED is 15% according to the Austrian NEEAP 2017.

Means and outputs

Table 1. Number of projects and related investments (for 2011-2013).

	2011	2012	2013
Number of funded projects	2,188	2,279	2,407
Environmentally relevant investment costs (million Euros)	536	534	798
Average rate of aid	14.9%	12.9%	9.5%
Annual amounts of subsidies (million euros)	79.6	69.0	75.5

Source: data from (Karner et al. 2014)



- Environmentally-relevant additional investments: These represent the extra costs for implementing a higher standard that results in additional benefits for the environment or energy efficiency.
- The majority of projects funded are related to energy efficiency actions (48.0%) and actions to increase the use of renewable energy sources (49.8%).
- Out of 9,914 applications submitted by companies over 2011-2013, 6,874 were accepted (69% approval rate). The other applications were either withdrawn or rejected due to non-eligibility or because the action was not implemented at all.

Data about energy savings

Unit	Main source of data
Final annual energy savings and amount of renewable energy (MWh/a)	Information submitted by companies in their applications for support

Table 2. Final annual energy savings and annual renewable energy production from projects implemented over 2011-2013 (in MWh/a).

Results in categories of funded measures			
	Funded projects	Energy from renewable sources in MWh/a	Energy savings in MWh/a
Renewable energy sources	3,420	2,865,520	
Biomass boilers	1622	306,817	
Biomass micro networks	312	98,791	
Biomass local district heating	426	1,005,922	
Biomass CHP	7	368,247	
Exchange of boilers	3		
Heat distribution (connection to district heating)	270	938,824	
Solar heat	705	13,718	
Production of biogenic fuel	4	42,345	
Electricity generation	62	590	
Geothermal energy	3	55,812	
Energy from biogenic waste	6	34,454	
Energy efficiency	3,302		1,212,419
Natural gas CHP	30		61,789
Connection to district heating networks	800		120,571
Heat pumps	349		35,527
Energy saving projects in companies	1176		884,882
LED systems	580		22,125
Energy efficient drives	26		5,300
Thermal insulation of buildings	178		65,254
New buildings	103		5,545
Air-conditioning and cooling	60		11,426

Source: data from (Karner et al. 2014, tables 112 and 118)

Energy savings are monitored for the scheme in terms of final annual energy savings. The category “Energy savings projects in companies” is open for projects that are not covered by any other category. These projects range from complex projects combining several actions to single action projects. The data presented above is based on the evaluation done in 2014 (about years 2011-2013) and is not directly comparable to the energy savings numbers presented for EED reporting.

Sources of uncertainties about energy savings

- Energy savings and amounts of renewable energy displayed are based on information provided by funded projects and are ex-ante.

Evaluation of the energy savings

Calculation method(s) and key methodological choices

- Methods: only ex-ante; engineering estimates (**scaled savings, method 5**), that is usually based on own calculations by the company (checked by Kommunalkredit Public Consulting when processing the application)
- Baseline: The baseline for energy savings is “**actual before**”
- The overall effects are expressed in CO₂ emission reductions per year using standard emission factors
- No correction factors are used
- Only projects can get funding that would not have been implemented anyway. This is the basic requirement of the subsidy scheme and ensures additionality. Causality is also ensured by this requirement (=without the subsidy, the project would not have been implemented). For more details, see *Focus on additionality*.

Ex-post verifications and evaluations

The CO₂ reductions effects displayed in the evaluation study are based on the information that subsidised projects have to deliver to the funding body (Kommunalkredit Public Consulting). Calculations are checked for every application before its approval. Based on this bottom-up information, the evaluators performed a plausibility check in order to make the effects consistent with the overall energy and greenhouse gas emissions balances of Austria.

Other indicators monitored and/or evaluated

Indicator	Explanations
Number of funded projects	Data monitored by main categories of projects. For results see above in “Means and outputs”.
Total environmentally relevant excess investments triggered	The environmentally relevant excess investment costs are the basis for determining the subsidy. This indicator can thus be seen as the investments triggered by the scheme. For Results see above in “Means and outputs”.
Total volume of subsidies in Euro	The total value of subsidies over 2011-2013 was 224 million Euro
Average rate of aid	For results see above in “Means and outputs”.
CO ₂ emission reductions per year	Results estimated based on the estimated energy savings, using standard emission factors.

Public efficiency indicator (euro/tCO ₂ avoided)	Amounts of subsidies divided by the CO ₂ emissions over the lifetime of the projects funded
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A disaggregation of all numbers is also made with respect to the Austrian Federal Provinces. This means to a certain extent the regional effects of the scheme are displayed.

One chapter of the evaluation report is dedicated to the analysis of economic effects. Within an input-output analysis the following economic effects of the scheme are assessed:

- Gross production value
- Value added
- Employment (number of employment relationships, number of full time equivalents)

Gross production value and value added

In total the environmentally relevant excess investments triggered of 1.9 bn Euro in 2011-2013 led to a production (gross production value) of 2.9 bn Euro and a value added of 1.2 bn Euro. This implies multipliers of 1.76 and 0.71 respectively.

Employment

In addition the environmentally relevant excess investments triggered 18,400 employment relationships which results in 16,800 full time equivalents.

This implies one million Euro of environmentally relevant investment that was subsidised with 170,000 Euro on average led to or secured 10 new full time equivalents.

Other aspects evaluated

In addition to economic effects and energy and CO₂-reductions the evaluation analyzed the average processing time (time between application and decision on eligibility) until of subsidy applications which is 192 days for the period 2011-2013. This means a reduction of 39 days as compared to the former period. This is due to more standardized procedures (e.g. online application) in the application process as well as the lower share of complex projects.

Focus on additionality

UFI provides investment subsidies to companies for actions that:

- are not required by law or an authority;
- have a positive environmental effect;
- due to a long pay-back time need a subsidy to be implemented.

Additionality of the actions is secured by a set of requirements. The **environmentally relevant excess investment costs** are the basis for the determination of the subsidy. If legal requirements exist, the company can only claim costs that go beyond this legal requirement (e.g. minimum requirements for refurbishments of buildings). If there are no legal requirements in place for an action the company can only claim the costs that go beyond a business as usual implementation of the action (e.g. more efficient boiler than the market average).

The subsidy rate **depends on the environmental effect**. Put simply: The higher the environmental effect the higher the subsidy rate.

The company has to prove that the **pay-back time of the action is longer than three years**. The calculation is based on static amortisation with current energy prices.

Companies have to **state the amount of subsidy that is needed** to trigger implementation of the action.

Each application for a subsidy is thoroughly checked by Kommunalkredit Public Consulting for all requirements that are laid down in the respective law and subsidiary rules.

Experience feedback from stakeholders

Interview with Michael Aumer (Austrian Federal Ministry for Sustainability and Tourism)

1. What is the role of evaluation in the management of the scheme?

The programme is evaluated every three years by external evaluators. The requirement for evaluation is set by law. Thus the evaluation serves more than one purpose:

- It is used to report to the federal parliament on the effects of the scheme
- It is used internally by the competent Ministry and the management body to get hints not only on the results/effects but also on possible future requirements and focus topics of the scheme.

The evaluation of the scheme tries to go a little more into detail of why certain things happened in order to understand the underlying dynamics and be able to take adequate measures to solve these issues.

2. What were the main lessons learnt from the evaluations (about the impacts of the scheme and what could be improved)?

Apart from showing the effects of the scheme the evaluation helped to adapt the scheme and its rules to make it more practical and effective.

3. What were the lessons learnt in terms of evaluation practices?

Data collection is a main issue. The data requested should be clear before evaluation starts because it is often impossible to gather data afterwards

Independence of evaluators is important but on the other hand evaluators have to know the scheme very well in order to understand the reasons for certain design choices policy makers made. This makes it sometimes difficult for authorities to find the right evaluators.

To go further

About the measure

- Website of the competent Federal Ministry:
<https://www.bmlfuw.gv.at/umwelt/klimaschutz/ufi/ufi.html>
- Website of the subsidy scheme: <https://www.umweltfoerderung.at/>
- Description in the MURE data base:
http://www.measures-odyssee-mure.eu/output2_in.asp?Cod=AU17

References of the evaluation(s)

- Karner, A., Figl, F., Kraner, H., Harather, K., Kletzan, D., 2014. Evaluierung der Umweltförderungen des Bundes 2011-2013. Evaluation report (see chapter 3 about the UFI scheme) prepared for the Federal Ministry of Agriculture, Forestry, Environment and Water (BMLFUW). September 2014.
https://www.umweltfoerderung.at/fileadmin/user_upload/media/publicconsulting/Evaluierung_der_Umweltfoerderungen_des_Bundes.pdf

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