A framework for Member States to support business in improving its resource efficiency

An Analysis of support measures applied in the EU-28

Measure synthesis

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Incentivising external audits to support resource efficiency

The aim of external resource efficiency audits is to provide support to businesses to help them identify and make resource efficiency improvements based on on-site identification of relevant resource and output (emissions, waste) flows and related saving potentials. These saving potentials can originate from reducing material and energy input costs as well as from reducing waste management and compliance costs. Governments may provide incentives for such audits, e.g. by offering government payments or vouchers, providing tax rebates for companies that have been audited for resource efficiency, or including resource efficiency audits as one beneficial criterion for Green Public Procurement processes.

State support to incentivise external audits to support resource efficiency is widely used in three Member States (11%; Czech Republic, Germany and Ireland) and used a little in eleven Member States (39%) (see Figure 1). In 14 Member States (50%) there is no national policy in place.

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Figure 1: Scope of application of support measure 2 across the EU-28

Good practice examples

In the following section, we provide selected good practice examples for this support measure from five different Member States (see Figure 2; the full list can be found in the separate Annex document): Germany (with wide use of this measure); Austria, Croatia, Italy and UK (each with a little use).
Figure 2: Good practice examples and scope of application for support measure 2 across EU-28
Financial support for external audits is a widely used support measure in Germany. A very successful example is the state support for PIUS-checks, which were initiated in 2000 in the federal state of North Rhine-Westphalia and are run by the Efficiency-Agency (EFA) of this federal state. By analysing relevant material flows and the current level of production technology, EFA aims to provide recommendations on how to optimise production in SMEs, primarily by implementing new production equipment or by organisational changes. All sectors are targeted, but the measure has been particularly successful in the metal processing, metal finishing and food processing industries. The costs for conducting an audit amount to between 10,000 and 15,000 EUR. Up to 70% of these costs can be covered by national funding programmes. The EFA handles the application for funding for the audit costs as well as for the implementation of the proposed measures. This measure has a high uptake by businesses and has proven to be effective. More than 550 PIUS consultations in businesses have been conducted by the EFA since the launch of the PIUS-checks in 2000. The average investment induced by the PIUS-checks amounts to 82,000 EUR, while average annual costs savings of around 50,000 EUR resulted from the investments into resource efficiency improvements – hence, the payback time of these investments is lower than two years (Engelmann, Liedke & Rohn 2013). The associated resource savings encompassed on average 5,020 m$^3$ of water, 260 MWh of energy and 46 tonnes of CO$_2$ (Jahns 2012, p. 14). By 2010, investments of approximately 36 million EUR were induced by the PIUS-checks, while annually approximately 10.4 million EUR could be saved through the improved production processes (i.e. material savings). Other federal states started copying the concept, e.g. Baden-Württemberg, Hesse, Rhineland-Palatinate.

On the national level, the Ministry for Economy and Energy grants audit and advice vouchers through the programme “BMWi Innovation Bonus (go-Inno)” since 2011. With one of its focuses on resource efficiency (module “go-efficient”), the programme facilitates expert advice on improving resource and material efficiency in form of a subsidy (50% of costs or up to 80,000 EUR per voucher) for external consultation by selected consultants. The programme aims to decrease the raw material and overall material use of small and medium-sized enterprises (SMEs) and is available for all sectors. Moreover, businesses in Germany that want to introduce EMAS are supported by sector guidelines since 1995, and SMEs can receive financial support. Since 2009, material efficiency is a core indicator under EMAS. The various guidelines and the EMAS procedure, including internal and external audits, help organisations to identify their resource efficiency potential.

To leverage the idea of resource efficiency, a regional consultancy programme was started by the Austrian Ministry of Environment. Specially trained consultants offer 3 days audits in the framework of the regional consultancy programmes. These programmes are subsidised by regions and the federal ministry. The first of these programmes was the Ökobusinessplan Wien, launched in 1998. Federal subsidies for this kind of programmes are being provided since 2001. Targeting all sectors, Ökobusinessplan Wien aims to help companies to decrease operating costs, inter alia, in the area of waste management and to lower pressures on the environment. For each sector and company size, tailored cleaner production auditing is provided. The offer encompasses professional, financially supported consultation, assistance with the implementation of measures, legal security, networking and public relations work. In 2014, all Austrian regional programmes provided subsidised audits to 1,943 enterprises. The federal contribution was more than 1 million EUR, the total value of the consultancies approximately 4.5 million EUR.

Since 2000, the Croatian Centre for Cleaner Production (Cro-CPC, http://www.cro-cpc.hr/) offers consultations and aid in the implementation of cleaner production and Environmental Management Systems (EMS) in industrial companies. Objectives of the measure are a more efficient use of raw materials and energy, savings in water and energy, as well as a reduction in the emissions of pollutants and waste at source. The Croatian Government and UNIDO (UN Industrial Development Organization) jointly founded Cro-CPC in the year 2000. Cro-CPC is a regular member of UNIDO/UNEP Resource

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Efficient and Cleaner Production (RECP) network. Although the services of Cro-CPC are in principle available for all sectors across the nation, at present there is no clear strategy to systematically establish activities on the national level. (Eco SCP Med 2013)

The certification scheme ‘Remade in Italy’ (http://www.remadeinitaly.it/) is the first accredited certification scheme in Italy and in Europe specifically aimed at the verification of recycled content in a product. The Remade certification satisfies the Minimum Environmental Criteria (MEC) for Green Public Procurement adopted by the Italian Ministry for the Environment Land and Sea. The Remade certification attests traceability of production within the same production chain, starting from the verification of origin of incoming raw materials, to finished product, making it a model for verification of the quality and sustainability of recycling. The measure was launched in 2013, targeting manufacturers of recycled goods and is available on the national level. Currently there are 20 recycled product industries involved, for around 100 recycled products certified.

In the UK, the most prominent example for incentivising audits is ENWORKS’ work on resource efficiency assessments in businesses. ENWORKS resource efficiency assessments aim to (i) improve the competitiveness and productivity of companies in North West England by reducing their exposure to environmental risk and (ii) reduce CO\textsubscript{2} emissions, water and material usage and divert waste from landfill. These goals are to be achieved through directly working with companies, including the supply of resource efficiency assessments, and targeted information. Launched in 2001, the measure targets all interested companies, although support was prioritised to areas thought to have the greatest effect. From 2007 to 2010, 3,655 businesses were assisted, leading to annual cost savings of 77 million £, material savings of almost 200,000 tonnes and an increase in sales by 35 million £. (GHK 2011)

**Lessons learnt from the application of the support measure**

From the application of this support measure in the above five Member States, the following lessons learnt could be derived.

The Austrian regional consultancy programmes offer best practice stories of the different programmes, which are easily available online.\(^3\) Concerning ÖKOPROFIT (see also section Error! Reference source not found.), the programme encompasses offers for different company sizes and sectors, e.g. module “ÖkoBonus” is targeted at companies with a high need for energy and resources and with up to 50 employees; the module “ÖKOPROFIT” is targeted at companies with 80 to 120 employees. This allows interested business to quickly find and make use of relevant stories and tailor-made advice.

Interestingly, the PIUS-checks in North Rhine-Westphalia are more widely used by businesses than the “go-Inno” vouchers in all of Germany. One success factor of the PIUS programme is its regional implementing organisations, which are widely known and trusted by the regional industry. The implementation of the concept in other federal states shows its potential to be replicated. In general, the incentives for audits in Germany are well targeted to the needs of SMEs (e.g. by offering assistance for the application process or advice on financing options).

Most all of the activities to implement cleaner production in the Croatian industry have been done with the support from international donors (UNIDO, Norwegian government, etc). Apart from that, the Czech Republic supported the Cro-CPC by offering training for the staff and carrying out demonstration projects. This shows that knowledge transfer from countries that have more experience with the introduction of resource efficiency measures can be a key to success. By means of initial outside support, financial savings of around 85 million HRK per annum were achieved, which equals approximately 11.6 million EUR.\(^4\)

The Remade in Italy certification scheme was developed with the involvement of a large variety of relevant stakeholders. Stakeholder engagement may represent a strategic engine for the circulation of


\(^4\) For the currency conversion from Croatian Kuna into Euro, the European Central Bank Average Exchange rate over the last 10 years was applied ([https://www.ecb.europa.eu/stats/exchange/eurofxref/html/eurofxref-graph-hrk.en.html](https://www.ecb.europa.eu/stats/exchange/eurofxref/html/eurofxref-graph-hrk.en.html)).
knowledge and for facilitating implementation of public policies. The certification process costs around 1,500 EUR. Such cost is lower than other product certifications and may be a very advantageous investment for businesses interested in green economy (competitive advantage, performance indicator).

Specific success factors of ENWORKS’ resource efficiency assessments in the UK encompass, inter alia, (1) the sub-regional delivery of business support through a core network of local organisations having a track record of delivering high-quality and effective environmental advice to businesses with in-house teams of qualified environmental auditors; (2) Provision of a group of specialised consultants to provide sub-regional delivery partners with additional capacity when needed and with specialist skills whose permanent embedding in each organisation through new staff would not be cost effective; (3) integration of ENWORKS into the mainstream business advice and support service as a one-stop contact point for any business with a query about environmental issues and business performance, which helped to reduce the previous lack of coordination of advice structures and the inconsistent and incoherent quality of advice; (4) providing firms with information updates on, for example, environmental legislation and regulations, good practice, business case studies, policy developments, etc.; and (5) integration of marketing and communications through, for example, the ENWORKS conference, presence on relevant steering groups and committees and the ENWORKS website.

In addition, further lessons learnt emerged from the information obtained for the other Member States where this support measure is being applied:

Support for company auditing according to the European Environmental Management and Audit Scheme (EMAS) was mentioned as a relevant support measure both in Cyprus and in the Czech Republic. Launched in Cyprus in 2004, there are currently 75 organisations registered in the national EMAS register. State support promoting the benefits of management and auditing schemes compared to any initial investments (i.e. pointing out the potential for identifying and realising cost savings through the annual external auditing of the system) and engaging business and organisations were highlighted as success factors of this support measure. In the Czech Republic, companies can apply for a financial support for EMAS auditing since 1998, for instance through financial aid from the State environmental fund or regional support. 26 companies are registered in the national EMAS database (as of 3 July 2015). Consideration of EMAS as one criterion in public tenders was identified as the most attractive incentive.

In Finland, the state owned company Motiva Oy Ltd. develops and promotes material efficiency audit tools in order to identify potential resource (material and energy) savings in production processes, save costs and create a widely accepted and used audit model for all industrial sectors. This measure was started in 2009 with piloting projects, and allocates annually 200,000 EUR. Altogether 15 Material Audit projects have been initiated to date, reaching a total cost savings potential of 11 million EUR. Within the scope of pilot case studies, the audit was conducted in different companies and revealed an average yearly savings potential of several hundred thousand EUR. Specific factors for success encompass (i) extensive training of new expert companies; (ii) conducting pilot case studies; (iii) profitable and useful auditing cases for metal industries; and (iv) state subsidies (Finnish Ministry of Employment and Economy) for companies to perform a Material Audit.

The French Environment and Energy Management Agency (ADEME) provides financial and technical help to companies willing to integrate the principles of eco-design in their business. This support has been deployed in several French regions. In the Bourgogne Region, the ADEME and the Conseil régional de Bourgogne have been supporting companies since 2006, with all industrial sectors of the region being part of the target audience (engineering, plastics processing, stone processing, etc.). A similar example exists in the Lorraine region. In the Bourgogne region, this measure seems to be successfully implemented. In 2009, the partners of the ADEME (the Region, the national government and Oséo) decided to create a dedicated resources centre, with the aim to support companies willing to integrate Eco-design into their business at each stage of their project.

In Ireland, the state’s current Green Business Initiative (http://greenbusiness.ie/) has been in place since 2011, aiming to help companies using less water, energy and raw materials to manufacture a product or provide a service, particularly targeting businesses in the Food & Drink sector. Between 2011 and 2013, 340,000 EUR was spent on the scheme. Since 2011, 700 active members in 1,144 businesses have engaged with the Green Business Initiative and 180 Resource Efficiency Assessments were carried out.\(^6\) Typical savings per company assessed amount to 37,000 EUR per annum (70% energy savings, 20% on waste, 10% on water), with a potential benefit-to-cost ratio of 4:1 in 2014.\(^6\) Specific factors for success include (i) free on-site Resource Efficiency Assessments (REAs) carried out by experts; (ii) provision of up to 5 days of consultant support, including write up of reports, for businesses; (iii) all work carried out by Green Business being 100% confidential; (iv) site reports are specific and detailed and concentrate on “no and low cost” improvement actions; (v) follow up with the firm after approximately 6 months to see how the firm is progressing with the identified savings, thus providing an incentive for their implementation; (vi) follow up information used as case studies, providing further implementation incentives, and demonstrating benefits to other firms; and (vii) a liaison was set up between the Irish Business representative organisation (IBEC) which has 7,500 business members, Green Business and the Irish Environmental Protection Agency EPA with the role of promoting resource efficiency to the IBEC membership and other stakeholders in Ireland.

Across the examples obtained from literature review and Member State responses, the following aspects could be identified as key success factors for incentivising external audits among businesses in the EU:

- Financially or otherwise supporting (incentivising) external auditing, e.g. establishing external auditing as a beneficial criterion for audited companies in public tendering processes.

- Concluding, where necessary, confidentiality clauses between the audited companies and the auditors.

- Providing information that is relevant to companies, of high quality and tailored to the needs of different company sizes and sectors – and in so doing respecting confidentiality clauses concluded and concerns of companies involved. In order to ensure relevance of the information, experienced and credible practitioners (e.g. specialised consultants) should provide or add to the information and advice.

- Creating easily (online) available repositories of best practice cases to enable quick retrieval of relevant information for different company needs and, thus, to encourage replication.

- Fostering (the development of) trusted regional implementing organisations or networks targeted to the needs of different company sizes and sectors (for SMEs, for instance, offering assistance for the application process or advice on financing options). The organisation or network ideally could act as a one-stop contact point for any business with a query about environmental issues and business performance.

- Promoting the economic benefits (cost savings) achieved by external auditing through conducting pilot case studies and involving companies and company networks in distributing information on profitable and useful auditing cases.

- Investigating and concluding financial support and knowledge transfer from international donors experienced in introducing resource efficiency measures.

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References used


