This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 696084

DELIVERABLE

Project Acronym: REScoop Plus

Grant Agreement number: 696084

Project Title: REScoop Plus

D6.2 First Report on Best Practices and Legal Barriers for Supplying REScoops and Promotion of Energy Efficiency

Version: v1

Authors:

Stanislas d'Herbemont (REScoop.eu)

Joshua J. Roberts (REScoop.eu)

REVISION HISTORY AND STATEMENT OF ORIGINALITY

Revision History

Revision	Date	Author	Organization	Description
V0	28/08/2017	SDH	REScoop.eu	Final Draft
V1	18/09/2017	MN	LEVELUP	Contributions and Peer Review

Contents

INTRODUCTION

The REScoop PLUS project has the purpose to help enhance energy efficiency as a value creating activity for the European cooperatives. Energy efficiency is crucial to reach the EU's 2020 climate and energy targets[1]. In order to reach those targets, local communities across Europe will need to be activated and the citizens will need to participate in energy saving efforts.

The REScoop PLUS project is collecting best practices from participating REScoops that inspire energy sober behaviors in their members. Over the course of the project, those best practices will be transposed in other cooperatives across Europe. The goal of this report is to understand the regulatory environment in which the best practices have developed, in order to have a better understanding of the context in which each of the measures have been developed. Such an analysis is needed in order to detect any regulatory incompatibilities between the Member State in which the best practices have been developed and the environment in which they will be implemented.

In a third report, we will review the regulatory environment and deployment modalities of the best practices. This will allow us to compare the two environments and detect any incompatibilities or barriers to the implementation of the best practices in the target REScoops.

How this report is structured

We structured this report around best practices identified in five target countries (France, Belgium, Denmark, Spain and Italy). We will go through 5 sections, one for each country. The list of selected best practice was published in the report 4.2 of the REScoop PLUS project. The full list is reproduced here:

Best Practice	REScoop	Country of Origin
One Tariff System	Ecopower	Belgium
Energie ID	Ecopower	Belgium
Dr Watt	Enercoop	France
Technical Support	Hvidovre Fjernvarme	Denmark
Package Approach	EBO Consult	Denmark
Return Flow Temperature Optimization	SEV	Italy
Info Energia	Som Energia	Spain

When analyzing the best practices, we realized that the regulations impacting them are rather similar between each of the countries. Those areas are:

- Data Privacy: All the tools using and processing personal data (Dr Watt, Energie ID, etc.) are subject to the rules, and relevant restrictions, regulating the use of personal data.
- Price of the Energy: In a wide range of the proposed services (One Tariff System, Tariff Optimization or the Package Approach) the regulation of energy prices is key to influencing whether consumers are incentivized or not to moderate their energy use and, hence, uptake of services provided by the REScoops.
- Mechanism contained within Energy Efficiency Obligation schemes or related policies[2]: Such legislation can have a direct impact on the success and failure of the economic models of the best practices. It is therefore useful to know if a certain system could be leveraged in order to make a best practice as or more successful in the target countries.

[1] The European Union has set a target reduce primary energy consumption in Europe by 20%[1], a target of 20% final energy consumption from renewable sources by 2020[1], and a target to reduce greenhouse gas emissions by 20%

[2] Those policies are commanded by the Article 7 of the Directive 2012/27/EU on energy efficiency

Methodology

In order to prepare this report, we had to build on the analysis from report 6.1 of the REScoop PLUS project[3], which looks at the EU legal framework on energy efficiency. Report 6.1 provided a basis upon which we built each comparison of the local regulatory environments. Because of the number of countries that we studied, we decided to focus on their common points rather than their differences. Therefore, using EU legislation as a starting point, we compared how each of the countries has implemented national rules on energy efficiency to identify differences and build upon the analysis that was initiated in 6.1.

With a focus on national legislation, we realized another round of qualitative interviews with legal experts from local REScoops participating in the project. Those interviews were complemented by a directed legislative document review. We tried to focus our research on barriers to energy efficiency-related activities of the REScoops. The focus for us was to obtain narratives that would better explain the road taken by the REScoops to develop the best practices. Comparable paths could be used by other REScoops trying to implement the same best practices. Those interviews were completed with the support of experts of the various topics that we are covering in this report, especially the White Certificates Club, in Paris.

This approach has allowed us to conclude that local regulations do not present any significant barriers to the implementation of the REScoop PLUS best practices. Indeed, in the majority of the countries that we studied, the European legal framework is still the most advanced in terms of the constrains around data privacy and the energy in general. Therefore, the purpose of this report will be to shed some light on certain specific aspects of the local legal environments and to identify how to better enable REScoops to implement actions of the REScoop PLUS best practices. A large part of the arguments presented in this report come directly from the recommendations of the local REScoops.

[3] D6.1 Analysis of the Legal Environment at the EU level, available at rescoop.eu/documents.

FRANCE

The French regulatory environment is successfully based on the monopoly partners EDF and GDF. A large part of the legislation to enforce energy efficiency on those large actors is intend to achieve sizable results in a short time. However, it is to be noted that, despite not exactly reaching the objectives of energy savings, France is far in front of the CO_2 emission savings goals due to the fact that nuclear energy production does not result in CO^2 emissions. This fact is allowing the French legislator to limit its action.

The best practice from France comes from Dr. Watt[4], which is being implemented by Enercoop. This tool allows members of Enercoop to benefit from an offline training on energy efficiency. They can then use the tool to analyze their consumption, get support to reduce it, and share their experiences with other participants of the program. Dr. Watt focuses on the energy savings from appliances used by consumers, and they are encouraged to understand the uses and consumption of those machines. The platform also provides an independent review of the appliances to help members of the Dr. Watt community to make purchasing choices. This service has a double impact, both on the energy saving aspect and the community creation aspect for the REScoop.

Dr. Watt is potentially impacted by several pieces of French legislation. The first one is the legislation around the provision of energy-related counsel. In certain European countries, providing energy-related services is regulated due to the fact that this activity can have adverse effect on the recipient. While some Member States have put in place legislation in order to protect e consumers, this is not the case in France, where the provision of energy efficiency-related services is completely free of any sort of licenses or obligations. However, the French state has put in place some labels to help the consumers make an informed choice. We will give a brief overview of those labels below.

The potentially significant barrier preventing energy savings from consumers is the calculation of the price of the energy in France. This does not have a direct impact on Dr. Watt; however, the price of the energy does condition the potential interest of consumers in engaging in energy savings. The lower the energy price is, the smaller is the incentive for consumers to save energy. This is especially the case in France, where the cost of energy is maintained artificially low by a fixed tariff. This has marginalized the cost of energy in the minds of French consumers. Considering that the energy price calculation does not directly impact the tools employed by Dr. Watt, we will simply provide an overview of the process followed by the French to fix the energy price.

The third impact of the legislative framework on energy efficiency is related to Data Privacy. This point is extremely relevant for Dr Watt, as the tool is based on the collection and processing of personal data. Below we will review data protection has been implemented in France compared to European legislation.

Finally, the fourth and last point that we identified as a potential impact on Dr. Watt is the Energy Efficiency Obligation Scheme (EEO Scheme) implemented in France. We do not consider this a threat but rather an opportunity. Indeed, by producing savings and behavioral changes, the Dr. Watt tool could benefit from the mechanisms providing energy saving obligation. Enercoop is not yet “obligated” (meaning does not have the responsibility to provide those certificates) under the French EEO scheme, but this may be the case in 3 to 5 years. Therefore, we will explore the mechanism of the French EEO scheme and other alternative measures that could be leveraged by the cooperatives through Dr. Watt.

[4] See http://www.enercoop.fr/offers/drwatt

The French energy law has seen two major changes in the past years. First, the law n°2010-1488[5], also called *loi NOME* for *Loi de Nouvelle Organisation du Marché de l'Electricité*, has profoundly changed the way the French energy markets are organized. In particular, it ended the monopoly of EDF as a state company responsible for all energy related services. The second was the more recent, law n°2015-992[6], *loi relative à la transition énergétique pour la croissance verte* (LTE). Signed into law in 2015, this law encourages the French market toward an energy transition and a "greener" path of growth. This law is part of France's implementation of the 3rd energy package.

The law *NOME* is opening the French market to competition and allowing the creation of multiple energy providers to French consumers. Article 1 defines how electricity can be sold on the French territory[7]. This article modifies Article 4 of the law 2000-108[8], which defined a right to electrical consumption to all French consumers.

The text of the 2000 law also defines the necessary steps to become an energy producer (Titre II) and distribution system operator (Titre III). The opening that is started by the *NOME* law regarding energy providers is implementing the changes made law by the European Law. However, it does not go so far as to open the distribution market. Indeed, the law 2000-108 continues the monopoly of ERDF (today Enedis) on distribution activities.

The *Loi sur la Transition Energétique* renovates the French energy code, adapting it to the requirements of the 3rd energy package[9].It covers all the aspects of the energy system including building and transport. The most interesting aspects of the law linked with energy efficiency are:

- Article 8 and 14, which allow renewable production to be counted in the efficiency grade of the building, which in relationship with the obligation to reach the highest efficiency grade in renovation (article 8.2) will be a strong incentive for renewable production;
- Article 151, which changes the way France calculates the energy price, allowing the energy price to be more market based; and
- Article 188, which encourages the implementation of energy efficiency at the local level, and provides financial support for these actions (for example the TEPOS program, article 1-II.9).

The LTE has also opened the door to auto-consumption for the French prosumers, which was previously forbidden. This has been supplemented by Ordonnance 2016-1019[10] (executive order), which lays down more detailed rules and ensures that auto-consumption can be implemented in a

[5] See https://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000023174854&categorieLien=id for the complete text

[6] See https://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000031044385&categorieLien=id for the complete text

[7] See Article 12 of Law N°2010-1488 : « Les fournisseurs souhaitant exercer l'activité d'achat d'électricité pour revente aux consommateurs finals ou aux gestionnaires de réseaux pour leurs pertes doivent être titulaires d'une autorisation délivrée par le ministre chargé de l'énergie. »

[8] See https://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000000750321&categorieLien=id for the complete text

[9] See Article 1.7 of law N°2015-992 : « Contribue à la mise en place d'une Union européenne de l'énergie, qui vise à garantir la sécurité d'approvisionnement et à construire une économie décarbonée et compétitive, au moyen du développement des énergies renouvelables, des interconnexions physiques, du soutien à l'amélioration de l'efficacité énergétique et de la mise en place d'instruments de coordination des politiques nationales. »

[10] See https://www.legifrance.gouv.fr/affichTexte.do?cidTexte=JORFTEXT000032938257&categorieLien=id for the complete text

legal way. This has opened up business models for private investments in energy efficiency coupled with renewable production.

The price of the energy in France

The price of the electricity in France is regulated. The price is proposed by the CRE (*Commission de Régulation de l'Energie*) and adopted by the government in a decree. The current price is calculated according to the following formula:

The addition of the historical regulated access price of nuclear energy (ARENH[11]), of the cost of provisioning the energy at market price, of the transportation costs (TURPE[12]) and of the normal margin of service provision. This price is before taxes, which represents approximately 1/3 of the energy price.

This formula was updated by the Article 151 of the Law 2015-992 published in 2017. This updates Article L337-6 of the Energy Code[13]. This article allows energy providers to modulate this price before tax in order to incentives consumers to save energy.

There are three main barriers caused by the fixed price of the energy in France (TRV). The first one is that this price includes the bare minimum cost of providing the electricity and does not include any other type of costs incurring when running a business. In particular, it does not allow energy providers to diversify their activities concerning production. This is notably a problem for alternative energy providers that are trying to deploy more renewable production on the territory.

The second barrier is the lack of consultation with a wide range of actors in France, with CRE often determining the calculation without support from market actors.

The third barrier is linked with the political role of the energy price in France. Because the price is determined by an institution and approved by the government, the price is often determined by the pressures of the various governments. Considering the traditionally low price of the electricity in France[14], the French public is very sensitive to a higher price that would put pressure on its budget. Therefore, the various governments have so far made an effort to keep the prices low (despite raises in the last couple of years).

In conclusion, the price of the electricity in France is kept low artificially by political forces and does not really allow alternative providers such as Enercoop to develop other activities. Therefore, the opportunity cost of the energy efficiency programs is not as strong as in other countries. But there are

---

[11] ARENH or *Accès Régulé à l'Électricité Nucléaire Historique* is a program created by the loi NOME (2015) that is calculating the price of the nuclear energy necessary to calculate in return the fixed energy price in France. The ARENH use to base itself on the EDF balancesheet, today it is even further of the reality as the ARENH is using a "random" supplier. This last part is a result of a modification in the calculation formula that was implemented in 2015. See https://www.jechange.fr/energie/electricite/guides/arenh-2982 for more details.

[12] TURPE or tarifs d'utilisation des réseaux publics d'électricité is the remuneration attributed to TSOs and DSOs in France for the management of the grid. This tariff includes the exploitation and development of the grid infrastructures. This tariff structure is calculated by the CRE, and published every year. The last version of those tariffs that included a specific structure for auto-consumption called "TURPE 5 HTB" and "TURPE 5 HTA-BT" came into force on the 01/08/2017. See http://www.cre.fr/reseaux/reseaux-publics-d-electricite/outils-de-calcul-de-la-structure-des-tarifs for more details.

[13] See https://www.legifrance.gouv.fr/affichCodeArticle.do?cidTexte=LEGITEXT000023983208&idArticle=LEGIARTI000031069220 for the complete text of the article

[14] "The electricity price in France are of the lowest in Europe according to Eurostat in 2015" source:https://www.ecologique-solidaire.gouv.fr/commercialisation-lelectricite

no barriers per se to the development of such services. At the end of the day, the cost of a kWh not consumed will always be cheaper than even a French kWh consumed and paid for pay the private household, and that is what Dr. Watt is leveraging by focusing on appliances consumption.

Data Privacy

Data Privacy is the most impacting topic for the best practice Dr. Watt. Due to the nature of this service and its heavy reliance on the processing of personal data, protection and transparency is crucial. Luckily, data protection rules in France re not very different than those provided for at the EU level. EU legislation on data protection is considered state-of-the-art, and therefore the French authorities mostly transcribe it into French law. First, we will review the institutions of data privacy, in order to identify the various actors. We will then review the declarations necessary to keep the data processing above board in France. We will also assess the impact of the new European Regulation (679/2016) on the existing French regulatory framework. Finally, we will review the current implementation of data privacy guidelines by Enercoop.

Institutions

The main institution in charge of the data protection in France is the CNIL (*Commission National de l'Informatique et des Libertés*). This institution is in charge of monitoring and protecting the flow of personal data on the French territories. The CNIL is in contact with other institutions around Europe to keep to the integrated framework at the European level. At the international level, the CNIL is implementing the BCR (Binding Corporate Rules).

The main obligations of companies and actors on data protection in France can be summarized in three simple steps[15]:

- Declare the activity involving personal data to the CNIL, and receive the agreement from the CNIL;
- Declare the databases that include personal data to the CNIL; and
- Inform the Data Subjects of the collection and processing of their personal data.

All data controllers in France have also an obligation to declare data leaks in the shortest time period possible.

The changes of the new Regulation

In general, the CNIL is implementing the European Guideline, but is still the supervising authority on the French territory. This will change with the new directive 2016/680 and regulation 2016/679. The new regulation reinforces the integration of the CNIL with other regulation authorities. The CNIL becomes the single contact point for all the companies based on the French territory.

Best practices in data management in ENERCOOP

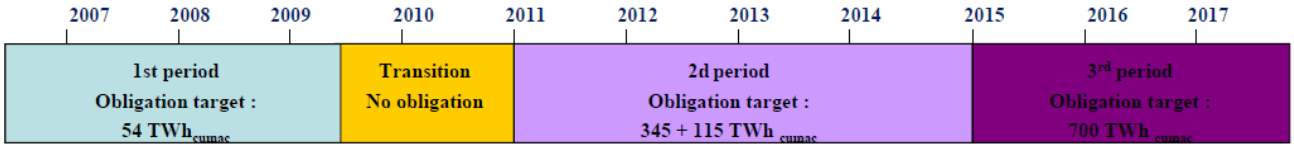
Enercoop is developing the Dr. Watt tool in the most transparent way. There are several principles that are put in place by the team of the cooperative in order to ensure the protection and good management of the personal data of their members and clients:

- Data Privacy training: the team of Enercoop systematically informs the user about the privacy of their data and how to protect them; and
- Data minimalization: the Dr. Watt platform captures only the necessary data of the users. Beside a necessary base of private data, the rest of the service is delivered gradually through the users' input into the tool.

[15] More information at https://www.cnil.fr/vos-demarches-en-ligne

EEO scheme

The French EEO scheme is piloted by ADEME[16]. This scheme aims to achieve a maximum final savings, meaning equivalent KWh saved by end consumers, allowing small end users and small professional consumers to be targeted. The paradox is that a large part of energy saving efforts are carried out by the most fragile consumers. The French scheme has been in place since mid-2006 when the first round of tests was launched:



source: White Certificates Club conference; ADEME, 2017

An interesting fact to consider, and a factor which made the French EEO scheme rather successful, is the implementation of a test period between 2006 and 2009. This test period allowed both market actors and government officials to explore options within the EEO scheme and to adjust market rules in order to ensure a buy-in from various stakeholders.

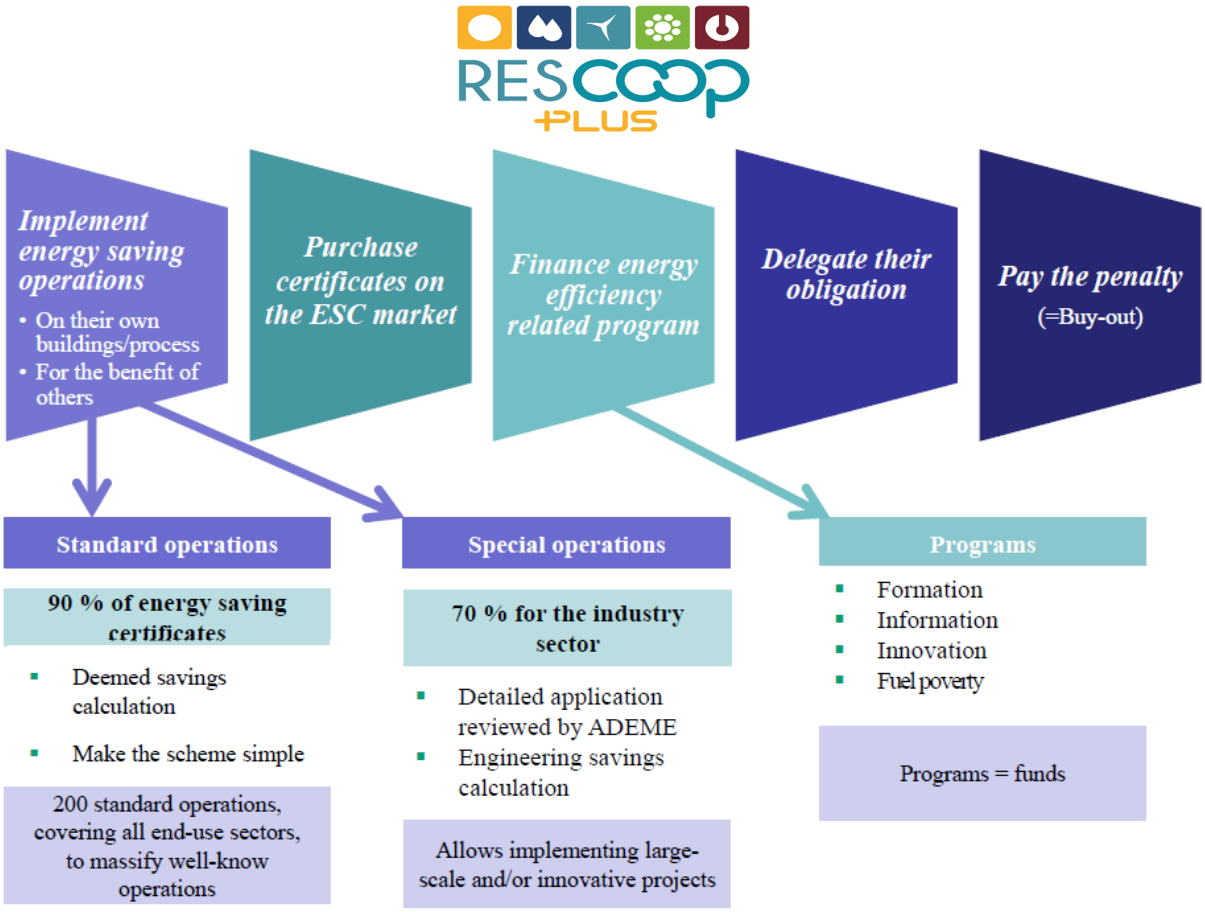
Mechanisms

The mechanism of the EEO scheme in France is rather standard. ADEME, as a government agency, sets the required amount of savings that needs to be delivered by the obligated parties. Each certificate represents 1 kWh "cumac", meaning cumulated equivalent of end user consumption. The obligated parties in the French scheme are the energy suppliers (electricity and gas) and the automotive distributors. The type of actions that can be delivered are divided into three categories:

- The standardized actions: actions that can be put in place by the obligated parties and are described in the catalog of ADEME. Those actions are recognized for their measured impact and are the simplest to put in place.
- The special actions: actions that are specifically put in place by a company and that are not collected in the catalog. ADEME has to assess the effectiveness of the action before delivering the certificates.
- The alternative actions: actions that are not part of the EEO scheme but that are recognized as having a positive impact on end user energy savings. Those alternative actions have to be reviewed and approved by the ADEME, and their effectiveness has to be proved by the obligated parties.

French Obligated parties have several options when it comes to complying with their obligation to deliver certificates to ADEME:

[16] ADEME: Agence de l'Environement et de la Maitrise de l'Energie, was created in 1991 to support the implementation of public policies in the domains of the environment, energy and sustainable development. They currently employ 1 000 policy specialists supporting the implementation of more climate responsible energy policies of the French government.



source: White Certificates Club conference; ADEME, 2017

The French EEO mechanism is based on two major pillars:

- The obligated party: energy suppliers (electricity or gas) and automotive distributors.
- A market for white certificates: the French EEO program is linked with an exchange market for "white certificates", which allow non-obligated parties to participate in the benefits of the scheme.

The next step for the French EEO scheme is to "clean up" the catalog of standardized actions, in order to include only actions for which results have been demonstrated. ADEME also needs to continue increase the objective and the ambition on the scheme. finally, new programs and actions in favor or energy efficiency should be recognized in the scheme, for example, cooperative engagement. ADEME is also placing a focus on vulnerable consumers for the next reporting period. In this aspect, the cooperatives with their socially responsible model can bring solutions to the table, for example, the *Energie Solidaire* project, which focuses on implementing energy efficiency measures in low income households supported by micro-donations on invoices[17].

The REScoop PLUS project has uncovered a certain number of actions that can be implemented by REScoops that have a clear impact on the energy awareness and energy savings of cooperative members. Programs that are financed by the cooperatives could be both recognized as alternative actions and special operations. They are having a clear impact on consumption and their results have been academically proven. Therefore, we believe that ADEME should provide more attention to behavioral related actions, despite the fact that it is always difficult to generalized their impact.

[17] More information at www.energie-solidaire.fr

BELGIUM

The Belgium regulatory environment for energy is covered both by national institutions and the regional governments. Because of the specific situation of Belgium, we will review here only the context for Flanders, which is the region where Ecopower, the Belgian cooperative, is based.

The Belgian regulatory environment

The Belgian regulatory environment for electricity is based on the Electricity Act, passed in 1999 by the federal government of Belgium[18]. This piece of legislation has been adapted and changed since then by various laws and decrees. The Electricity Act implemented the unbundling of the energy actors, separating production and supply activities from grid operation activities. This legislation allowed for a "buy-out" of the grid infrastructure by the local municipalities. This "buy-out" was closed in 2014, with the last piece of the infrastructure being re-claimed by local municipalities from the historical operator, Electrabel.

This legislation was complemented in Flanders with regional legislation, the "Energy Decree" of 2009. This decree frames the organization of the energy market in Flanders, and creates the obligation to support the deployment of renewable energy and cogeneration through a green certificates scheme. It also describes the role of the VREG (Vlaams Reguleringsinstantie), the Flemish regulator. The "Energy Decree" also formalizes the obligation of energy distributors to act in favor of the "rational energy use"[19], de facto creating the VEA (Vlaams Energieagentschap). This institution is responsible for the operation of the obligation scheme for energy savings.

Previously, only energy management was a regional responsibility. However, in 2015 changes to the law placed the responsibility for energy policies on the shoulders of the regions. The Flemish government is now solely responsible for most energy legislation. This is the reason why we will explore only the regulatory environment linked with the Flanders in this report, Since Ecopower, the cooperative carrying the best practices for REScoop PLUS is based there.

The price of the energy in Belgium

The price of the energy in Flanders varies largely based on the sub-region in which the consumer is placed. This is mainly linked to varied grid tariffs depending on the sub-regions (also called "inter-communalities") of Flanders. Following the unbundling of 1999, which was acted by the Belgian government, DSOs are now paid through grid tariffs that are directly added to the price of the energy.

The price of the electricity is built in the following way: price of the energy is added to the grid tariff (which represents approximately two times the price of the energy), added to a third tier of taxes (VAT, regional taxes …). A large factor responsible for high energy prices in Belgium is high grid tariffs.

Grid tariffs are built based on an estimation of the capital investment necessary to keep the grid infrastructure running, added to a limited profit margin offered to the DSOs. This margin is usually fixed to guarantee between 5 and 6% the turnover to the DSO. The capital investment is based on an estimation of the balance sheet of the DSOs. The necessary grid tariff is proposed by sub-regions to the Flemish regulator, VREG, and therefore will vary significantly from one sub-region to another. This discrepancy is linked with the fact that certain regions in Flanders are more densely populated than

[18] http://www.elia.be/fr/a-propos-elia/cadre-legal

[19] Décret sur l'Energie, 2009, http://www.ejustice.just.fgov.be/cgi_loi/change_lg.pl?language=fr&la=F&cn=2009050827&table_name=loi

others. Each sub-region proposes a grid tariff, which is then approved by VREG and published in a decree once a year.

A large part of the subsidy mechanisms, including the green certificates mechanism to encourage the deployment of renewable energy, are financed by the DSOs, and therefore are included in the grid tariffs that are charged to the end consumers. As such, a large part of the energy transition is considered financed by the small users of energy. The large users, which are directly connected to the high voltage grid, are therefore subject to lower grid tariffs.

The significant differences in the grid tariffs based on the regions forced Ecopower to abandon the Single Price for all its consumers. This change was implemented in order to avoid subsidization of consumers in certain regions by consumers from other regions, provoking an imbalance in the revenues of the cooperative. However, it encouraged the development of energy efficiency best practice such as Energie ID, in order to avoid the high prices of the energy.

Data Privacy

Just like in the French context, a large part of data privacy regulations in Belgium come from European regulations. Therefore, there will be no major differences compared to what has already been assessed in report 6.1. However, certain contrasts are to be noted regarding the Belgian case. Data privacy and protection is the responsibility of the federal level, which makes it identical in Flanders and Wallonia.

The regulatory foundation for data privacy in Belgium is the law of the 8th of December 1992[20], which fixes the main principles of data protection and management. This law was adapted to the Directive 95/46/CE[21] by the law of the 11th of December 1998[22]. Belgian regulation follows 9 main principles data management:

- **Principle 1: The law is applicable for all data and in all situations**;
- **Principle 2: The finality principle**. The data subject provides his/her data for a purpose and that purpose needs to be respected in the treatment of their data. The provided data cannot be used for any and everything;
- **Principle 3: The right to review and modify one's personal data**;
- **Principle 4: The right of the subject to refuse treatment of their data**;
- **Principle 5: The ban on processing for sensitive data**. This is a topic that is not well covered in the European Law. The Belgian law makes clear that any data related to race or ethnic background, political opinions and engagements, sexual or religious orientation are off limits for any kind of collection and processing. This is especially important because it also means no tracking or analysis based on these types of criteria;
- **Principle 6: The obligation to communicate the processing of personal data to the data subject;**
- **Principle 7: The obligation to declare the processing of personal data to authorities.** More specifically, this makes it mandatory to declare any data sets to the Commission of Protection of Personal Data (CPVP)[23]. This commission is responsible at the federal level, and is also supported by the Flemish Commission for Personal Data (VTC)[24];

[20] http://www.ejustice.just.fgov.be/cgi_loi/loi_a.pl?language=fr&caller=list&cn=1992120832&la=f&fromtab=loi&sql=dt=%27loi%27&tri=dd+as+rank&rech=1&numero=1

[21] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31995L0046:fr:HTML

[22] https://vlex.be/vid/transposant-directive-egard-donnees-50529964?_ga=2.158022137.2137899749.1503147941-943031732.1503147941

[23] https://www.privacycommission.be/fr/a-propos-de-la-cpvp

[24] http://www.vtc.corve.be/

- **Principle 8: The obligation of securing the personal data** of the data subject, for the data controller; and
- **Principle 9: The obligation to update the data set** when receiving new information or discovering false data. This is a little different from principle 3, because it imposes the weight of the correction on the data controller, as much as on the data subject.

Impact of the new European Regulation

The new European Regulation 2016/679 will impact data privacy laws in Belgium. The main changes, as pointed out by the CVPV are[25]:

- The creation of a Data Protection Officer, responsible for all data management related topics for the Data Controller;
- Changes in the portability of the data: the right to data portability will make it easier for the consumer to go from one provider to another;
- The DPIA (Data Protection Impact Analysis), which will qualify the way data protection is handle in the data controller's processes; and
- Finally, it will change the way the regulator will be involved at the European Level, with the creation of a regulators' council that will ensure more homogeneity at the European level for data protection.

Best Practice in the Cooperative movement

The best practices implemented by Ecopower and Energie ID are heavily impacted by the new regulation on personal data, because the consumption data required from the users are considered personal data under the EU definition. However, Energie ID also benefits from this new regulation:

- Energie ID is built on "privacy by design" with to the frame by frame consent required to the users;
- Energie ID is having a respectful and transparent use of the data of their users, but also, they are transparent with all the aspects of their internal processes, due to the nature cooperative engagement; and
- Energie ID will benefit from an enhance portability allowing their users to provide them the data they need more easily from grid operator and other actors.

The main challenge for Energie ID will be to implement the personnel changes required by the new regulation.

EEO scheme

The EEO scheme in Flanders is based on the RUE regulation, or Rational Use of the Energy regulation. This regulation was implemented in 2003, to put on obligation on energy distributors. This regulation was amended several times (2007) and finally revoked in 2011. It was replaced by an objectives-based scheme imposed on distributors in 2012[26].

Based on the Flemish Energy Decree of 2009, DSOs are obligated to encourage consumers to adopt more "rational energy use". This is achieved through the possibility of offering a subsidy to end users that perform a catalog of specific actions. The end-user must make a request to their DSO to obtain the subsidy for their action. The weight of those subsidies is carried by the DSOs, and are reflected in the "tariff" to end users. The public at large is therefore de facto paying for the energy efficient actions of the minority. This "invitation" is only valid for the electricity DSOs, which is one explanation for the

[25] https://www.privacycommission.be/fr/reglement-general-sur-la-protection-des-donnees-0

[26] D2.1.1 Report on existing and planned EEOs in the EU - Part I Evaluation of existing schemes; ENSPOL, EU funded project IEE/13/824/SI2.675067

high price of the electricity in Flanders. The catalog of actions is renewed every year and delivered by the VEA.

The cooperative in this regard is not benefiting from the obligation due to the fact that none of the behavioral actions they encourage are included in the catalog of the VEA. However, the high energy price is providing incentive enough for Flemish consumers to chase after a reduction of their consumption.

DENMARK

Introduction

EBO Consult is responsible for the management of the two REScoops implementing the REScoop PLUS best practices. The "packaged deal" is a mechanism by which the cost of the implementation of district heating in an area is spread evenly among all the inhabitants. This mechanism allows a large buy-in to district heating while providing an opportunity for lower income households to participate. District Heating provides, in the long run, the most competitive heating prices. The "FJR-ordning" is a technical analysis provided by the cooperative to its consumers. This energy analysis of the house situates the consumers compared to other similar households, and provides insight on how to lower their consumption.

The Danish heating system is based on the local municipalities. The decisions and responsibilities of the development of the district heating are on the municipality. The project proposal is made by a third party; however, the Danish system of district heating is built around a "Non-profit principle". This does not allow the companies running the heat system to profit from delivering the service. This principle is crucial to avoid any overbearing costs of heat to the consumers, but also to use it as political leverage. The two main regulatory principles are:

- Supply services must not result in indirect taxation of the consumers; and
- Supply services must not result in an indirect subsidization of the consumers.

This principle is the basis for the development of a district heating system that is fundamentally monopolistic. Once a consumer is connected they must not only stay connected, but must buy the heat of the network. The limitation to those are for low energy houses and new buildings.

There are three main actors involved in district heating in Denmark. Regulatory aspects are dealt with by the Danish Energy Agency. The district heating providers are divided in two associations: the Danish District Heating Association and the Association of Danish CHP Plants. Those organizations negotiate the prices that will be applied, after which the Danish agency proposes those prices to be ratified by the government.

The price of the energy

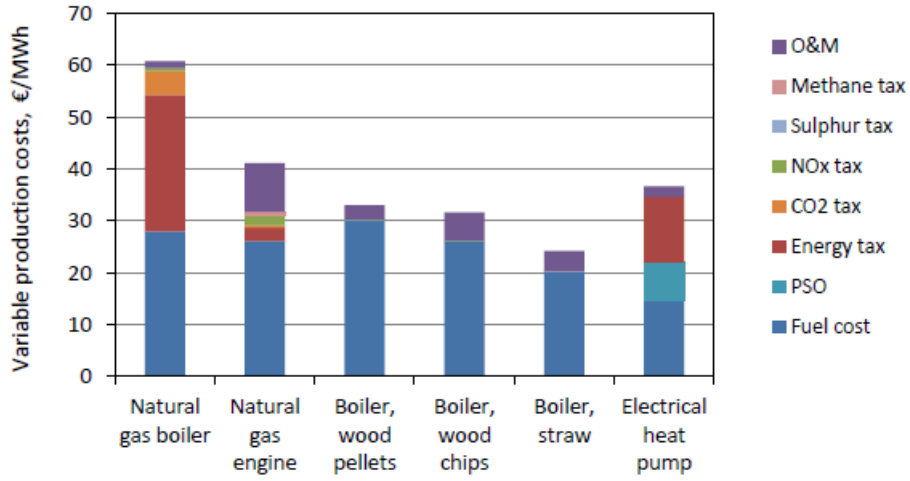
The price of heat in Denmark is set by law, and should cover all costs related to the supply of heating. The district heating companies are not meant to be profiting from their activities, and are required by law to deliver the best possible price to their consumers. The calculation of this price is composed of the following pieces[27]:

- Fuel Cost
- Heating Production Facility
- District Heating network
- Building
- Operation and Maintenance

The price of heating is impacted by the technical aspects of the production of heat: fuel type, efficiency of the installation and efficient management of the installation. These costs incentivize a cleaner type of production, simply because besides the initial investment, sustainable fuels are cheaper. Added to this, the Danish government provides tax and other types of financial incentives to adopt "green" fuels (pellet and biogas). It is to be noted however, that district heating is quite investment intensive. That

[27] https://ens.dk/sites/ens.dk/files/Globalcooperation/regulation_and_planning_of_district_heating_in_denmark.pdf

is where the "package deal" comes into action and supports the deployment of a larger number of installations.



source: Danish Energy Agency

Data Privacy

The Danish privacy laws are based largely on European Law. Directive 95/46/CE[28] was adapted in the local law by the Data Protection Act 429/2000[29]. This piece of legislation uses the European definitions for "personal data" and "data processing"[30]. This legislation also takes on the problem of data crossing the Danish border. In terms of data in Denmark, this regulation establishes that any piece of data stored on the national territory is ruled by Danish law, which also applies to any data coming in the country. For any data leaving the country, the law is differentiating regarding any European country (European law prevails), and for non-EU countries this transfer has to be approved by the DPA (Data Protection Agency).

The main actor in charge of Danish data privacy is the Data Protection Agency (Datalilsynet), which is in charge of the tracking, securing and auditing any transmission of personal data in Denmark. Any sensitive data sets must be declared at the DPA and their processing described.

It is to be noted that Danish consumers are rather trusting regarding their personal data. From the interviews that we had with Danish experts, it appears that data privacy and the communication of the consumer's personal data to their heat supplier is not an issue for a majority of their customers. The trust in government institutions is high, and the necessary data to perform the best practices are not seen as crucial to the members. However, transparency and local aspects linked to the district heating cooperative also play a big role in promoting trust.

The changes that will be brought forward by the new regulation on Data Privacy (Regulation 2016/679) will bring some changes to the way the cooperative will deal with data privacy, mainly regarding the staff. There will be a need for a Data Protection Officer. Regarding portability, due to the nature of the district heating, there will be no reasons to send consumption data to anybody except to the consumers themselves.

[28] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31995L0046:fr:HTML
[29] https://www.datatilsynet.dk/english/the-act-on-processing-of-personal-data/read-the-act-on-processing-of-personal-data/compiled-version-of-the-act-on-processing-of-personal-data/
[30] http://ec.europa.eu/justice/data-protection/document/studies/files/new_privacy_challenges/final_report_country_report_a2_denmark.pdf

EEO scheme

The Danish EEO scheme is widely accepted as a success[31]. Denmark was one of the early adopters of energy efficiency policies to encourage end-user savings. Danish energy efficiency policies started in 1991 with the inclusion in the "assignment letter" of the Danish government to DSOs, of actions related to information and education of consumers. This action started with electricity and in 2000, the gas system operator joined in. Finally, the transformation of those actions into the EEO scheme that we know now was realized in 2006.

The main goal of the Danish EEO scheme is to focus on the cost-effective energy savings for the end consumers. The scheme is geared toward supporting consumers to make changes that they would not have made if not for the support scheme.

The EEO scheme in Denmark is objectives-based. The savings target is determined by "The Energy Agreement" that was signed by the Danish political parties in 2012. This agreement covers a large part of the Danish integrated energy policies. The EEO scheme is included in this package, and it describes the trajectory of the country for the period 2012-2020.

The scheme includes a certain number of standard actions that may be put in place by the energy system operators (gas, electricity and transport). The objective is to reach a 2% decrease in consumption (3% without the transport). The impact of each action must be calculated and reported to the Danish Energy Agency on a web platform by the obligated parties. Each actor must input the consumption before and after implementation in order to claim the savings. The difference is aggregated and accounted for nationally.

The control and monitoring of the scheme is ensured by the Danish Energy Agency. A fine system is also foreseen in the executive order that serves as the legal basis for the "Energy Agreement". The system of "forced-volunteering" ensures enforcement of the outcome and a large buy-in, due to the fact that the Danish Energy Agency has ensured a constant open dialogue with the stakeholders. Specifically, they performed several assessment and studies of the program, and held public consultations.

This scheme was very much leveraged by the small DSOs and especially with the cooperative actors. The possibility of a fine for non-compliance also incentivized the district heating cooperative to support members with the highest amount of consumption, since they became the "low hanging fruit" for the group to achieve the necessary savings. This is the logic behind the support of the cooperatives to energy refurbishment of their members with the most need. However, it is also true that a re-assignment of subsidies directly to households would help the most vulnerable consumers to perform the necessary renovation, especially because the pressures imposed on the System Operator now rest on them.

Conclusion

There are no barriers in Denmark that impede the implementation of the best practices. On the contrary, it is rather conducive to the deployment of district heating in the country. It is recognized as a more efficient way to go about heating a local community and a more responsible way to deal with the energy in a collective way.

[31] D2.1.1 Report on existing and planned EEOs in the EU - Part I Evaluation of existing schemes; ENSPOL, EU funded project IEE/13/824/SI2.675067

SPAIN

Introduction

The current Spanish energy market is based on the Electricity Sector Act (Law 24/2013), passed in December 2013. This regulation updates the Electricity Sector Act (Law 54/1997), which has been in force since November 1997.

The legislation of 2013 is built on the following principles[32]:

- The separation between regulated activities (transmission and distribution) and those which can be developed in conditions of free competition (generation and supply);
- The liberalization of contracting and selection of suppliers by end consumers;
- Freedom of access to transmission and distribution networks through the payment of charges.
- The establishment of a system operator to be responsible for technical management, and a market operator to be responsible for the financial management of the system; and
- The principle of economic and financial sustainability of the electricity system, which implies that any electricity sector regulatory measure leading to an increase in cost to the electrical system or a reduction in income should incorporate an equivalent reduction of other cost items or an equivalent increase in revenue to ensure system balance.

The third point listed above provided the basis for a very high tariff on self-consumption. By forcing consumers to pay a very high charge to access grid and give away excess self-produced electricity from renewable energy, the Spanish government has de facto killed off any type of single prosumer development in the country.

The institutions in charge of the Spanish market are:

- The CNMC (National Market and Competition Commission) is responsible for the regulation of the markets in Spain and for proposing the fixed part of the energy price, which is approved by the government. This CNMC is responsible for the smooth running of the energy markets under to supervision of the Ministry of Industry, Energy and Tourism; and
- The Ministry of Industry, Energy and Tourism is the government authority responsible for the energy policy making and implementation. It approves all regulation that could potentially impact energy markets and related topics.

Som Energia, the REScoop PLUS member in Spain, has put forward a best practice called Info Energia. This best practice leverages smart meter information to give personal advice on consumption reduction. The team at Info Energia provides an analysis to the consumer on top of their energy bill, allowing them to understand their bill better, and situating them compared with similar households. Info Energia is impacted by the price of the energy in Spain, but also by data privacy regulations. Finally, the certificate scheme put in place in Spain to encourage energy efficiency could be a good opportunity for Cooperatives to develop this type of service.

The price of the energy

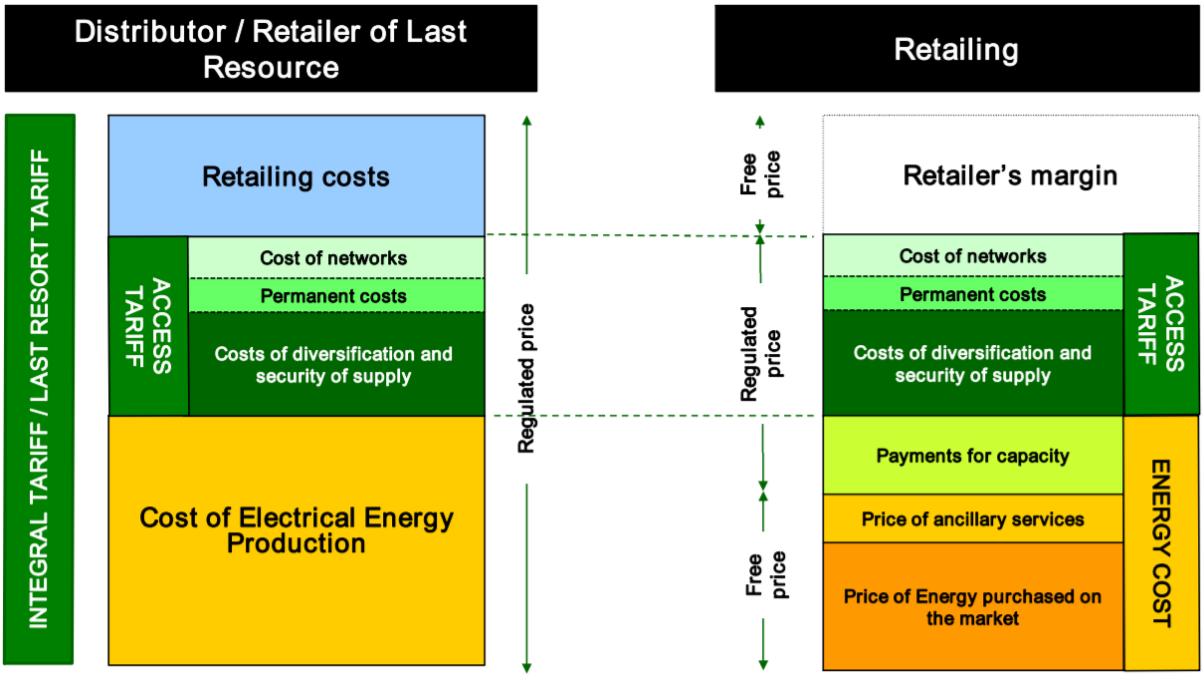
The prices in Spain are market based, although a large part of those prices are still related to the taxes and other grid costs. Those amount is decided by the Spanish government according the to the Law 17/2007[33] that adapted the Law 54/1997, complemented by the Directive 2003/54/EC. The flexible

[32] https://uk.practicallaw.thomsonreuters.com/Document/Ieb49d7bd1cb511e38578f7ccc38dcbee/View/FullText.html?transitionType=CategoryPageItem&contextData=(sc.Default)&firstPage=true&bhcp=1

[33] http://www2.aneel.gov.br/arquivos/PDF/El%20Sistema%20tarifario%20en%20Espa%C3%B1a%20(ingl%C3%A9s)%20-%20MARTI.pdf

component of the price, which is represented below by the margin of the supplier, represents less than a third of the price. This part can be modified.

This represents an opportunity for the REScoops, since incentive programs can be built by the suppliers. It is also the object of the EEO scheme, which offers the possibility to build those incentive schemes for consumers. The supply side of the electricity equation is rather flexible, and is made especially effective by the smart meter deployment that makes the consumption monitoring and planning more efficient. However, the situation is a lot different on the production side with the last changes described above[34].



Source: Spanish National Commission of the Energy

Data Privacy

Data privacy regulations in Spain are embedded in the Spanish constitution of 1978, where the right to privacy is described as a fundamental right of the Spanish citizens. In terms of implementation of this right, the Spanish law is very much an adaptation of European law. The adaptation of the directive 95/46/CE is the Organic Law 15/1999[35] which defines the obligations and right of the data subjects, data processor and supervisor. The Organic Law 62/2003[36] provides more details regarding "sensitive" information of the citizens, and their treatment by the Spanish state. Just like in France, the treatment of "sensitive information"[37] is forbidden.

The main authority for the protection of privacy in Spain is the AEPD[38] (Agencia Espanola de Proteccion de Datos[39]). This agency was created in 1992 by Royal decree as requested by the European directive.

[34] https://uk.practicallaw.thomsonreuters.com/Document/Ieb49d7bd1cb511e38578f7ccc38dcbee/View/FullText.html?transitionType=CategoryPageItem&contextData=(sc.Default)&firstPage=true&bhcp=1

[35] http://www.agpd.es/portalwebAGPD/canaldocumentacion/legislacion/estatal/common/pdfs/2014/Ley_Organica_15-1999_de_13_de_diciembre_de_Proteccion_de_Datos_Consolidado.pdf

[36] http://www.agpd.es/portalwebAGPD/canaldocumentacion/legislacion/estatal/common/pdfs/Ley_62-2003_de_30_de_diciembre_de_medidas_fiscales_administrativas_y_del_orden_social_Consolidado.pdf

[37] Information linked to sexual, religious and political orientations

[38] https://iclg.com/practice-areas/data-protection/data-protection-2017/spain

[39] http://www.agpd.es/portalwebAGPD/index-iden-idphp.php

The agency was integrated in the European strategy of data protection[40]. This federal agency is also seconded by regional (state) agencies in Catalonia and the Basque Country. The regional agencies assume some of the responsibilities of the federal agency, especially regarding the declaration of procedures for data sets.

The management of data in Spain is rather similar to the one previously described in other countries. The data sets including personal data need to be declared to the AEPD[41]. The data supervisor must declare itself capable of handling those data sets. The data subject must be informed regarding the collection and processing of his/her personal data. The declaration must include: the granularity of the data, the processing intended and the type of data collected and obtained. The Spanish law is very strict on the consent of the data subject that must be obtained before any kind of collection, treatment or transfer. The only way to bypass this consent is in relationship with the performance of a contract with prior consent. It is then possible to transfer data to a third party without asking for a specific consent from the data subject.

It is to be noted, however, that due to the lack of information to Spanish consumers, in many cases specific consent is not given by the data subject. Many Spanish citizens are not aware that they need to give their consent for all transfers of their personal data. This is especially relevant for our best practice, considering that the consumption data used by Info Energia is smart meter data, and therefore with a very high granularity. The team at BeeData, working to collect and process those data, had to be train to handle this type of personal data. Consent must be obtained at each step of the process. This can become quite burdensome for the team implementing the best practice in Spain. This fact can be also relevant for the implementation of other best practices of REScoop PLUS in this country.

EEO scheme

The Spanish EEO scheme is rather standard. It was adopted in 2014[42] along with several other alternative policy measures looking to encourage end user savings. The Spanish EEO scheme focuses on end consumption of large consumers and looks to support lowering consumption.

The scheme has been implemented in two stages[43]. In the first stage, all energy suppliers are given a requirement to lower the consumption of their customers. The calculation is based on their sales. The obligated parties are all energy suppliers: gas and electricity but also petroleum, wholesalers for petroleum products and liquified gas. Their contribution is calculated at the ratio of their sales. In the second stage, energy efficiency certificates will be introduced based on approved projects. The managing authority, IDEA (Institute for Diversification and Saving of Energy), will review and approve projects presented by the suppliers. The realization of those projects will give them the right to claim energy efficiency certificates. Those certificates would be then tradable and will serve to fulfill the obligations of the suppliers.

As of 2017[44], there is an obligation to contribute to the National Energy Efficiency Fund. The Law 18/2014 article 70.1 defines the objective at the national level and its break down for each market

[40] Cf. Delivrable 6.1

[41] http://www.mariscal-abogados.eu/regime-de-sanctions-de-la-loi-de-protection-de-donnees-a-caractere-personnel-en-espagne-lopd/

[42] http://atee.fr/sites/default/files/1-snapshot_of_energy_efficiency_obligations_schemes_in_europe_27-5-2015.pdf

[43] http://www.article7eed.eu/index.php/spain#design-of-energy-efficiency-obligation-scheme-eeo

[44] https://translate.google.es/translate?sl=es&tl=en&js=y&prev=_t&hl=ca&ie=UTF-8&u=https%3A%2F%2Fwww.boe.es%2Fdiario_boe%2Ftxt.php%3Fid%3DBOE-A-2017-3190&edit-text=&act=url

actor. Each of obligated party must realize an amount of savings to contribute to the national objective. The actions that can be taken are:

- Economic and financial support schemes to consumers to realize those savings;
- Technical Assistance; and
- Training and Information actions toward consumers.

The opportunity of this model for the cooperative is to act as a coherent group in order to provide the necessary savings to the energy distributor. The REScoop PLUS project has proved that in the long term, cooperative engagement leads to more sober consumption habits. Therefore, the implementation of cooperative actions in an area could be a solution for distributor that wishes to achieve their energy saving objective.

Conclusion

The Spanish regulatory environment does not present any barriers to the implementation of the best practices of REScoop PLUS, although it has some specific characteristics that might make it easier or a little more difficult.

The technological environment with the early deployment of smart meters provides availability of very high-quality consumption data. However, privacy constrains attached to this data is very high, which has forced the team at Info Energia to be very careful.

Energy prices are rather flexible, offering the possibility to reward sober attitudes by consumers.

Finally, the EEO scheme, although it does not directly help the REScoop (as they are not technical obligated), could provide interesting opportunities to generate tradable certificates to make a business model work in Spain for some of the best practices.

ITALY

Introduction

Italian regulations have undergone many changes in the past 10 years, following the rapid evolution of European Law and the emergence of new consensus around energy policies. However, in this report we will focus on a small part of this transformation linked with district heating. The Italian cooperative SEV (Südtirol Energie Verband) is part of the REScoop PLUS project, and in a rather specific situation. South Tyrol (also called Alto Adige) is a region benefiting from a rather special legal status compared to the rest of Italy. As an autonomous region, it is comprised of the regions of Tyrol and Trentino. Together, this large European Region has implemented a number of programs favoring energy efficiency and the implementation of European policies. It is to be noted however, that despite this specific status, the applicable regulations for the purposes of this review are those of the Italian government.

The best practice put in place by SEV is a reverse heat exchange that allows the cooperative managing the district heating network to reward private consumers for saving energy by better managing the temperature of the heat coming back into the transportation grid. The stability of this temperature allows SEV to get a bonus from the TSO that is then transformed into benefits for the users. The best practice is impacted by the regulations linked with district heating and the price of heat. The regulations around data privacy also impact the REScoop, as consumer data used to manage these installations are considered "personal". The EEO scheme presents an opportunity for the cooperative when implementing this best practice.

Both electricity and gas (downstream) market are fully liberalized in Italy[45]. However, it is to be noted that a dominant share of the market is still under the control of the historical company (ENEL and ENI). Both exchanges are run by the company Gestore dei Mercati Energetici SpA ('GME'). The regulatory authority overseeing these markets is AEEG. This authority is responsible for the implementation of the Italian energy policies, and the control of the market players, including setting market tariffs for grid access and consumer protection.

Since 2013, district heating and cooling systems are supported and encouraged by the government through a program called "Conto Termico". Legislation also covers a "white certificate" program and several Energy Efficiency actions. Conto Termico provides "*financial incentives on capital costs up to 40% on the eligible investment payable on yearly basis for a variable period of 2 to 5 years depending on type of improvement implemented, technology type implemented and its scale*."[46]. This program places district heating development at the center of the energy efficiency strategy of Italy, which was published in 2013. The strategy aims to see Italy meet an objective of saving 23% of primary energy consumption by 2020[47], and a 20% share of renewable source energy in the gross final consumption.

The price of the energy

The energy price for heating in Italy is market based. However, the grid and feed-in tariff schemes are decided by the AEEG. This process of determination is not the subject to a large stakeholder dialogue,

[45] https://www.lw.com/thoughtLeadership/energy-regulation-markets-review-italy-2012
[46] www.med-encerticus.eu/uploads/files/381itD5_1_1_National_reports_on_energy_certification_of_buildings_(IT_publish).pdf
[47] Italian Energy Strategy; http://www.sviluppoeconomico.gov.it/images/stories/documenti/SEN_EN_marzo2013.pdf

and a large part of this calculation is made by a standard calculation of investment prices for the grid tariffs.

The gas price is divided in the following components[48]:

- Costs of Natural Gas: (around 40% of the total bill) this includes the price of raw materials, the margin of the supplier and security costs;
- Costs for Metering and Transport: (around 17% of the total bill) this includes transport, balancing, metering and quality control;
- Costs of the System: (around 3% of the total bill) this includes general system costs. This piece is set by law; and
- Taxes: (around 40% of the total bill) this includes duties, VAT and regional taxes.

Data Privacy

The founding document of data privacy in Italy is the Legislative Decree 196/2003, which transposed Directive 95/46/EC into the Italian regulatory system. This legislation was updated in 2004, by the Legislative Decree 196/2003[49]. This new regulation aimed to simplify and make data privacy regulations in Italy lighter for organizations. The main principles of this legislation are[50]:

- Notification: the new regulation looks to make the process more transparent and understandable for individuals. It reduces the obligation of organizations for non-sensitive data;
- Data Minimization: capture only the necessary information from the data subject, and work at the maximum with non-personal data;
- Data Subject's rights: the new regulation makes it easier for individuals to file a complaint and it has also loosened the response timeframe for organizations; and
- International Data Transfer: the necessity of companies to notify the "Garante"[51] when transferring the data outside of the country, and outside of the EU. This notification is necessary only when the transfer can "adversely impact" the data subject.

Regarding the processing of personal information, there are limitations that also apply to the data processor. Although the Italian government put in place a system of "general authorization" which, once the data is obtained, allows the data processor to repeated process personal and sensitive data of the data subjects. Regarding the electronic communication's data for example, the regulation was updated to comply with the directive 2002/58/EC on e-communication and the data retention directive 2006/24/EC. The main adaptations are linked with anonymous e-marketing, which is now forbidden, and the retention of data for anti-crime purposes.

Italian data privacy rules are overseen by the Italian Data Protection Authority (Garante per la protezione dei dati personali). This institution was set up in 1997 to manage the data privacy declarations and complains in Italy, to ensure policing and enforcement of data privacy law. This agency is also the main contact for international data management purposes and in making policy recommendations to the Italian government.

[48] http://www.autorita.energia.it/allegati/com_stampa/17/170628eng.pdf
[49] http://www.garanteprivacy.it/web/guest/home/docweb/-/docweb-display/docweb/4814258
[50] http://www.garanteprivacy.it/web/guest/home_en/italian-legislation
[51] Data Protection Authority

In terms of energy data management, the Italian government has put in place a Data Hub[52]. The policy recommended by the European Commission allows the centralized treatment of all meter data collected in the country. This data hub is managed by *Acqirente Unico Spa*[53] and is called the SII (Sistema Informativo Integrato). This integrated information system collects data from the DSO responsible for energy metering. This information is then shared with the TSO to deal with system balancing. In the meantime, energy suppliers can have access to the data of their consumers based on the contracts they have with the DSO. The Data Hub is still young in Italy, and some points still need to be reviewed, such as the consent form for consumers to review the data shared to third parties, or the visualization of this data on a private network for the consumers. But deployment has been made successfully, and from our interview with our member, there is a simplified process of getting access to the consumer data for suppliers. This system allows a more fluid transfer of data, and a more a more integrated view of the consumers energy consumption.

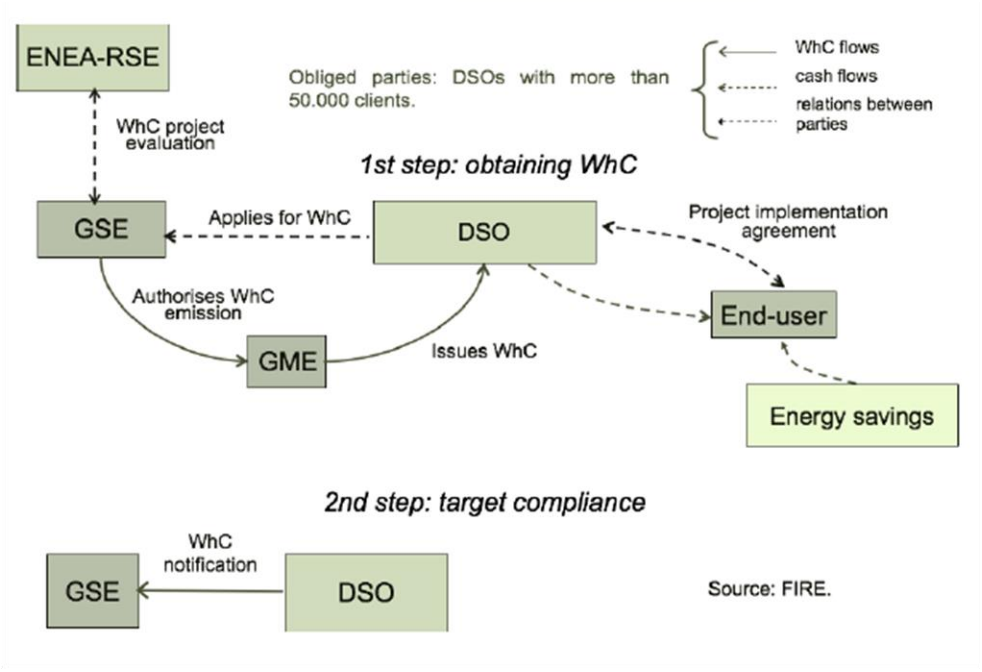
The Italian data privacy regulations do not pose any barriers to the implementation of the REScoop PLUS best practices. It is also rather standard regarding its management of data subject consent, and therefore should not be difficult to replicate. The culture around the privacy of data on the other hand is a stronger in Italy than in other places in Europe. Therefore, our experts had to be pedagogic in their approach of the consumers.

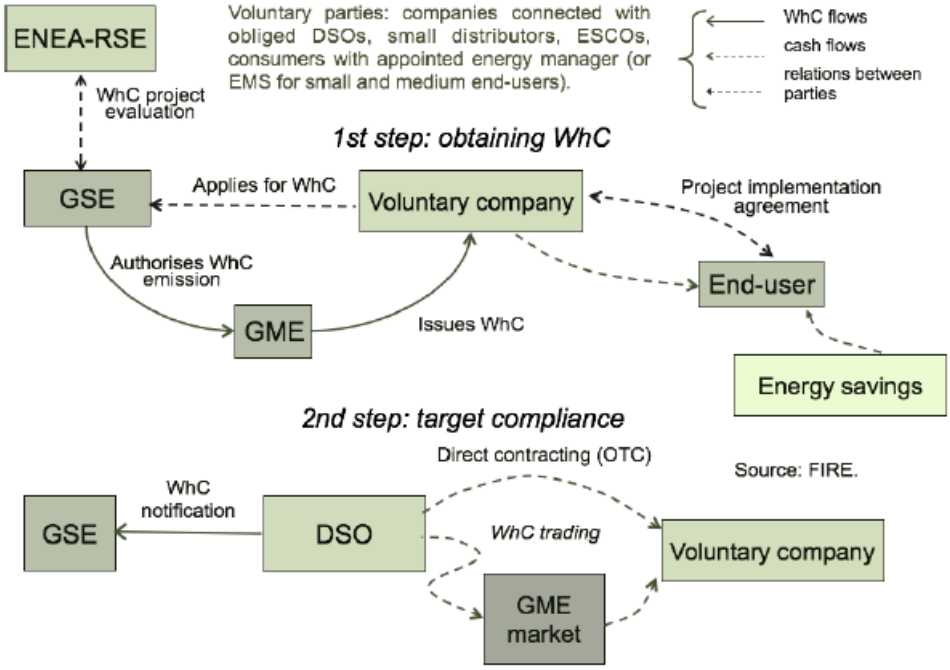
The new European regulation will definitely tighten the current Italian rules. By giving more autonomy to the data subject, they are also placing a heavier burden on the data processor. But the technical tools (data hub) developed by the Italian government will certainly help in dealing with these new changes, with the necessary transparency and access. The question will be how the Italian government will ensure that this structure stays safe in today's fast changing security age. Like it was pointed out in report 6.1, all data sets can potentially be breached. The danger of the centralized data hub being breached is certainly something that needs to be discussed further.

EEO scheme

The Italian EEO scheme was established by the regulation liberalizing the energy markets (both gas and electricity) in 2011. This regulation implements a "White Certificate scheme" with DSOs as obligated parties. However, the Italian scheme allows voluntary parties to obtain white certificates and trade them to the obligated parties. So far, above 90% of the delivered White Certificates have been to voluntary parties. The mechanism is described below[54]:

[52] My Energy Data Final Report, November 2016, European Smart Grid Task Force Expert Group 1
[53] http://www.acquirenteunico.it/attivita/sistema-informativo
[54] D2.1.1 Report on existing and planned EEOs in the EU - Part I Evaluation of existing schemes; ENSPOL, EU funded project IEE/13/824/SI2.675067





GSE (Gestore dei servizi energetici) is the state-owned company that promotes and supports renewable energy sources in Italy. This company is the operator of the scheme.

GME (Gestore dei mercati energetici) is the state-owned company that manages the Italian Power Exchange and Emission Trading. They are effectively supporting the EEO scheme and host the market for White Certificates.

The White Certificates are tradable and include an incentive scheme for end users to implement energy efficiency measures. The way to get White Certificate is to get a project proved by the GSE, which then calculates the White Certificates delivered to the project carrier. This calculation can be done either by a standard analysis (projects with proven saving outcome) or by the monitoring of the consumption. The savings must be aggregated to reach 20, 40 or 60 Toe of carbon emission saved. Due to the high

thresholds, the scheme is totally invisible to the end users. Only companies with a significative volume can participate in the scheme.

The voluntary parties can be:

- Companies of administrations that have an appointed or voluntary energy manager (or that are ISO 50001 certified);
- ESCO and other energy services companies;
- DSO with less than 50 000 users; and
- Companies linked with obligated DSOs.

It is interesting to see that only very large operators are obligated, but that the voluntary parties are the most active to provide energy efficiency projects and realize savings. This is a lesson that has been also learned in other countries. The EEO scheme is not only a constraint for actors, but also an opportunity to open new services and business models. Therefore, it is important to leave the door open to other actors to participate, not just obligated parties.

The EEO scheme is not valid for the cooperative participating in the REScoop PLUS project. However, there is an opportunity to take advantage of the GME market to obtain and sell white certificates. The large projects like the one developed by SEV to deploy more efficient district heating is typically the type of larger scale project that could come within the scope of the scheme.

Conclusion

There are no major barriers to the implementation of REScoop PLUS best practices of in Italy. Nevertheless, it should be noted that Alto Adige is a subject to a unique legal regime, which gives support to locally owned and developed projects, and that district heating and cooling is an important piece of the Italian strategy for more energy efficiency. In that regard, the situation of SEV is somewhat specific. However, they do not benefit from a more specific support than other areas. Finally, some recent innovations, such as the data hub, are making it easier to deal with consumer data today.

CONCLUSIONS

During the preparation of this report, it became apparent that none of the best practices of the REScoop PLUS are currently either blocked or supported by a specific regulatory tool at the local level. The Energy Efficiency Obligation schemes could become an opportunity in several of the countries covered by the project. The exception is the Danish example, where the government policy to implement a savings' objective encouraged the success of the package deal and the technical support. However, it is to be noted that those two actions would probably have been implemented without this incentive.

New European legislation will impact national level legislation in several ways. The implementation of the new data privacy regulation 679/2016 (will come into force January 2018) and directive 680/2016 and the ongoing construction of the "Clean energy for all Europeans" package, are and will present new feature that will change the national legal environment in which the European cooperatives will evolve.

On data protection, the new legislation will bring forward new rights for the data subjects:

- The legislators at the national level will roll back their control in favor of private data controllers. At the European level however, collaboration is enhanced by this new regulation;
- The consent of the data subject is key in the new regulation, with the right of the consumers to attach their consent to a specific processing. This will require changes to some national regulations as it will require the data controllers to engage the data subjects much more. The data subject will also have the right to access and modify their personal data at any point (including processed data); and
- The data privacy by design concept is introduced in the regulation. This is not exactly new in national regulation however, the tools introduced, like the DPIA, will bring more reality to this general requirement of protection of the personal data at the center of the development of new services.

Regarding the Clean energy package, revisions to EU energy legislation are under discussion as the report is being written. However, it is clear that an "energy efficiency first" approach by the European Commission for is a strong feature in its legislative proposals. Furthermore, for the first time REScoops, referred to as local energy communities, have a stated role to play in achieving EU climate and energy objectives, including on energy efficiency. Specifically, the recitals to the Electricity Directive state that community energy can advance energy efficiency in households and help fight energy poverty through reduced consumption and lower supply tariffs. From this report, it is clear that, while REScoops do not experience any concrete barriers to implementing energy savings measures among their members, they could benefit from more visibility in the development of energy efficiency policies, especially in energy efficiency obligations schemes.

However, when looking at the substance of the Commission's legislative proposals, it did not provide any concrete measures to promote local energy communities in driving energy efficiency at the national level. This represents a potential gap and a missed opportunity. Therefore, we would recommend further changes to the existing legislative proposals.

Proposed amendments to the Energy Efficiency Directive	Justification
Article 7a(5)(a) 5. Within the energy efficiency obligation scheme, Member States: (a) shall include requirements with a social aim in the saving obligations they impose, including by requiring a share of energy efficiency measures to be implemented as a priority in households affected by energy poverty and in social housing. ***To this effect, specific measures should be put in place to promote and encourage participation of local energy communities, in particular those that are driven by social aims connected to the savings obligations imposed;***	*Referencing the valuable role that local energy communities play in encouraging their members/customers to engage in energy efficiency, particularly with households experiencing energy poverty, will help make it easier for Member States to achieve their obligations under Article 7 of the Energy Efficiency Directive.*
Proposed amendment to the Governance Regulation	**Justification**
Article 19 paragraph (b) ***New subpoint (8) policies and measures to promote the role of local energy communities in contributing to the implementation of policies and measures in points (1), (3) and (5) above.***	*Requiring Member States to report on how they encourage local energy communities to help implement energy efficiency policies and measures will help provide more high-level visibility for the role they play in driving energy savings with final consumers.*
Annex I, Part 1, Section A, 3.2 ***New point viii. Description of policies and measures to promote the role of local energy communities in contributing to the implementation of policies and measures in points i, iii and iv above.***	*Requiring Member States to report on how they encourage local energy communities to help implement energy efficiency policies and measures will help provide more high-level visibility for the role they play in driving energy savings with final consumers.*

Such changes could further empower REScoops to play a key role in make the Energy Union a success, and ensuring that all European citizens benefit from the energy transition.