

Do voluntary agreements on industrial energy efficiency still have a future?

Side-event at the eceee Industrial Efficiency conference, Berlin – 11-13 June

Energy Efficiency

Many European countries have concluded **voluntary** or **long-term agreements** with industry to improve the sector's energy efficiency. While some of these countries have relied on voluntary agreements for more than 20 years, others have either stopped or have never implemented one. So, can such agreements continue to stimulate energy efficiency in industry in the next decade? This question was addressed in a joint Tractebel ENGIE - IPEEC - UNIDO workshop.

Tractebel ENGIE, together with IPEEC and UNIDO, organised a dedicated workshop on voluntary agreements in the framework of the 2018 eceee Industrial Efficiency conference. Two core questions were addressed:

- Have voluntary agreements come to their end or do they continue to deliver?
- If so, how should they be designed today to achieve a maximum contribution to the Paris Agreement?

Experts from Belgium, Denmark, Finland, Germany, Ireland, Sweden and Ukraine met and exchanged practices, views and lessons-learnt.

Introducing Voluntary Agreements (VAs)

- Voluntary agreements are **contracts** between a **government** and local **industry**, creating a specific **benefit to those companies** who decide to implement a **more efficient energy practice** over a compulsory baseline energy practice

INDUSTRIAL EFFICIENCY 2018
LEADING THE LOW-CARBON TRANSITION BERLIN 11-13 JUNE



Germany: Energy Efficiency Networks

Energy Efficiency Networks set targets and organise monitoring locally at the level of a network of about ten companies.

Thematic workshops are organised regularly fostering the exchange of knowledge and lessons learnt amongst the participants.

The German experience shows that these networks catalyse the implementation of energy efficiency measures and can be considered as [a good practice for a voluntary agreement](#).

Mr. Durand, Fraunhofer ISI

Voluntary agreements have not come to their end.

- The conclusion on the first core question is that [voluntary agreements still have a future](#); in Europe as well as in other continents. The renewal of the voluntary agreements in Belgium, Luxembourg and Finland; their reintroduction in Denmark and Germany; and the interest shown by the Czech Republic and Ukraine indicate that voluntary agreements can still be a core element in implementing energy efficiency policy in industry.
- In fact, no other policy instrument seems to engage industry quite so much as voluntary agreements do. The [combination of energy auditing](#), to make participating companies aware of their energy efficiency potential, and the [obligation to improve the companies' energy efficiency](#), either by imposing energy efficiency targets or obliging the implementation of energy saving measures, is [very effective in mobilising the industry sector on energy efficiency](#).

Voluntary agreements continue to deliver, even after a few decades of being in place.

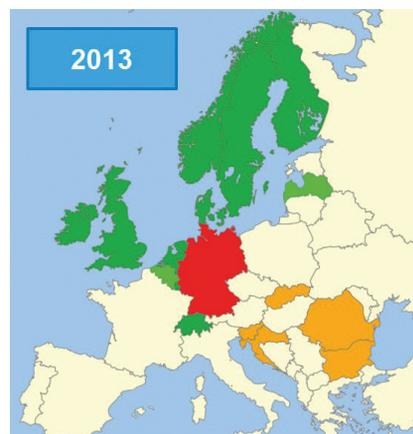
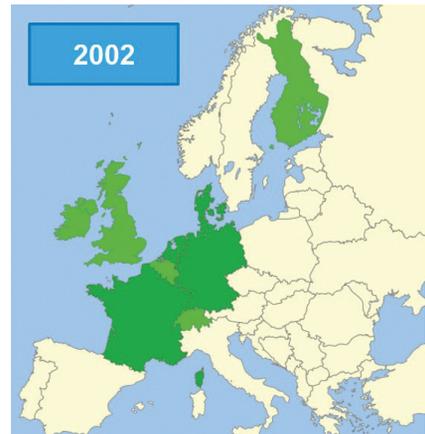
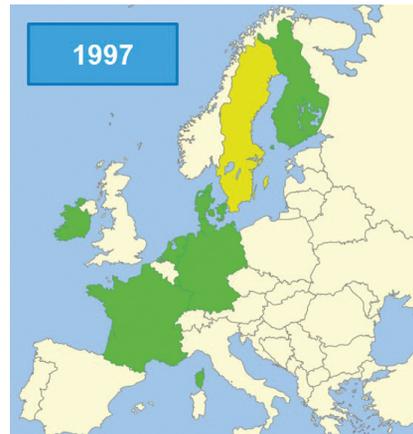
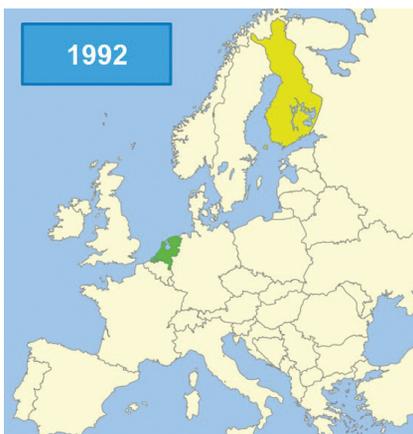
Latest evaluation results of consecutive Danish voluntary agreements provide good evidence of this; economically viable energy efficiency potential continues to manifest, even in companies that have participated in the voluntary agreements from the start.

Inversely, as one Danish company pointed out, during the interruption of the Danish voluntary agreements scheme (2013-2015), the momentum to keep energy efficiency on the company's top management agenda noticeably slowed down.

Evolution of voluntary agreements in Europe

Starting from 1992

- Precursor
- Considered
- 1st Generation
- 2nd Generation
- Stopped



When renewing or introducing a voluntary agreement scheme on industrial energy efficiency, how should it be best designed for maximum delivery?

This was the topic of the second core question of the workshop. Literature on European voluntary agreements reveals some common success factors of which three are key:

- ambitious enough targets;
- high enough incentives for participation and penalties for non-compliance;
- a strong enough motivation for both government and the industry to enter into such an agreement.

The first key aspect deals with the agreement's ambition to save energy.

Some voluntary agreements include well-defined targets on energy efficiency improvement or on greenhouse gas emission reduction as a main element. These targets need to be both achievable and ambitious; in other words, they need to stimulate an energy practice in participating companies beyond business-as-usual. These **target-based agreements** should also be organised in such a way that the overall targets translate into clear commitments for each of the individual participating companies.

Other voluntary agreements put the emphasis on **requiring a commitment to implement energy saving measures**. These implementation-based agreements can benefit from indicative overall targets to keep all involved stakeholders focused on the ultimate objective of the agreement: improving overall energy efficiency of industry.

The split between target-based and implementation-based agreements in Europe is about half-half and engaged countries tend to stay with their original choice. **However both approaches can deliver.**

The delivery of voluntary agreements can be enhanced by adding **the implementation of an energy management system** as an obligation for participants. Indeed, such an obligation has gradually been added to many European voluntary agreements. In this way, voluntary agreements offer the possibility to test best energy practices amongst industry vanguards

before generalising them to the whole of industry. Subsequent **guidance documents on relevant energy saving measures or best energy practices** can help reduce the transaction cost for existing and incoming players.

A new trend is also the organisation of **knowledge sharing networks on energy efficiency**, allowing participants to meet and exchange information and best practices. Such networks have always been a key feature of the Irish and Swiss voluntary agreements; they have gradually been introduced in Luxembourg and Germany, and other countries show interest in this approach.

Governments must be able to **verify whether participating companies fulfil their obligations as achieving the agreed energy efficiency improvement targets is an important outcome of this**. Therefore, a competent, powerful administration, with stringent **monitoring**, reporting and verification procedures, needs to be in place for the voluntary agreement schemes to truly deliver.

INTERNATIONAL ENERGY AGENCY COMMENT

"Efficiency can enable economic growth, reduce emissions and improve energy security. The right efficiency policies could enable the world to achieve more than 40% of the emissions cuts needed to reach its climate goals without new technology."

Fatih Birol,
Executive Director, IEA

Some lessons learnt in Denmark

It is important to clearly set out **requirements to companies** and provide instruction as to which energy saving projects to implement.

The voluntary agreement scheme must, at the same time, provide **a strong economic incentive** to participants in order to make the scheme attractive.

A well-managed voluntary agreement scheme requires a **dedicated team at the managing authority** for continued follow-up, control, and development.

A scheme should be **regularly evaluated** in order to improve and develop it.

The **authority should take the lead** in identifying and developing new approaches, findings, and technologies. These should be promoted continuously to the companies.

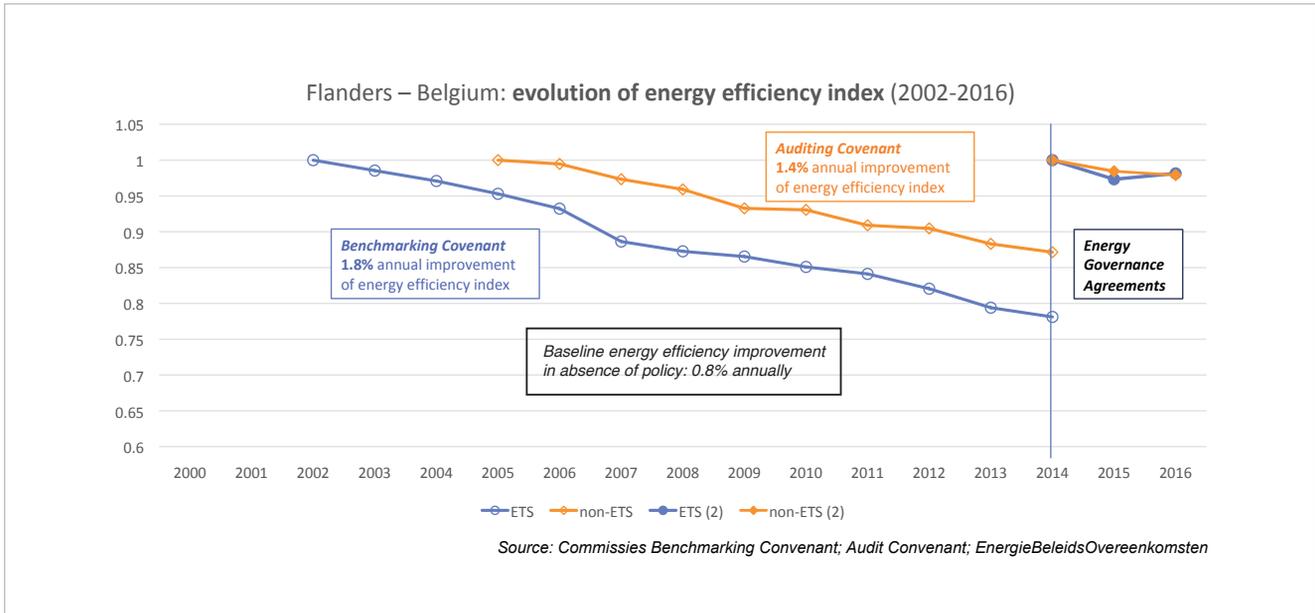
Keep a close dialogue with industrial companies and industrial experts to understand new agendas, challenges, and ways to integrate energy efficiency activities within their practices.

Surveys and data platforms are crucial to identify energy saving potentials and manage priority of new focus areas.

Ms. Ellegaard-Vejen,
Danish Energy Agency



Voluntary agreements accelerate investments in energy efficiency



THE SECOND KEY ASPECT DEALS WITH THE BENEFITS FOR PARTICIPATING COMPANIES.

Incentives should be attractive enough to both encourage participation in the voluntary agreement and make being weaned from these benefits, in the case of non-compliance, a significant enough disadvantage.

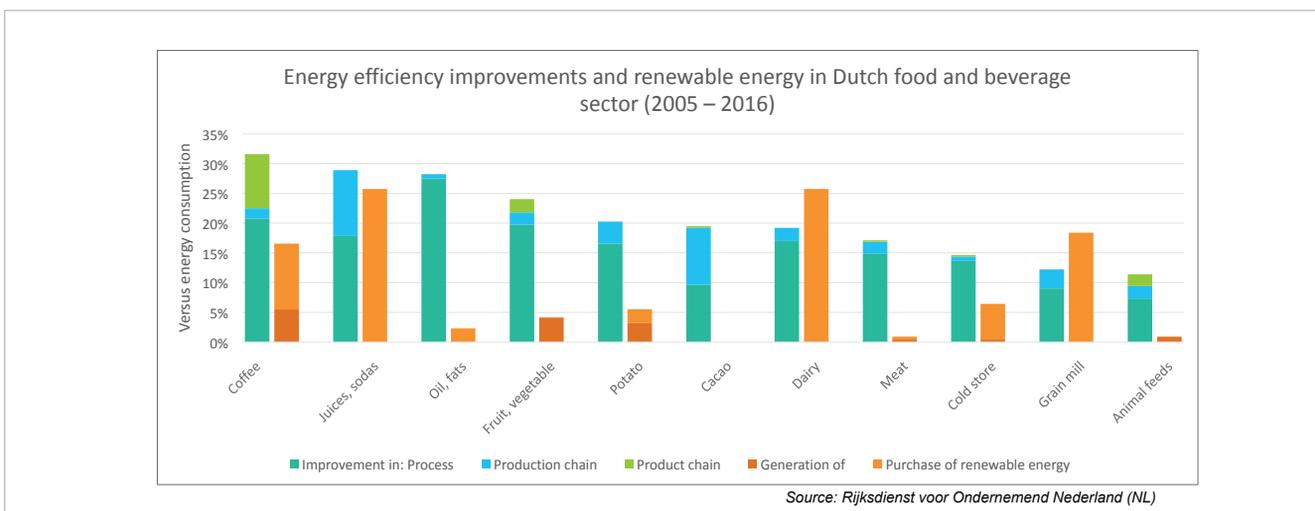
Most countries offer financial benefits to participants, as a carrot, but also use the threat of enforcing stricter regulation, as a stick. Most countries offer energy tax reduction related to energy consumption as a benefit. One can argue that preferring benefits related to energy savings, such as privileged investment subsidies, can help improve the cost-efficiency of voluntary agreements.

IPCC REPORT

“Reaping energy efficiency potentials hinges critically on advanced management practices in industrial facilities such as energy management systems, as well as targeted policies to accelerate adoption of best available technology”

Global Warming of 1.5 °C report

Voluntary agreements foster decarbonisation in the whole value chain



Finland

voluntary agreements deliver a triple-win

GOVERNMENTS win because voluntary agreements help them to better comply with EU directives and stimulate a good relationship with the industry sector.

COMPANIES win through the benefits of participation, the freedom to decide how to comply, and access to a platform for common action and networks to exchange ideas.

INDUSTRIAL ASSOCIATIONS win because voluntary agreements are a practical and concrete way to contribute to the Paris Agreement.

Mr. Väisänen, Finnish Energy Authority

THE THIRD KEY ASPECT DEALS WITH THE MOTIVATION OF GOVERNMENTS AND COMPANIES TO ENTER INTO SUCH AGREEMENTS.

As these agreements are voluntary, not mandatory; industrial companies are free to participate or not. The reward to participants for their participation should therefore be commensurate with their effort to fulfil the obligations under the agreement and the resulting energy efficiency improvements should be in balance with the incentivising subsidies offered to participants in order for such agreements to constitute **an effective and cost-efficient policy instrument for the government**.

This is a delicate balancing act. Negotiations between industry sectors' representatives and the government can take quite some time before a final accord on the voluntary agreement is reached.

Yet, while it calls for patience, **concluding such an agreement is usually a lighter and faster process than imposing better energy practices by law**.



Ultimately, a voluntary agreement is an agreement between different parties; the agreement stands as long as the agreeing parties remain comfortable with its terms. Evidence and workshop discussions showed that, without question, **voluntary agreements still can, and must continue to, deliver**, even in a context of stricter EU legislation raising the bar for baseline energy practice or limiting energy tax reductions.

However, more thorough evaluation of costs and benefits for industry and government will be needed to ensure the agreements continue to be mutually beneficial. Unfortunately, only a minority of voluntary agreements are currently performing as well as they could with regards to costs and benefits analysis.

Existing voluntary agreements should therefore be studied further and more in depth to provide stronger evidence of their added value, particularly under new near future scenarios - including achieving the climate goal set out under the Paris Agreement. This deeper understanding would be instructive and useful for countries supporting such schemes as well as for countries considering the implementation of their first voluntary agreement schemes.





Voluntary agreements need to be well designed in order to be effective.

Tractebel is an ideal partner to support public authorities in this challenge based on a good understanding of the operation of this policy instrument.

Tractebel has a good view on the energy savings potential in industry and has experience in realising energy efficiency projects, managing project pipelines, as well as implementing energy management schemes. Tractebel can help in estimating the energy saving potential of the target group ex-ante, as a basis for ambitious and achievable targets; can conduct market research to assess the availability of energy services; and can help develop procedures for a smooth and effective agreement operation.

About Tractebel ENGIE

The Tractebel BU (business unit) is a leading global player in energy, water and infrastructure engineering which provides expertise and innovative solutions in order to design and plan for a changing world. Backed by more than 125 years of operational and technical excellence, as well as the passion and the expertise of our 4,400 employees who make up our international teams, our unique solutions bring added value to clients in public as well as private markets all over the globe. Headquartered in Brussels, Belgium, and with offices in more than thirty countries and projects in over 140, our Tractebel BU strives to provide every client with unparalleled innovation, security and quality.



Want to know more?

Contact

Erwin CORNELIS
Senior Expert - Energy Efficiency,
Renewable & Storage Policy
erwin.cornelis@tractebel.engie.com
Phone +32 476 72 22 26



TRACTEBEL ENGINEERING S.A.

Boulevard Simon Bolivar 34-36
1000 Brussels – BELGIUM

tractebel-engie.com
info@tractebel-engie.com