Conclusions and recommendations of the National Audit Office

Energy investment aid as a driver for the green transition

The audit focused on the energy aid granted to companies and other entities in the form of investment aid. Energy aid has aimed at promoting the achievement of the energy and climate objectives of Finland and the EU. The aid is intended for projects that promote renewable energy, energy saving and energy efficiency or other decarbonisation of the energy system.

The amount of energy aid multiplied in 2018–2023 when, in addition to national aid, funding under the EU Recovery and Resilience Facility (RRF) was targeted at promoting the green transition and climate objectives. The audit examined whether the Ministry of Economic Affairs and Employment and the funding centre Business Finland have created sufficient conditions for effective allocation and use of the energy investment aid.

More than half of the aid for large demonstration projects under the Ministry's responsibility was granted for the production of renewable hydrogen and methane, and less than half of the RRF funding was granted for power generation projects. The five largest recipients of the aid received in total around EUR 190 million of the granted aid.

Business Finland granted energy aid to around 4,500 small projects, more than half of which had eligible total costs in the range of EUR 100,000–200,000. The aid was mainly targeted at solar power, the utilisation of waste heat and the improvement of the energy performance of buildings.

The lack of concrete objectives has undermined the steering impact of energy aid and the accountability of the aid administration

The energy aid has many objectives. They are so general in nature that the aid can always be said to have promoted the achievement of one of them, at least to some extent.

The granting of energy aid is based on case-by-case discretion by the authority granting the aid and, in the case of projects dealt with by the Ministry of Economic Affairs and Employment, also on a comparison between projects. The application and aid processing guidelines have not included any criteria for the deliverables required from projects. An exception is certain types of RRF projects for which the EU has set a minimum emissions reduction level.

Ensuring the effectiveness of energy aid would require more specific performance targets, such as defining the minimum increase in renewable energy, energy efficiency, energy saving or other measurable impact expected to be achieved with the aid and the time frame within which this should be achieved. Performance targets would also ensure equal treatment of the applicants and promote the accountability of the aid administration and the transparency of the use of state funds.

New technology has been prioritised, but almost as much aid has been granted for conventional technology

According to decrees, new technology projects should be prioritised in the discretion process for energy aid. Aid may have been granted for other projects as well if this has been possible within the scope of the state budget authorisation. The priority of new technology and its commercialisation has also been recorded in the national energy and climate strategies (2016 and 2022). However, it has also been stated in these strategies that energy aid should be allocated to a large number of established conventional technology project types as well. This ambivalence has also been reflected in the Ministry's energy aid processing guidelines (2018).

Between 2018 and 2023, about 51% of the national energy aid granted was targeted at new technology projects. The Ministry of Economic Affairs and Employment and Business Finland granted nearly the same amount of aid. Of the aid granted by the Ministry, 99% was targeted at new technology projects. Of the aid granted by Business Finland, 94% was targeted at conventional technology projects. Business Finland had no need to prioritise projects until the authorisation was cut at the beginning of 2024.

The aim has been to discontinue the support for conventional energy solutions as their risks decrease and they become commercially viable. However, the criteria for assessing the novelty and risks of technology have been rather ambiguous, and the authorities do not seem to have had a systematic procedure for monitoring the matter. The Ministry's energy aid guidelines have, nevertheless, annually defined indicative aid percentages for different project types and limited the eligibility of projects. For example, between 2018 and 2023, the aid rate for solar power projects was lowered from 25% to 15%.

The fiscal planning of energy aid has been challenging, and the resources of the Ministry's aid administration have not been adequately secured

The authorisations to grant energy aid increased in the state budget from around EUR 55 million in 2018 to around EUR 730 million in 2022. A growing amount of the authorisations remained unused, and the resulting budgetary distortion had to be corrected in supplementary budgets. The appropriations earmarked for the payment of energy aid were also overbudgeted. The Ministry of Economic Affairs and Employment faced particular challenges in finding suitable targets for granting RRF funding. At its lowest, the utilisation rate of the Ministry's authorisation was 45%. Business Finland, in turn, granted aid for the full amount of its increased authorisation, and the approval rate of applications processed by it was high.

Strong fluctuations in the use of authorisations are problematic. They weaken the predictability of the operating environment of particularly companies planning large investments and also pose challenges to the functioning of the aid administration. RRF funding has involved the budgetary risk that part of the funding received from the EU may remain unused or has to be covered nationally. The authorities have strived to respond to the risk.

The resources that the Ministry has for energy aid processing have not corresponded to the exceptional increase in the amount of aid and the number of projects and to the extremely tight schedule for the use of the RRF funding. The aid administration was overloaded, and applications were backlogged. Other duties of public officials had to be deprioritised. In addition, both of the aid authorities have failed to carry out the follow-up of projects as required by the Energy Aid Decree within two years of the last payment of the aid.

The administrative organisation of energy aid and the division of labour between the Ministry of Economic Affairs and Employment and Business Finland are clear. The Ministry's role in the performance guidance of Business Finland has not been realised, but the two aid authorities have cooperated on a regular basis. The aid processes have been defined and described, and the authorities have strived in many ways to ensure the quality of the process. Electronic services have been developed.

The assessment of the catalytic effect of the aid has been inconsistent

The energy aid guidelines have been comprehensive. However, based on the analysis of the application material, the guidelines have made it possible to apply the aid criteria differently. The discretion in granting the aid has been largely based on information provided by the applicant, and this information has not been presented consistently. This makes it difficult to compare projects and may jeopardise the equal treatment of applicants.

Energy aid is required to have a catalytic effect. The profitability of projects and the catalytic effect of energy aid have been assessed, particularly in Business Finland, using a payback period without interest. However, energy price, which dominates the calculations of the payback period, has not been standardised, and the prices indicated in the applications have varied significantly even at the same time. The risk is that the price level presented in the application may be based on purposefulness rather than objectivity.

There are more suitable methods for assessing profitability, such as the net present value (NPV) and internal rate of return (IRR) indicators, which also take into account the investment holding period. If they were used, many energy investments would appear financially viable even without the aid.

In addition to the payback period, the Ministry of Economic Affairs and Employment has also used other criteria, such as the project's energy and emissions impacts. However, the aid decisions have not been justified sufficiently clearly to make it possible to assess the weighting given to the different criteria.

Emissions reduction and energy saving have also been calculated in many ways

According to the aid processing guidelines, the project must have a clear emissions reduction impact at the level of the entire energy system. Applications have been required to include at least an estimate of the reduction in carbon dioxide emissions. However, the calculation and assessment of the emissions impact have been very inconsistent. Many different emission factors and calculations have been accepted in the application process. The energy saving impact of projects has also been calculated in different ways, for example as cost savings generated for the companies.

The energy and climate impacts of projects have been poorly comparable. It has not been possible to compile uniform and reliable monitoring information from the project data or to assess the overall impacts of the aid. The external impact assessments of the aid commissioned by the aid authorities have therefore mainly focused on the views of the aid recipients on the necessity and effectiveness of the aid.

The aid authorities have not considered it necessary to separately assess the cost-effectiveness of the aid

The cost-effectiveness of energy aid projects has not been assessed or documented systematically. Based on the exemplary statistical analysis carried out in the audit, the majority of the projects supported by Business Finland seem to have produced relatively small energy savings, and the majority of the aid euros seem to have been allocated to projects with a low impact on energy saving. No significant differences were found in the cost-effectiveness of new and conventional technologies, although the lack of comparisons between their cost-effectiveness has been justified by the argument that they would hinder the achievement of the commercialisation target of new technology.

It was not possible to make a corresponding statistical assessment of the cost-effectiveness of the large projects managed by the Ministry of Economic Affairs and Employment because the total number of the projects was relatively small, and the projects were of very different types.

Recommendations of the National Audit Office

1. The Ministry of Economic Affairs and Employment sets concrete performance targets and corresponding follow-up indicators for energy aid. They can be set separately for different types of projects, if necessary.
2. The Ministry of Economic Affairs and Employment and the funding centre Business Finland introduce better methods for assessing the catalytic effect of energy aid.
3. The Ministry of Economic Affairs and Employment updates its processing guidelines so that the ex-ante assessment of the profitability, emissions

reduction impact and other impacts of projects is based on uniform criteria and calculation rules.

4. The Ministry of Economic Affairs and Employment develops the aid criteria and aid process so that the aid is genuinely targeted at new technology and projects with the most cost-effective emission and energy impacts.
5. The Ministry of Economic Affairs and Employment and the funding centre Business Finland monitor the results and impacts of the energy investment aid and assess the benefits achieved with the aid in relation to the objectives set for the aid.