EU-MORE Final Event

in cooperation with the LIFE x³ Cluster

11 March 2025 - Brussels

Boosting energy savings in industry and the service sector by accelerating replacement of old and inefficient electric motors

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The EU-MORE Final Event

Boosting energy savings in industry and the service sector by accelerating replacement of old and inefficient electric motors

📅 **Date:** 11 March 2025
🕒 **Time:** 12:00 – 16:30 CET
📍 **Location:** COMET Meetings, Brussels, Belgium

- 12:15 – Registration & networking lunch
- 13:00 – Welcome & EU-MORE key outcomes
    - 13:00 EU-MORE highlights – João Fong (Project Manager at ISR, University of Coimbra; coordinator EU-MORE)
    - 13:20 Turning policy into action; policy overview on motor systems – Ronald Piers de Raveschoot (Policy Officer at European Commission DG ENER.B3)
- 13:30 – Boosting energy savings under the EED - Dialogue with the audience on policy recommendations
    - 13:30 AUDIT2MEASURE Key findings from the Policy Recommendations Report – Simone Maggiore (Coordinator of International activities at R.S.E.; Coordinator of AUDIT2MEASURE)
    - 13 :45 Recommendations for policies to accelerate motor replacement– Nikos Ntaras (Head of Transport, Infrastructure and Alternative Fuels department at CRES; EU-MORE)
    - 14:05 Policy Impact Analysis – Antoine Durand (Researcher in Sustainable Energy at Fraunhofer ISI; EU-MORE)
    - 14:15 Interactive discussion with the audience (Moderator: Tomas Jezdinsky, ICA Europe)
- 14:30 – Networking break
- 15:00 – Beyond energy efficiency benefits
    - 15:00 KNOWnNEBs: Preliminary results of the KNOWnNEBs methodological approach approbation – Georg Benke (Head of the energy industry division at e7; KNOWnNEBs)
    - 15:15 Non-Energy Benefits in electric motors – João Fong (Project Manager at ISR, University of Coimbra; coordinator EU-MORE)
    - 15:25 Motor replacement in the circular economy – Fernando Nuño (Manager Market Development at ICA Europe; EU-MORE)
- 15:35 – Future outlook
    - 15:35 From motors to systems: Rethinking industrial efficiency policies for a sustainable future – Lauren Boucher (Senior Manager Research at CLASP)
    - 15:50 Panel discussion with all speakers (Moderator: Fernando Nuño, ICA Europe)
- 16:20 – Final conclusions (João Fong, coordinator EU-MORE)
- 16:30 – Adjourn

EU-MORE highlights (Joao Fong, ISR-UC)

EU-MORE = a 30-month LIFE-project ending in March, with 6 partners.

Problem identified: the assumed lifetime of motors is far below the lifetimes in reality → a lot of inefficient motors are still in service today.

When taking normal lifetimes into account, 70% of motors still have an efficiency below the current MEPS. From this followed a first rough estimation of the savings potential: 25 TWh/y. Up to 75 TWh/y if the entire motor systems would be renovated.

Our working plan:

- Gather more data
- Propose policies
- Maximize efficiency gain through system approach
- Maximize the circularity

Concretely:

- We assessed the current motor market.
- We did a policy overview
- We did an analysis of efficiency trends
- We did an analysis of end-of-life practices
- Co-creation workshops for knowledge exchange

→ **Policy recommendations + policy impact assessment tool + policy recommendations for end-of-practices**

We developed some supporting documents on how to use the model, and policy briefs.

Policy recommendations for EU Member States, and national policy recommendations for each of the EU-MORE partner countries (Portugal, the Netherlands, Germany, Austria, Greece).

We presented the results in many ways (webinars, workshops, conferences, scientific papers…)

We will see how the policy recommendations can be replicated to other product groups.

All our outcomes are available on the project website.

Turning policy into action – Policy overview on motor systems (Ronald Piers de Raveschoot, European Commission)

New Commission in place since 1 December.

U Vd Leyen, 5-6 years ago: European Green Deal. EU carbon neutral Europe by 2050.

After the elections, vd Leyen established her new priorities. **A new plan for sustainability, prosperity and competitiveness** – so not only sustainability. We will go on with the Green Deal. But also: bring down energy bills -> **invest in energy efficiency**

- Clean industrial deal: turn decarbonisation into a driver for growth
- Action plan for affordable energy

- Competitiveness compass: for EU to become the place where clean technologies etc are invented, manufactures and put on the market.
- ➔ Energy efficiency remains key: to lower energy bills, for the economic independence, and to lower carbon emissions.

ESPR since 18 July 2024. Replacing Ecodesign. Including a wider range of requirements.

- ➔ Including the legal framework for market surveillance. All regulation of the old framework can still go on under the new framework.
- ➔ A working plan to set priorities for ESPR will come soon

Energy Savings of ESPR: 1418 TWh savings by 2030. Motors are 12% of this.

Energy efficiency of electric motors is standardised. EU was the first to adopt the IE4, which has been followed by the US.

We also need to think of the system efficiency, because there is large potential to save energy there. Not only through VSD. Especially in flow systems (pumps and fans), as dynamic losses are proportional to the cube of the flow. We cannot force the use of a VSD, but we can give incentives. E.g. through information requirements.

Motor and VSD regulation are in review, for possible adoption in 2029. Many aspects have to be looked at (written in current regulation).

ESPR also obliges to look at other aspects: assess relevance of other requirements, and the potential adoption of the digital product passport (DPP). Possible other aspects, such has how to measure energy use.

We will also look at other aspects

- Further reduction of energy use at system level
- Ways to improve information requirements
- Considering innovative technologies
- Different types of motors

Other motor driven products.

- New regulation on industrial fans. Information requirement: providing efficiency curves at three different values of partial load
- Water pumps. Ongoing review. Up to now, we had been looking at the hydraulic part only. Now it will include the electric motor and VSD (extended product approach). The metrics of these machines are conceived in such a way that a VSD is advantageous even at constant speed. Savings potential of 30 TWh/y. Limited timeframe, because not yet under the ESPR (so has to be adopted before 2026)
- Similar situation for circulators (review has to be adopted before 2026).

The information gathered in this project will be very valuable for the revisions of the various Ecodesign and ESPR regulations.

Q&A

Question 1 : You talked about **affordable energy and affordable prices – which of both is more important**? They are not exactly the same. In the first, EE can contribute a lot.

A: The two aspects are equally important.

Question 2: ESPR: how will trade-offs between the various criteria be handled?

A: Very relevant question. We don't have a complete answer yet. It's a new territory. We have some tools (e.g. the Ecoreport tool). But indeed, there can be conflicting interests.

Question 3: We want to bring the best class products into the market. This means that we have to take out the old products. **How can we guarantee that the raw materials are kept in Europe?** I did two different qualitative surveys, on motors and transformers. 60% of the end-of-life materials are going out of Europe.

A: This will not be resolved by Ecodesign itself. It needs to be tackled in other policy areas. Indeed, your considerations are important, but the topic and its relevance is broader than what we aim for with Ecodesign.

Q: But maybe the two aspects need to be regarded together. Also for reasons of competitiveness.

A: Yes, but we have already some regulatory tools, and other tools need to be looked at.

Question 4: Regarding the trade-offs. Are certain criteria prioritized?

A: Difficult to say. Many types of impact exist, but I cannot say that one gets priority over the other. It's a political choice.

Comment: Maybe we need some tools to make the trade-offs?

Comment: We should have a more quantified approach, integrating more types of impacts, instead of just listing the impacts. I have the impression that every time that the non-energy related aspects are brought up, they say we will talk about it later.

Comment: It will improve with ESPR, which will use new tools. But not all aspects are included, smell and noise not, for instance.

Comment: But even with ESPR, I still don't have the feeling that we are evolving to a holistic vision on all types of impact. It's not really integrated. As the tools will develop further, they may become more complete, but I have the impression we always come back to the basic tools.

Comment: Quantifying is not always easy, because e.g. noise is not only decibels, also the type of noise can play a role.

Audit2Measure (Simone Maggiore, coordinator Audit2Measure)

Audit2Measure. Started 1 November 2022. 36 months.

How to stimulate the uptake of audit recommendations contributing to the energy transition of companies.

Action strategy: the analysis of decision-making processes in companies is central.

The Energy Saving Measures (ESM) database is a collection of energy-efficiency measures that have been identified as effective in reducing energy consumption in the industrial sector of the EU.

With the ESM database tool, the user can access the database, filter on the basis of sector, etc.

A2M Energy Management Maturity Model: a questionnaire assisting companies in assessing the maturity of their energy management practices, with focus on ISO 50001 compliance, to help them in the decision whether to implement an energy management system or rather go for an energy audit.

Our Knowledge Exchange Space promotes the EU-MORE Motor Model tool.

Analysis of Article 8 and the state of the art of auditing systems in the 5 partner countries.

We summarized the situation in fact sheets for each of the 27 Member States. This created the basis for our policy recommendations, together with:

- **The analysis of decision-making processes in companies**
- **An analysis of barriers and drivers affecting the uptake of ESMs in companies**

All these findings are summarized in the policy recommendations. In September 2025, the final version will be presented.

We wanted to identify the gaps and barriers in the new Art 11 of the EED.

A few examples of recommendations:

- Financial incentives: to stimulate measures with low implementation rates, to avoid bottlenecks caused by high prices, to reward best practices.
- Regulatory measures: minimum requirements and guidelines, long-term EE and CO2 strategies, make low hanging fruit ESMs obligatory
- Company support measures
- Focus on audit quality

Some suggestions for the European Commission:

- Support control and monitoring of energy using systems
- Strengthen the evaluation and transparency at MS level
- Promote implementation obligations
- Harmonise the audit and auditor quality standards: EU-level audit requirements, standardized audit reports, encourage the inclusion of NEBs.
- Emphasize synergies and increase the integration between EU regulations

EU-MORE policy recommendations (Nikos Ntaras, CRES)

Industrial motors > 0.75 kW. Swiss survey: 50% of those motors are more than 20 years old.

When including systems, there is a savings potential of 100 TWh/y.

We conducted a motor policy review of past and existing policy measures stimulating motor replacement in a direct or indirect way. We identified 64 of such policy measures. Sub-reports per country were written for all the 27 EU Member States. A few conclusions from the study:

- Financial subsidies are pre-dominant
- Informational barriers are not often tackled
- Professional training and capacity building are insufficient
- Very few programmes are directly focussed on motor replacement. When motor replacement is an eligible measure, this is often not clear or explicit.
- Motor replacement has a median pay-back time of 4 year and becomes economically favourable from an electricity cost of 4.5 euro/kWh cost. So why is it not happening?

We came with some general guidelines:

- Follow integrated approach, combining set of measures that each overcome a different barrier: data collection, awareness rising, financial subsidies, feedback
- Stick and carrot approach (to avoid free riders)
- Plan long term
- Keep it clear, simple and transparent
- Build on best practices
- Integrate calculation tools (e.g. the EU-MORE Motor Model) and a life-cycle approach
- Adopt a system approach, as it increases the benefits
- Take NEBs into account
- Consider material availability and circularity
- Keep up with technological innovations (digitalisation, AI), which can result in higher energy savings.

The first editions of our recommendations were discussed in National and Co-creation Workshops, after which the recommendations were finetuned.

After gaining feedback, we came with a list of policy recommendations which may be useful for EU member states, depending on the energy efficiency policies already in place:

- Initiate a programme on data collection
- Initiate a subsidy scheme to replace old, inefficient motors in cases where the energy saving is high but the uptake cost is high as well. In cases where the investment is economically attractive, but not still not implemented, there must be other barriers, which means that other types of policy measures might be more effective.
- Tax incentive scheme with voluntary agreement
- Update of the Energy Efficiency Obligation Scheme (EEOS)
- Free audits and capacity building for SMEs
- Information and training programmes
- Attract private capital by alignment with EU Sustainable Finance Framework

Another outcome are the national policy recommendations for each EU-MORE partner country, which are entirely tailored to the local situation and mainly build on existing regulations and policies in the respective country.

A document with all the policy recommendations will be available on the EU-MORE website before the end of March.

EU-MORE also formulated policy recommendations for stimulating the circularity of materials used in motor manufacturing – we will discuss this in detail in another presentation today.

Policy Impact Analysis (Robin Barkhausen, Fraunhofer ISI)

EU-M^3 (= the EU-MORE Motor Model).

Objective: to quantify the impact of existing and future policies on electric motor replacement.

EU or Member State measures. For different efficiency levels and power ranges. We are not dealing with VSDs due to lack of information (no system approach).

The tool deals with three types of policies

- Subsidies

- Tax incentives combined with voluntary agreements
- Information campaigns and capacity building activities

The tool compares the impact of a non-policy scenario (base case) with that of a new policy. Savings are only counted until the end of the technical lifetime of the old motor.

The results are based on a stock model and provides the energy use, CO2 emissions and material use. This means that it supports a more holistic approach, to be more in line with ESPR.

The model is running in Excel, so that anyone can use it.

We provide material to support using the tool and interpreting the results. We also show and motivate our assumptions.

The final version of the tool will become available on the website before the end of March.

Interactive discussion with the audience (moderator: Tomas Jezdinsky)

Question 1. I'm from a steel company. The impact data for steel that are used in the model are not compatible with the ones we use. What is their origin?

A: We used the BOMs of Ecodesign Preparatory Studies.

Comment: If you want to proceed with the full LCA, the emissions related to the material use is not compatible with what I have. Could you check the data on steel before launching the final version?

Question 2: To Audit2Measure. Which main barriers for implementing ESMs were detected by your analysis?

A: The informational barrier (lack of knowledge and awareness) is crucial. When we found the right key to talk with companies, also speaking about NEBs etc., they discovered a new world. In some cases, financial barriers are prominent as well.

Question 3: To Audit2Measure. What were the target audiences for the training programmes that you developed?

A: We developed three types of trainings. One for operational staff (more technical), one for middle management (slightly less technical), and one for a more general management level (summarizing main benefits, legislation)

Comment: From an EU-MORE partner to Audit2Measure: in both our projects we have national recommendations and EU-wide recommendations that include audits. Why don't we join our recommendations, to create a one policy recommendation package?

KNOWnNEBs (Georg Benke, KNOWnNEBs)

Energy advisors often focus on the energy cost savings only, ignoring other types of benefits of the investment. To explain the full profitablity of energy efficiency investments, however, all efforts and benefits should be taken into account. Doing so would almost certainly lead to higher investments in energy efficiency and a higher number of energy efficiency measures being implemented.

With the KNOWNNEBs project, we have addressed this issue.

We started from a comprehensive market research, which identified seven areas of non-energy benefits (NEBs): social, health, quality, economic, security and safety, time, and environment. Through interviews and audit evaluation, we collected data for each of these areas, resulting in a matrix with more than 130.000 arrays.

Next to non-energy benefits, we also came accros non-energy efforts. And both the benefits and the efforts can be quantifiable or not.

What are NEBs? When we speak about motors, it could be less noise, less heat, or less vibration, to name just a few examples.

In order to promote the inclusion of NEBs in the profitability calculation of energy efficiency investments, we created an Excel tool that supports such an approach. It includes two different modules, the associated manual, and explanatory documents. One module guides the identification of NEBs for planned energy efficiency measures. The second module is for calculating the economic impact of NEBs. The tool also calculates the theoretical costs for NEBs which are not easy to express in monetary terms.

The output of the second tool includes common economic values: NPV, IRR, ROI, but also a sensitivity analysis and a CAPEX analysis.

The tool also includes a newly developed benefit indicator: when some figures say "no" and some say "yes", the tool still comes up with one simple to interpret number that synthesizes all benefits and drawbacks, made visible on a colour scheme. Moreover, it incorportates a scenario analysis, providing the most likely scenario, the best case scenario, and the worst case scenario.

The new approach has already been used for evaluating 45 audits. The results of this reality test will support us to optimize the tool.

Based on our experience, applying the NEB-approach and our tool require some training and experience. Within the KNOWnNEBs project, we offer training courses of up to 8 hours. The training sessions will be available on Youtube later.

The following are our first conclusions from using the tool:

- Perception and quantification are very different according to the energy auditor, country, and size of company.
- Quantification of NEBs is often better done by the companies themselves than by an energy auditor.

However, energy auditors have the task of emphasising the added value of energy efficiency measures when presenting the results of their audits.

Both modules of the tool are already available on request. We recommend taking part in a training course, and not only use the part of the tool that is freely available on the website.

Non-energy benefits in electric motors (Joao Fong, ISR-UC)

We did a report on NEBs in electric motors. Available on the EU-MORE website.

We characterized NEBs at three levels: at society level (e.g. less emissions, job creation), at utility level (less need of infrastructure etc), and at end-user level (mainly benefits that follow from the improved reliability due to the lower operating temperature and improved control of high-efficiency motors).

Quantifiable, economic benefits

- Reduced maintenance cost
- Extended motor lifespan
- Decreased downtime

Key operational benefits

- Improved process performance (for some type of high efficiency motors)
- Reduced downtime
- Optimized system performance

➔ Even if they are not quantifiable, these are major selling points for the companies.

Key environmental benefits

- Lower carbon emissions due to reduced energy consumption
- Reduced resource usage due to longer life span of the motor. Reduced energy consumption also leads to material savings at the level of power generation, transmission and distribution
- Waste minimisation: less waste from repair and disposal

Workforce benefits

- Noise reduction
- Improved air quality (reduced need for ventilation)
- Enhanced safety (stable motor operation reduces risk of accidents)

Main conclusion: NEBs should always be taken into account when evaluating energy saving measures, and this is also the case for motor replacement. They can substantially increase the attractiveness of energy efficient investments, both at company level and at country level.

Motor replacement in the circular economy (Fernando Nuno, ICA)

An advanced replacement rate of motors will result in more material use in manufacturing. But poor energy efficiency also uses material, namely in electricity generation capacity. And in general, the type of material use in motors is less critical than the one in generation capacity, as wind uses a lot of rare earth materials.

High efficiency levels not only save energy, but also material.

End-of-life practices. We conducted a market survey.

- Small motors < 11 kW are usually not dismantled and exported outside EU
- Larger motors: dismantled, copper is recovered and sold separately
- Permanent magnets: no approach to recover them

The materials have a high potential for circularity.

Drivers for recycling:

- Design for recycling: everything that can help disassembly and material separation
- Industry collaboration
- LCA: is a good driver for circularity

Barriers:

- High labour and energy cost, especially for smaller motors
- Fragmented regulation
- Technology gaps: for the recycling on rare earth elements

Recommendations

- Addressing waste export, or incentivising closed loops in the EU
- Promote end-of-life treatment by certified companies
- Stimulate design-for-recycling
- Stimulate R&D in rare earth recovery
- Conduct studies to map end-of-life material flows

From motors to systems (Lauren Boucher, CLASP)

CLASP: international NGO stimulating the energy efficiency of appliances.

In 2024 we launched a new motors programme. I will present data from the work in China, which can be relevant for the EU.

Motor system efficiency is crucial to meeting net zero goals.

A systems approach is key to unlock the maximum savings potential.

While a component approach can reach savings of 3-5%, the savings of a systems approach are up to 10-15%.

China, the EU and the US are leading the way.

We modelled the motor system energy use under multiple scenarios, based on our tool. We clearly see that addressing the optimisation with a systems approach strongly increases the energy savings.

Efficiency opportunities for compressed air stations.

- Compressed air represents 6% of electricity consumption in China
- 313 million tons of CO_2
- China has MEPS on induction motors and air compressor units

When addressing the compressed air station, this is not only the compressed air unit, but also the filters, dryers etc.

Huge benefits to a systems approach: 44.7 % energy savings compared to 19.5% of savings when addressing the compressed air unit and 1.7% when addressing the motor only.

Disadvantage: highly customized projects involving multiple stakeholders.

Pilot: six sites where we implemented the energy efficiency updates. Plants that operate 24/24, meaning that it is crucial to minimize the downtime risk.

Improvement measures vary from facility to facility, because these systems are highly customized. But having a standard helped us to understand which measures might matter.

Results: higher air production efficiency, better work output, pay-back period of 2 years --> significant potential.

Conclusions:

- Compressed air station efficiencies can be significantly improved at system level

- When addressing the entire system, multiple measures are needed. Policies to facilitate this are needed.
- Common barriers persist: multiple stakeholders, complex and highly customized projects, risk of downtime is key.

Panel discussion (moderator: Fernando Nuño)

Question 1: Regarding the definition of a compressed air station: in the text you said it included everything, including the piping. And if it includes everything, how can it be included into regulation, as every set-up is different?

Answer: I don't think it includes the air tank. China has MEPS for compressor stations, which will evolve to become mandatory.

Question 2: When estimating the savings potential of motors, we had doubts about the average running hours. The compressor is always on, but not always working. How to take this into account in the data? Something similar happens with pumps: they can be always on, but are not continuously working.

Comment: For compressed air this is different. I assume these companies work 24/24 hours. On a compressed air station, you have a recording indicating when it's working and when not.

Comment: It is very unlikely that the compressors are working every hour of the year.

Question 3: Today, we have seen presentations of three LIFE projects. With each providing a number of policy recommendations. What will happen after those projects end? Could brainstorm about potential avenues to take the recommendations further?

Question 4: When looking at the list of policy recommendations by EU-MORE, I would like to know what the quick wins are. With Audit2Measure there is a score assigned to each kind of measure. Doing this in a quantitative way would be difficult. But a qualitative approach could be an interesting exercise. Which of these measures would have the least trade-offs? There's an additional layer of analysis to be done.

Answer: We were asked this question before. However, prioritising the measures has the risk that only the policy measure with the highest priority will be executed, and this will most probably have a poor result. We've investigated many existing policy measures, and they often did not achieve a satisfying result. They focus on one barrier only (e.g. the financial one), but then there is still another barrier that blocks implementation (e.g. lack of knowledge). This made us conclude that an integrated approach is needed, with several measures tackling different barriers. In this way, the measures will reinforce each other, and their efficiency will increase. We wrote a Policy Brief about such an integrated approach.

Comment: For policy makers it would be nice to have a kind of traffic light. Moreover, what works in one country does not mean that it works in another country. For example, EEOS work well in the Netherlands, but would never work in Germany

Comment: You could give some examples of preferred policy measures for specific countries.

Answer: That is what we did in the national policy recommendations, which contain a limited set of concrete recommendations (2 or 3 measures, instead of 25), leaving out all the potential policy measures that are expected to be less efficient in the context of the country.

Question 5: Regarding the monetization of non-energy benefits. We have tools for monetizing the harm to society (e.g. the Ecoreport tool that calculates the external marginal cost to society). A similar tool is used

by utility companies for comparison between offers. They tend to aggregate the results to come to a unique value. Could we do something similar for the NEBs of energy efficiency improvements?

Comment: I'm not sure that everything can and needs to monetized. When the underlying uncertainties are too high, it doesn't make sense.

Answer: With KNOWnNEBs, we did not quantify everything. Instead, we ask the user: how much would this benefit be worth to you?

Comment. When presenting the EU-MORE policy recommendations, you made a difference between society point-of-view and the company point-of-view. From the point of view of a country, we can see the benefits. But apparently, seeing the benefits at company is hard, as the investments are often not realised.

Comment: Also at company level, decarbonisation and energy efficiency enhance the energy supply security.

Comment: We can always quantify something. E.g. reduced cost of maintenance. But than you still need the trust from the manager that this benefit will actually materialize. It's difficult to convey the message of NEBs, even for quantifiable values. For this reason, with KNOWnNEBs, we turned things around: "how much would *you* value this benefit?"

Comment: You need to have different messages depending on who you are talking to in a company. The NEBs you talk about, need to be directly related to the person you are talking too.

Comment: With KNWOWnNEB, we did make this distinction in our fist tool, which contains three levels depending on the position in the company (operational, middle management, high management).

Participants (49)

Online: 27

In-person: 22

First name	Last name	Organisation	
Ajit	Advani	International Copper Association	Online
Andreas	Androutsopoulos	CRES	Online
Antoine	Durand	Fraunhofer ISI	In-person
Antoine	Lagomarsino	Diren	Online
Antonio	Scozzafava	Rossi S.p.A.	Online
Bruno	De Wachter	ICA Europe	In-person
Carolina	Pastor	Fundación CARTIF	Online
Cumhur	ER	Brussels Municipality	In-person
Diedert	Debusscher	ICA Europe	In-person
El Hadji Amadou	SOW	Make Sustainable Projects	Online
Fernando	Nuño	ICA Europe	In-person
Fiona	Robinson	University of South Wales	Online
Frédéric	Renkens	Swiss Federal Office of Energy	Online
Geert	Dewitte	Aquafin	Online
Georg	Benke	e7	In-person
Georgeta	Vuloe	National Environment Protection Agency	Online
Georgios	Karampatos	AB Vassilopoulos Single Member S.A. (Member of Ahold Delhaize)	Online
Huong	Phan Thi	ULB	In-person
Igor	Hegedis	EIHP	Online
ioanna	Makarouni	EPU NTUA	Online
João	Fong	ISR	In-person
Josef	Buchinger	ConPlusUltra GmbH	Online
Konstantin	Kulterer	Austrian Energy Agency	In-person
Lauren	Boucher	CLASP	In-person
Lorena	Miranda	CLASP	Online

Maarten	van Werkhoven	TPA advisors	Online
Marco	Massacesi	MDP-SE	Online
Maria	Varsos	MVS	Online
Maria-Luisa	Doldi	myself	Online
Marie	Baton	CLASP	In-person
Michael	Burghardt	Danfoss GmbH	Online
Nicole	Kearney	CLASP	In-person
Nikos	Ntaras	CRES	In-person
Nuno	Quaresma	ISR University of Coimbra	Online
Païline	Caroni	CLASP	In-person
Poppy	Gale	CLASP	In-person
Ronald	Piers de Raveschoot	DG ENER.B3	In-person
Sergio	Felicissimo	Rossi SpA	Online
Sigrid	Jacobs	ArcelorMittal	In-person
Simone	Maggiore	R.S.E.	In-person
Stamatis	Sivitos	CINEA	In-person
Tanja	Hyvönen	Motiva Oy	Online
Teresa	Alejos	A3E	Online
Thomas	Ramsson	CLASP	In-person
Tomas	Jezdinsky	ICA Europe	In-person
Tomi	Kiuru	Motiva Oy	Online
Tutana	Kvaratskhelia	.	Online
Wolfgang	Eichhammer	IEECP	In-person