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D6.3 - Final Report on Best Practices and Legal barriers for supplying REScoops and promoting energy efficiency

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Introduction

The REScoop PLUS project has the purpose to help enhance energy efficiency as a value creating activity for the European renewable energy cooperatives (REScoops).

Energy efficiency is crucial to reach the European Union's (EU's) short, medium and long-term climate and energy targets. This fact has been reaffirmed by the new *Clean Energy for All Europeans* legislative package (CEP) and its integration of the "Energy Efficiency First" principle. Furthermore, the European regulatory framework has increased its objectives for the amended Energy Efficiency Directive (EED)[1] with a binding energy efficiency target of 32.5% by 2030.

This vision is unfortunately difficult to put in practice and several Member States are still implementing "statistical tricks" in order to deliver on their promised energy savings for their 2020 energy savings targets, or are refusing altogether to work to reduce energy consumption and decarbonise their national production.

In the meantime, the cooperative movement is mobilising to help deliver national objectives and support their communities on the way to the transition.

Through the REScoop PLUS project, several Energy Efficiency services were launched in Portugal, France and Italy. Indeed, the services provided by the REScoops to their members are usually open to the wider public and are therefore accessible to all.

An earlier public report of this project (D6.1 - National Regulatory Environment Report) looked at the European legal environment and specific themes relevant to the best practices. We then produced an internal report that reviewed national regulations that could impact the deployment of the REScoop PLUS best practices, to be a basis of the present document.

The goal of this report (Deliverable 6.3) is to explore the deployment of the tools from the toolkit and identify the barriers, specifically legal, the implementing REScoops experienced. This report presents the lessons learned from the deployment of REScoop PLUS best practices and provides recommendations for future policy changes.

In particular, this report takes into account the recently finalised CEP. This new revised EU legal framework will require significant reform of national rules. Therefore, this report will look at how the CEP will impact national regulations for REScoops and energy efficiency.

[1] Directive (EU) 2018/2002 of the European Parliament and of the Council of 11 December 2018 amending Directive 2012/27/EU on energy efficiency. L 328/210, 21.2.2018 (EED).

The tools of energy efficiency in the REScoops

The REScoop PLUS Project has successfully launched 12 deployments from the best practices identified in the REScoop PLUS toolkit.[2] The toolkit is being implemented both inside and outside of the consortium:

	Implementing Rescoop	Best Practice Implemented
1	**Enostra**	Energie ID
2	**Enostra**	Dr. Watt
3	**Coopernico**	Energie ID
4	**Coopernico**	Dr. Watt (Wiki)
5	**Coopernico**	Dr. Watt (Tupperwatt)
6	**ODE**	Package approach
7	**SOM Energia**	Dr. Watt (billing)
8	**Retenergia**	Dr. Watt (Wiki)
9	**Retenergia**	Energie ID
10	**Cooperatives UK**	Package approach
11	**ZEZ**	Energie ID
12	**SEV**	Hydraulic Balancing

These deployments have either been successful or are currently being deployed as we write this report. All deployments are expected to move forward, and the tools are expected to be up and running before February 2019. In parallel, the national workshop tour undertaken by REScoop PLUS has spurred strong interest in all countries where the toolkit was presented.

Interestingly, while deployments faced some financial and cultural constraints, there were no major legal barriers. In fact, none of the deployments had to be stopped due to legal barriers.

Nevertheless, throughout the project, we were able to identify some legal best practices that could help better facilitate the deployment of some the practices within the REScoop PLUS Toolbox. The legal best practices are the following:

- The non-profit regulation for district heating (DK): this piece of legislation prevents companies providing district heating to Danish citizens to produce excessive profits from this activity.
- The automatic municipal guarantee for low interest loans in district heating (DK): This mechanism supports the development of district heating by Danish local municipalities.
- The support scheme to municipalities to invest in return flow (IT): This mechanism allows local Alto-Aldige municipalities to invest in optimisation of local district heating networks.
- The public fund for community projects (NL): This fund supports the development of citizen-led projects by providing bridge funding.

[2] REScoop PLUS (2018). *The energy efficiency toolkit for energy communities*. Available at: http://www.rescoop-ee.eu/the-toolbox.

How this report is structured

This report is divided in two parts. **Part One** is dedicated to aggregating the lessons learned of the deployment of best practices. In this part we review and identify the legal barriers and best practices experienced during the deployment of the various tools in the REScoop PLUS toolkit.

In **Part Two** of this report, we focus on how the CEP could impact the future deployment of REScoop PLUS best practices. First, we will identify the new rules that are relevant for REScoops working on energy efficiency, looking in particular at the revised EED, the revised Energy Performance of Buildings Directive (EPBD)[3] new provisionally agreed Market Design Legislation (Electricity Directive and Regulation), the recast Renewable Energy Directive,[4] and the new Energy Union Governance Regulation.[5] We will then present a summary of individual assessments and recommendations that the national partners of REScoop PLUS (Belgium, Italy, Spain, France and Portugal) have prepared for how the CEP should be transposed in their specific countries.

Lastly, we will provide a number of general recommendations for how national decision makers should take REScoops and energy efficiency into account during their national planning processes for 2030, as well as the process of writing these new EU legal requirements into national legislation.

[3] Directive (EU) 2018/844 of the European Parliament and of the Council of 30 May 2018 amending Directive 2010/31/EU on the energy performance of buildings and Directive 2012/27/EU on energy efficiency, OJ L 156, 19.6.2018, p 75 (EPBD).

[4] Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (recast), OJ L 328, 21.12.2018, p 82 (Recast Renewable Energy Directive).

[5] Regulation (EU) 2018/1999 of the European Parliament and of the Council of 11 December 2018 on the Governance of the Energy Union and Climate Action, amending Regulations (EC) No 663/2009 and (EC) No 715/2009 of the European Parliament and of the Council, Directives 94/22/EC, 98/70/EC, 2009/31/EC, 2009/73/EC, 2010/31/EU, 2012/27/EU, and 2013/30/EU of the European Parliament and of the Council, Council Directives 2009/119/EC and (EU) 2015/652 and repealing Regulation (EU) No 525/2013 of the European Parliament and of the Council, OJ L 328, 21.12.2018, p 1 (Governance Regulation).

Methodology

In order to complete this report, we conducted interviews with experts from the REScoop PLUS Project to collect their stories of how different practices were deployed. We also received specific support relating to a number of legal best practices:

- Mr. Christiansen and Mrs. Krabsen for the parts related to Danish law;
- Mrs. Hoffer and Mr. Egger for the parts related to the Italian legal system; and
- Mr. Zomer and Mrs. Harteveld for the Dutch scheme.

These contributions allowed us to have a better picture of the legal and institutional environments that REScoops face when focusing on energy efficiency.

In relationship with the analysis of the EED and the CEP in general, we received the support from the Secretariat of the Coalition of Energy Savings. The team of the Secretariat specifically supported us with our analysis of the amended EED and EPBD.

To provide specific inputs for this report, we followed a tendering process in order to find legal experts capable of assessing the new CEP for the local partners. Each individual report from the partners can be found in the Annex to this report.

Part One: Legal Barriers to REScoops to become licensed suppliers and implement energy efficiency actions

In this first part of the report, we will explore several legal and institutional mechanisms that supports the deployment of the best practices. During the deployment phase of the REScoop PLUS, we did not face any specific legal barriers to deployment. However, we discovered that some best practices were much easier to deploy in their origin country compared to the receiving countries. This is especially true for our best practices related to district heating, as the upfront investment is significant. Therefore, we were able to identify four regulatory and institutional mechanisms that support the development of the best practices.

Municipal support scheme for return flow optimisation (Italy)

The first support scheme comes from Italy. This mechanism is specific to the region of Alto Adige (also named South Tyrol). South Tyrol's autonomy is based on three legal norms: the Italian Constitution, the Paris Treaty and the Second Statute of Autonomy. The so-called "new (or Second) Statute of Autonomy" of 1972 today forms the basis of minority protection in South Tyrol. The statute came into force on January 20, 1972 and gave the province of South Tyrol primary, secondary and tertiary responsibilities.[6]

The region of Alto Aldige shares a large number of common norms and regulations of the energy sector with the rest of Italy. Their fiscal system however is vastly different. The regional government of South Tyrol preserves between 80% and 90% of the levied taxes in the region and has a large autonomy in the use of this capital. Also, due to the strong economic activity of the province and its ties with the Austrian region of Tyrol (through the Euroregion Tyrol South Tyrol Trentino), the province of Alto Adige is one of the wealthiest in Italy (highest GDP per capita in 2017).[7]

Through its Regional and Provincial law, the provincial government has put in place incentives to decarbonise the local energy system and support the integration of renewable energy.[8] It has also implemented mechanisms to support and place energy efficiency at the center of its strategy. Our example is one of those mechanisms, which supports the deployment of the “Optimise Return Flow”, a best practice of the REScoop PLUS toolkit, supported by SEV.

Hydraulic balancing of existing heating and cooling plants is supported by the Autonomous Province of Bolzano (region Trentino - Alto Adige) through the decision from the provincial government of the 14.02.2017 Nr. 168 and Nr. 169 (“Beschluss der Landesregierung vom 14. Februar 2017, Nr. 168 und 169”).

The support scheme targets private households, municipalities and corporations without profit goals but also firms (for firms the support depends on the size of the firm).

[6] http://www.provinz.bz.it/politik-recht-aussenbeziehungen/autonomie/autonomiestatut.asp.
[7] https://www.statista.com/statistics/658274/gross-domestic-product-gdp-per-capita-of-italy-by-region/.
[8] http://lexbrowser.provinz.bz.it/doc/de/lp-2010-9/landesgesetz_vom_7_juli_2010_nr_9.aspx?view=1.

The following conditions must be in place:

- the hydraulic balancing must be implemented in the province of Bolzano;
- minimum investment of 3.500,00 € (without tax);
- buildings which have been constructed with a building permit before the 30th June 2000;
- compliance with the guidelines on the consumption-based recording of energy requirements; and
- the implemented actions must reduce the flows and reduce the energy consumption of the circulating pumps.

Costs that can be claimed are:

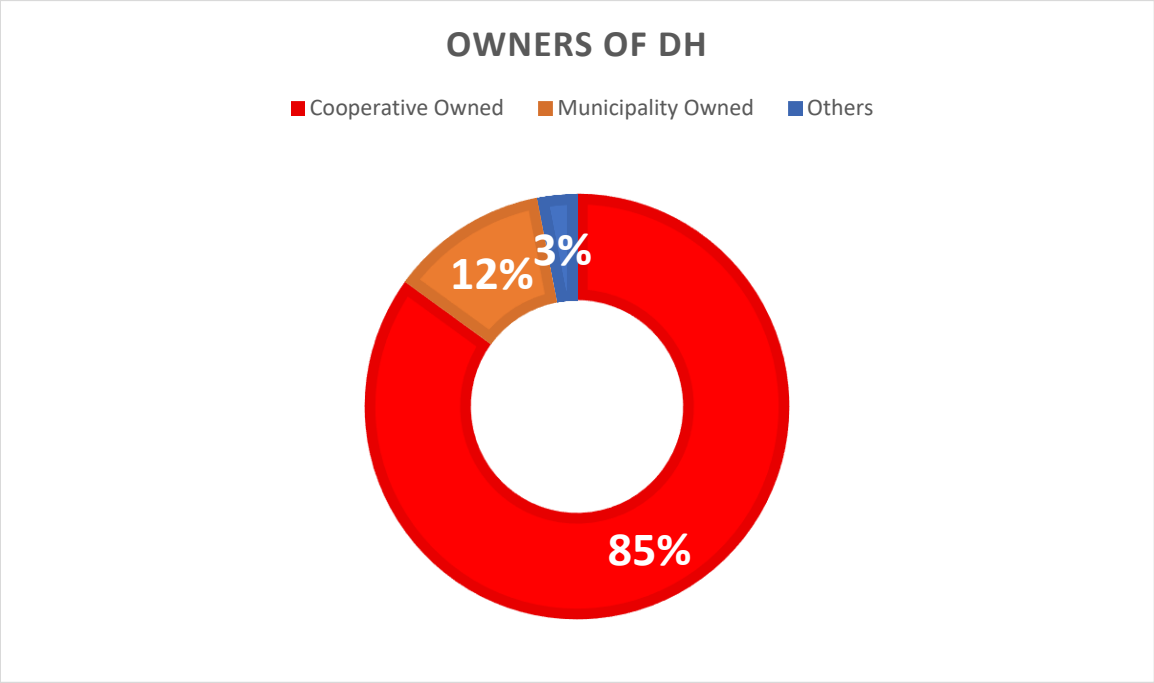
- Costs for the new installation of thermostatic valves or for the adaptation of existing thermostatic valves for flow control including hydraulic balancing: maximum € 50.00 per heating or cooling element;
- Costs for the new installation of regulators and valves for the hydraulic balancing;
- Cost of replacement of circulating pumps by automatically controlled pumps with energy efficiency index <0,23 according to Ecodesign Directive 2009/125/EG; and
- Costs for the planning and construction management: up to a total of 10% of the permissible costs.

The mechanism greatly improves the capacity of municipalities to finance renovation and improvement of their district heating system. The implementation of the optimised return flow has an estimated cost saving of 13% per year, making it very attractive to municipalities wanting to improve their infrastructure and quality of service to their constituency.

The non-profit regulation for District Heating (Denmark)

64 % of all Danish households are connected to district heating. There are 340 district heating cooperatives out of a total number of 400 district heating suppliers. Many of the district heating cooperatives work as prosumers, producing and delivering heat to all members of the single cooperative.

The Heat Supply Act has minor regulations concerning the organisational structure of district heating cooperatives (DHC). The DHC is organised on the principles in the agreement between all members/consumers – i.e. "the statutes".



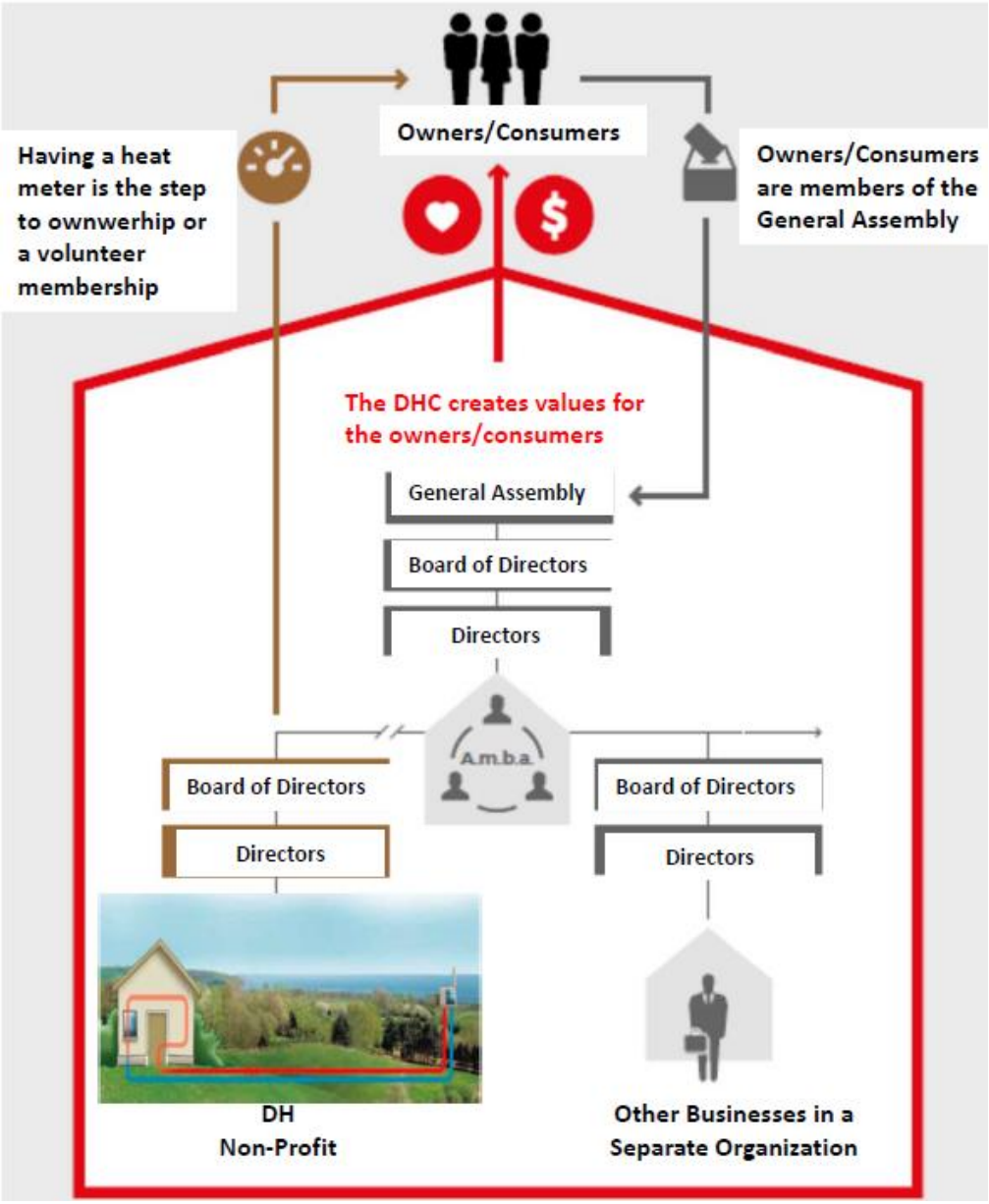
The figure shows the percentage of DH entities on owner types.[9]

Establishment

The citizens can establish a DHC when the district heating project follows the heat planning of the municipality. It is obligatory that the future district heating system is economically and technically viable.[10]

A district heating project typically starts by settling a cooperative with statutes following the Danish cooperative tradition. The cooperative will be registered – see section 2.

[9] Data from the Danish Utility Regulator.
[10] The Act §§ 3-4 and § 6.



A typical DHC organisation with activities beside DH, e.g. cooling. Normally, DHC have DH as their sole core business.

Danish district heating is based on local heat supply monopoly for the cooperative. Since it is a monopoly it is founded on a non-profit principle. Prices and terms of heat deliverances are controlled by the Danish Utility Regulator. The non-profit principle limits the costs of heat production and distribution and for several years the DHC have proved to obtain the lowest heat supply prices. Prices are benchmarked by the Danish Utility Regulator.

The non-profit principle can be deviated from when renewable energy production plants supply heat to a district heating grid (e.g. solar thermal, geothermal, biogas or biomass installations). The DHC is allowed

to calculate a surplus based on these technologies. Industrial businesses can also calculate a surplus when they deliver excess heat to the district heating grid.[11]

The municipality heat planning process is characterised by a narrow corporation between the DHC and the municipality including hearing procedures. When an existing district heating system is going to expand, it is a normal procedure that the DHC takes the planning lead and provides all necessary calculations for the expansion of the district heating grid. The expansion plan must be approved by the municipality and the plan will be integrated in the following hearing processes.

The Heat Supply Act

The Heat Supply Act has no direct protection of consumers' interest. The protection is based on the prices and terms control by the Danish Utility Regulator, and during the planning process of a local district heating system the developer must proof that the price will reflect a sound consumer economy.

The Act allows private entities like cooperatives to establish a district heating system.[12] Actually, the municipality can demand that a local heat plan shall be made by the cooperative.

If the district heating system is owned by a municipality or a subsidiary company owned by the municipality and the municipality wants to sell it or merge with another district heating system, owned by another municipality, the municipality is obliged to offer the district heating system to the consumers.[13] This is also the procedure when there is a transfer of part-ownership, e.g. some shares in the company owned by a municipality.

If the municipality overrules that obligation the selling or merge agreement will be declared nullified.[14]

The majority of the board members in a DHC must be elected by the consumers. This is fulfilled by the traditional cooperative organisation and by an organisation where the board members are elected by the municipality.[15]

In conclusion, Cooperatives have been the drivers of an efficient Danish district heating system.

The establishment of a district heating system and the DHC is based on thorough heat planning. The heat plan including the organisational structure of the system must be approved by the municipality before the implementation phases.

The Heat Supply Act stipulates consumers influence on the structure (e.g. by giving consumers the priority to by a municipality owned district heating system, when a municipality wants to sell it to third party companies).

[11] The Act § 20 b.
[12] The Act § 2 b,1, no.3.
[13] The Act § 23 f.
[14] The Act § 23 f, 5.
[15] The Act § 23 h, 2.

The Dutch public fund for Community projects (Netherland)

The Dutch public fund for community projects: *Ontwikkelfonds voor coöperaties,* is a new support mechanism for energy cooperatives. The mechanism was initiated by ODE and supported by the Dutch Ministry of Economic Affairs and Climate. The Dutch minister of Economic Affairs and Climate Eric Wiebes announced the fund on June 2018 in his letter on Stimulation policy for local renewable electricity production to the House of Representatives.[16] The fund is expected to be operational from the first quarter of 2019.

The fund is set up to cover the financial risks of the first phase of project development. In that phase it is not certain whether the project will succeed. For cooperatives this means a 100% risk because they usually have only one project that they invest in. Professional developers often have a portfolio of projects and can mitigate risks over their portfolio through diversification. The high-risk profile of an energy community project makes it difficult to collect large amounts of funding from their members. External financing is a problem because then the cooperative loses control over the project.

In the Regional Energy Strategies as formulated in the context of the new Dutch Climate Agreement, sustainable energy cooperatives play an important role in initiating investment projects with sufficient local support and local purchasing. Sustainable energy projects of cooperatives can almost always count on a lot of local support from local residents and municipal authorities.

In practice, however, it appears that not all energy cooperatives can finance the start-up costs of projects, mobilise sufficient knowledge and expertise and guarantee the continuity of the cooperative. The public fund for community projects can remove these possible impediments and strengthen and accelerate the investments of energy cooperatives.

With the Dutch public fund for community projects, part of the start-up costs are pre-financed via development credits for local, sustainable energy projects, such as wind energy, (large scale) solar projects and sustainable heat projects. Energy cooperatives can borrow money from the Public Fund for:

a) staff support from the REScoopNL project office;[17] and/or
b) a loan to make out-of-pocket costs for specialist investigations or other necessary partial steps to realise a financeable business case and an irrevocable permit for the project / projects.

The development fund has a cost-effective approach. Projects with funding from the development fund, that come to financial close will pay an extra premium in addition to the normal remuneration for the loan. With this premium, income losses can also be compensated for the projects which unfortunately cannot be realised. The compensation and premium will be competitively priced. In addition, this fund can initiate further professionalisation of the cooperative sector, and of the underlying projects. The required premium can gradually decrease due to positive learning effects.

The Dutch Ministry of Economic Affairs and Climate and the provinces will deposit €10 million in the fund and another €10 million later on.

REScoopNL has the operational management, and maintains the primary contacts with the connected energy cooperatives. The Dutch National Green Fund (Nationaal Groenfonds) oversees these activities and the management of the funds.

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[16] https://www.rijksoverheid.nl/ministeries/ministerie-van-economische-zaken-en-klimaat/documenten/kamerstukken/2018/06/15/kamerbrief-stimuleringsbeleid-lokale-hernieuwbare-elektriciteitsproductie

[17] REscoopNL is the Dutch umbrella organisation for energy cooperatives www.rescoop.nl

Part II: Energy efficiency and energy communities– policy recommendations for transposition and implementation of the Clean Energy Package

Introduction

The EU's latest reform of energy legislation has brought with it an unprecedented recognition, acknowledgment and support of the role citizens and communities in a successful energy transition. As such, a new EU level legal regime now exists for REScoops, now acknowledged by the Clean Energy Package (CEP) as 'renewable energy communities' (RECs), or 'citizens energy communities' (CECs).

Now that the CEP is finalised, Member States will soon be required to 'transpose' these new requirements. In other words, they will need to revise their national laws to ensure they are consistent with the new EU legislation.

At the same time, Member States will be required to deliver (also called national energy and climate plans, or 'NECPs') to the EU Commission that contain objectives, policies and measures for how they aim to meet their 2030 renewables, energy efficiency and greenhouse gas targets.

Below we highlight what is in the CEP on energy communities and energy efficiency, particularly looking at the amended EED, the recast Renewable Energy Directive, the provisionally agreed Market design legislation (Electricity Directive and Electricity Regulation), and the new Energy Union Governance Regulation (and by extension – the amended EPBD).

We also provide policy recommendations for how Member States can develop their NECPs, and transpose/implement the CEP so it maximises potential synergies between the support for RECs and CECs and the achievement of energy savings objectives. We start with the Governance Regulation, mainly because Member States should have final NECPs submitted to the Commission by the end of 2019.

The CEP: what's relevant for cooperatives and energy communities?

The Governance Regulation

The Governance Regulation places a strong emphasis on the importance of energy efficiency. This is primarily done by setting a framework that requires Member States to plan how they will aim to meet their commitments to EU level objectives for 2030, which includes an increased target of at least 32.5%. for energy savings. Within this framework, the Governance Regulation places strong recognises the energy efficiency first principle, as well as the need to include CECs and RECs in Member States' planning for 2030 to meet their renewables and energy efficiency objectives.

Importantly, the Regulation provides a definition of the 'energy efficiency first' principle.[18] In particular, it references the importance of citizens and more efficient distribution of energy.

Definition of energy efficiency first

"energy efficiency first' means taking utmost account in energy planning, and in policy and investment decisions, of alternative cost-efficient energy efficiency measures to make energy demand and energy supply more efficient, in particular by means of cost-effective end-use energy savings, demand response initiatives and more efficient conversion, transmission and distribution of energy, whilst still achieving the objectives of those decisions;"

Regarding energy communities, in their initial NECPs, Member States are encouraged to include objectives for supporting RECs, as well as renewable energy production by cities and self-consumers.[19]

The Governance Regulation also encourages Member States to link energy efficiency with RECs and CECs in their NECPs. Specifically, Member States must, where applicable, include policies and measures to support the role of energy communities in achieving energy efficiency policy objectives.[20] Concretely, this means that in their NECPs Member States are encouraged – but not required – to include policies and measures to:

- support participation by energy communities in energy efficiency schemes and alternative measures with a social purpose under Article 7 of the EED;
- Support energy communities in the renovation of public and private buildings in their *Long-term Renovation Strategy* to support the renovation of the national stock of residential and non-residential buildings, both public and private;
- Promote the delivery of energy efficiency services by energy communities;
- Promote participation by energy communities in the delivery of energy efficient public procurement; and
- Support energy communities in undertaking information and training measures for citizens.

While non-binding, if Member States can indicate at a high level how they will aim to support RECs and CECs in achieving energy efficiency obligations, it can further help REScoops play a significant role in energy efficiency.

Finally, the enabling framework that Member States are required to develop under the Renewable Energy Directive must be included by Member States in their integrated reports on NECPs that are required under the Governance Regulation,[21] as well as their Long-term Renovation Strategies that are required under Article 2a of the amended EPBD.

[18] Energy Union Governance Regulation, Article 2 point (18).
[19] Energy Union Governance Regulation, Annex I, Section A, 2.1.(v).
[20] Energy Union Governance Regulation, Annex I Part I 3.2(v).
[21] Energy Union Governance Regulation, Annex I Part I 3.1.2(v).

The Energy Efficiency Directive (EED)

The amended EED establishes a framework for meeting the EU's target on energy efficiency of at least 32.5% by 2030. In doing so it continues, with some amendments, the requirement to achieve cumulative annual end-use energy savings. Much of these amendments pertain to the calculation of energy savings at national level. The EED also continues with established energy efficiency obligation (EEO) schemes and alternative policy measures.

CECs and RECs are not addressed specifically in any of the revised EED provisions. Nevertheless, the EED does contain a new requirement to take into account the need to alleviate energy poverty (including vulnerable households, and individuals living in social housing) in designing policy measures to achieve energy savings.[22] Furthermore, given their connection to addressing energy efficiency and energy poverty, it is clear that CECs and RECs could be included in EEO schemes and alternative policy measures, particularly those that address energy poor and vulnerable customers. Explicit links between CECs and RECs and energy efficiency are made elsewhere in the CEP, which we will address below.

The Electricity Directive

The Electricity Directive has been politically agreed between the EU institutions. However, it still needs to be formally adopted by the Council and the European Parliament. Nevertheless, the political agreement, which is not likely to change, provides a supportive framework for REScoops to participate across Europe's energy market.

First, largely based on the REScoop business model (i.e. the International Cooperative Alliance Principles), the Electricity Directive acknowledges and defines 'citizens energy communities' (CECs).[23] Importantly, the definition acknowledges CECs as a distinct type of market actor from traditional commercial energy market actors, based on principles of ownership, internal decision-making and participation, and an alternative purpose to profit-making.

Definition of 'Citizens energy community' based on the final political agreement

'citizens energy community' means: a legal entity which is based on voluntary and open participation, effectively controlled by shareholders or members who are natural persons, local authorities, including municipalities, or small enterprises and microenterprises. The primary purpose of a citizen's energy community is to provide environmental, economic or social community benefits for its members or the local areas where it operates rather than financial profits. A citizen's energy community can be engaged in electricity generation, distribution and supply, consumption, aggregation, storage or energy efficiency services, generation of renewable electricity, charging services for electric vehicles or provide other energy services to its shareholders or members.

Importantly, the definition acknowledges that CECs can participate across the electricity sector, including supply and provision of energy efficiency services. The Recitals reinforce the role of CECs in encouraging energy efficiency, stating that "Community energy can also advance energy efficiency at household level and help fight energy poverty through reduced consumption and lower supply tariffs."[24]

[22] EED, Article 7 paragraph 11.
[23] Political Agreement on the Electricity Directive, Article 2, paragraph 7.
[24] Political Agreement on the Electricity Directive, Recital 30.

The Electricity Directive provides CECs with specific rights, including the right to access all markets – both individually and through an aggregator. In addition, CECs have the right to engage in energy sharing.[25] Distribution system operators (DSOs) have an obligation to facilitate these activities.[26]

The Directive also ensures non-discriminatory and proportionate treatment with regard to the activities, rights and obligations of CECs.[27] Proportionate treatment is particularly important for CECs because the Directive acknowledges that they are different from other energy companies operating in the market, based on CECs' membership structure, governance requirements and their purpose to provide community benefits and services over profits.[28] Therefore, proportionate treatment entitles CECs to benefit from licensing requirements and procedures that are not overburdensome, ensuring that CECs can become suppliers and provide energy efficiency services.

The Electricity Regulation embeds the efficiency first principle with regard to management and operation of local power distribution networks. First, tariffs should be designed to, inter alia, "increase efficiencies, including energy efficiency … support efficient investments … and facilitate innovation … in areas such as digitalisation, flexibility services and interconnection."[29] Network tariffs should also incentivise DSOs to operate and develop their networks in the most cost-effective way, including through procurement of services, in order to raise efficiencies in their networks.[30]

To the extent the efficiency first principle is embodied in the Electricity Regulation, the Electricity Directive aims to operationalise this principle by acknowledging the potential value that CECs can provide to the system through activities such as self-consumption of electricity from renewables and energy sharing. Therefore, there is a requirement to determine grid fees for CECs based on an assessment of their costs and their benefits to the system. Ideally, if through their activities the CEC can save the DSO money through efficient use that is optimal for operation of the grid, or where the CEC can provide specific flexibility or other services to the DSO (for instance through new flexibility markets), this value should be reflected in the charges they pay to use the network.

Lastly, DSOs now have a requirement to make forward-looking network plans that include, inter alia, medium and long-term flexibility services that will be needed. These plans will need to include how the DSO uses demand response, energy efficiency, energy storage, and other resources it uses as an alternative to system expansion.[31] This presents a very concrete opportunity for DSOs to provide transparency over the positive role that CECs can play on implementing the efficiency first principle.

The recast Renewable Energy Directive

The recast Renewable Energy Directive acknowledges and defines 'renewable energy communities' (RECs).[32] Similar to the Electricity Directive, the definition acknowledges RECs as a distinct type of market actor from traditional commercial energy market actors, based on principles of ownership, internal decision-making and participation, and an alternative purpose to profit-making. However, the criteria that identify a REC are stricter compared to the criteria for defining CECs, in particular regarding the local nature of RECs and the requirement for 'autonomous' internal decision-making. This last requirement is intended to prevent abusive power grabs by better resourced members of the community.

[25] Political Agreement on the Electricity Directive, Article 16 paragraph 2a(d).
[26] Political Agreement on the Electricity Directive Article 16 paragraph 1(d).
[27] Political Agreement on the Electricity Directive Article 16 paragraph 1(e).
[28] Political Agreement on the Electricity Directive, Recital 30c.
[29] Political Agreement on the Electricity Regulation, Article 16 paragraph 2.
[30] Political Agreement on the Electricity Regulation, Article 16 paragraph 8.
[31] Political Agreement on the Electricity Directive, Article 32, paragraph 2.
[32] Recast Renewable Energy Directive, Article 2, point (16).

Definition of Renewable Energy Community

'renewable energy community' means a legal entity:

(a) which, in accordance with the applicable national law, is based on open and voluntary participation, is autonomous, and is effectively controlled by shareholders or members that are located in the proximity of the renewable energy projects that are owned and developed by that legal entity;
(b) the shareholders or members of which are natural persons, SMEs or local authorities, including municipalities;
(c) the primary purpose of which is to provide environmental, economic or social community benefits for its shareholders or members or for the local areas where it operates, rather than financial profits;

RECs have specific rights, including the right to produce and sell – or supply – renewable energy, and a right to access all suitable markets.[33] Moreover, Member States must put in place enabling frameworks for RECs that must, inter alia, ensure they are not discriminated against with regard to their rights or obligations as market actors, including as suppliers and distributors (this includes heating networks).[34] This is important as many REScoops that perform energy efficiency or other demand-side measures will often do so through other activities, such as retail supply or management of the district heating network.

Importantly, the recast Renewable Energy Directive explicitly acknowledges the potential for RECs to advance energy efficiency in households and address energy poverty. In particular, collective self-consumption is identified as an opportunity for "renewable energy communities to advance energy efficiency at household level and helps fight energy poverty through reduced consumption and lower supply tariffs."[35]

In Article 22, Member States are required to develop an 'enabling framework' for RECs, which must ensure, inter alia, "the reduction of unjustified regulatory and administrative barriers for energy communities, and that participation in renewable energy communities is accessible to low-income and vulnerable households." This requirement provides opportunities for the development of national and local level initiatives that empower RECs to include, and to help, vulnerable and energy poor households, through energy efficiency interventions.[36]

Lastly, there is a requirement to integrate RECs into infrastructure planning, for instance local electricity distribution and district heating and cooling networks.[37] In particular, cities and DSOs should consult with each other so that potentials of energy efficiency and flexibility by RECs and renewables self-consumers can be taken into account in the plans. This is also linked to several requirements to integrate renewables with new and renovated buildings governed by the EPBD.

[33] Renewable Energy Directive, Article 22, paragraph 2 point (a) & (c).
[34] Renewable Energy Directive, Article 22, paragraph 4, point (e).
[35] Renewable Energy Directive, Recital 67.
[36] Renewable Energy Directive, Article 22, paragraph 4, point (f).
[37] Renewable Energy Directive, Article 15, paragraph 3.

Summary of national legal gap analysis

The activities of REScoops are deeply dependent on the national context. While the best practices that have been identified in the REScoop PLUS toolkit are relevant at the European level, national regulations ultimately determine the impact and development of the community energy movement. Therefore, we sought help from national legal experts to assess the impact of the CEP on national rules around energy efficiency and energy communities. With the best practices in mind, each partner conducted a gap analysis of the new CEP for their country.

Depending on the partners' core activities, analyses varied.

For partners focusing on district heating, it was clear that energy efficiency rules contained in the EED and the EPBD are quite strong drivers for national regulation. In Denmark, the new provisions on energy communities will have limited impact since Danish district heating is already based very strongly on consumer ownership, regulations that limit profitability, and a strong collective action culture. Nevertheless, some needed improvements could be identified on a technical level. The Heating Act should be amended to require inclusion of housing associations and cooperative district heating networks in local heating plans, in order to ensure support for financing renovations. National legislation may also need to be revised to allow cooperative district heating networks to cooperate with households that are not a part of existing networks, in order to improve efficiency and reduce these households' reliance on oil. Overburdensome administrative barriers within the Danish EEO scheme should be removed, while measurable targets on energy efficiency would help district heating cooperatives plan and finance projects. Finally, new provisions on metering and sub-metering in the EED provide an opportunity for district heating cooperatives to improve transparency and encourage energy savings from their members.

The Italian system is more layered considering that the South Tyrol / Alto Adige possesses a certain level of autonomy from the larger Italian system. The Italian heating sector will be positively impacted by the CEP, as several improvements will be possible. Administrative burdens, in particular documentation and reporting requirements for smaller district heating networks need to be more proportionate to the size and capabilities of the network operator. The Italian EEO scheme should also be revised in order to allow smaller neighborhoods or household energy savings to participate. Even though there are possibilities to aggregate such savings, it is still more difficult for smaller actors to participate.

Both district-heating focused partners from Denmark and Italy emphasised the new opportunities in the recast Renewable Energy Directive for RECs to share renewable energy. In particular, this could be an impetus for coupling community renewables projects (e.g. wind) with district heating to enhance storage opportunities. However, incentives (e.g. taxes and levies) need to be adjusted in order to make this activity attractive.

In France, partners felt that most energy communities are excluded from the EEO scheme, as it only obliges large energy companies. One of the recommendations of our French national partner is to support municipalities to help lower this threshold and help smaller organisations benefit from this support scheme. In Spain, it was highlighted that energy communities focusing on renovations could receive support through, for example, existing energy efficiency funds established pursuant to Article 7 of the EED, particularly where such actions aim to address energy poverty.

In general, there was an overall consensus from the different country assessments that much work is needed in order to acknowledge energy communities – both CECs and RECs – generally, and ensure they can act across the energy market. In particular, no countries identified a definition that has been adapted to the new EU definitions. Despite no formal definition in Spanish legislation, however, energy communities are acknowledged in Spain's NECP. Furthermore, there is a formal reference to RECs in a recently introduced national law that is currently being debated.

Several of the partners, including in Denmark, Italy, and France identified regulatory burdens that can make it hard – but not necessarily prohibit – to engage in activities such as establishing district heating networks, and licensed supply. This makes sense given that the REScoops participating in the REScoop PLUS Project are already licensed suppliers or managers of district heating networks. This may not be the case elsewhere in Europe, however, as cost and risk prohibitive barriers still exist in some Member States which prevent energy communities from establishing retail supply or district heating networks.

In Spain, while there are no barriers to energy communities becoming energy efficiency service providers per se, they could benefit by positive validation, or visibility, through incorporation into existing legislation. Lastly, procurement rules could be clarified to help give support to energy communities that want to contribute towards renovating public buildings.

One significant gap that exists relates to new rights around self-consumption and energy sharing within energy communities. Our French partner carried out a thorough assessment of the types of services and roles (around energy sharing and collective self-consumption) that energy communities (citizen or renewable) might have under new French legislation. One particular issue that will need to be addressed is the burden associated with becoming licensed to supply at local level for energy sharing. In France, Italy and Belgium, furthermore, energy sharing is currently forbidden or simply does not exist in regulation.

Importantly, network charges and incentives for energy communities do not yet acknowledge the benefits that linking renewables generation with energy efficiency and flexibility can provide to the energy system or the DSO. Regulations will also need to require DSOs to facilitate energy sharing, for instance through appropriate agreements for a grid connection, data sharing, and allocation of roles and responsibilities. These regulations will need to be designed properly so that energy communities can contribute to an efficiency first approach to operation and management of grids.

Lastly, several partners, particularly from Belgium and Italy, mentioned that information (including guidance, training, mentoring) and funding initiatives for citizens on benefits and practicalities of participating in an energy community are needed. Moreover, there are currently no programmes at national level that emphasise better access to energy communities by citizens that are vulnerable and experiencing energy poverty.

Recommendations for national transposition

As demonstrated above, most of the energy efficiency activities identified in the REScoop Plus project do not face significant legal barriers at the national level. However, energy efficiency activities by REScoops also do not currently receive any positive policy support from national level. Such support could help to upscale interventions by REScoops, increasing their impact and the benefits for citizens and communities. Furthermore, the role that REScoops can play in promoting an energy efficiency first approach towards addressing energy poverty, and the operation and management of local power networks, is currently underappreciated.

More significant legal barriers exist with regard to basic activities that REScoops must undertake before they can engage in energy efficiency and other demand side interventions – for instance, becoming a fully licensed retail energy supplier. Therefore, the new rights for CECs and RECs, as well as the required enabling frameworks that must be set up at national level, have potential to allow REScoops to engage more broadly in the energy system, bringing more opportunities to help their members better manage and save energy.

From these insights, we can identify specific recommendations for how Member States should:

1. approach development their National Energy and Climate Plans (NECPs) (and by extension, contribute to delivery of objectives under the EED and EPBD); and
2. transpose new rules in the Renewable Energy and Electricity Directives to support activities of REScoops that want to work towards a more energy efficiency energy system.

Recommendations regarding Member States' National Energy and Climate Plans (NECPs)

1. In their NECPs, Member States should establish high level objectives or targets for supporting community ownership of renewable energy. In doing so, Member States should also acknowledge the potential synergies between support for RECs and CECs and investments or actions that result in behavioral change around energy efficiency and building renovations.

2. In their NECPs, Member States should provide concrete policies and measures to support energy communities – both RECs and CECs – In encouraging energy efficiency at household level, particularly in the areas of:
    a. **Energy efficiency obligation (EEO) schemes and alternative measures with a social purpose under Article 7 of the EED**. Specifically, member States should ensure that thresholds should establish appropriate thresholds that do not prevent smaller CECs that supply electricity or heat from participation in EEO schemes. At the very least, CECs should be incentivised to voluntarily participate in such schemes. In addition, Member States should ensure that markets for energy savings (e.g. white certificates) allow energy communities to participate. CECs and RECs should also be targeted for support when Member States are developing alternative measures, particularly those that take into account alleviation of energy poverty.
    b. **Renovation of public and private buildings**. Member States should include the role that RECs and CECs (including housing associations and consumer-owned district heating networks) can play in delivering their *Long-term Renovation Strategies* under the EPBD. In particular, Member states should provide investment support for renovations in shared housing or apartment buildings connected to district heating and areas that have potential to be energy positive districts.
    c. **The delivery of energy efficiency services**. Member States should support a level playing field and commit to reducing barriers for CECs and RECs to become licensed suppliers so that they can sell energy and provide services aimed to encourage their members to become more energy efficient.
    d. **In the delivery of energy efficient public procurement**. Member States should develop sustainability criteria and provide guidance to local authorities so that it is easier for them to support local citizen initiatives during the process to procure energy supply and other services such as energy efficiency, and the renovation of public buildings.
    e. **Information and training measures for citizens**. National – and to the extent relevant regional and local – governments should provide technical and financial support to existing information and training campaigns undertaken by CECs and RECs in order to upscale the impact of such actions for instance through existing National Energy Efficiency Funds.

Recommendations for transposition of the Renewable Energy and Electricity Directive

1. Member States should adopt robust definitions that align RECs as a subset of CEC, ensuring that they are open, voluntary, autonomous in their internal decision making, and promoting business models whose purpose is to drive renewable energy and energy efficiency investments, deliver energy-related services and address socio-economic needs of members and the local community – rather than generate profits. Such definitions should focus primarily on empowering citizens, small businesses and local authorities – as opposed to granting additional benefits to larger companies.

2. In the transposition of the Renewable and Electricity Directive, Member States should priorities the reduction and simplification of administrative procedures, costs and other disproportionate barriers so CECs and RECs are allowed to become licensed suppliers, establish district heating networks, and provide other energy-related services (e.g. aggregation, energy efficiency, etc.).

3. In their enabling frameworks required under the Renewable Energy Directive, Member States should develop policies and measures that help low-income and vulnerable households access and benefit from cheap renewable energy supply and energy efficiency services through participation in energy communities. Specifically:

    a. Member States should provide incentives (e.g. special loans, grants, and other financing arrangements) to households that are vulnerable, experiencing energy poverty, or are living in social housing so they have easier access to participation in a REC or CEC.

    b. CECs and RECs should be incentivized (through appropriate savings on energy bills, grid tariffs, taxes and levies) and provided sufficient autonomy to meter local networks (e.g. district heating, electricity sharing). This will allow energy communities to encourage reduced consumption and develop solidarity schemes to help members experiencing energy poverty vulnerability, particularly through energy efficiency investments and energy bill support.

4. Member States should develop frameworks for collective self-consumption and energy sharing by CECs and RECs based on the value that these initiatives can deliver to the energy system – emphasizing their contribution towards the efficiency first principle. Cost-benefit analyses used to determine network and other charges (e.g. taxes and levies) should take into account the ability of RECs and CECs to deliver energy efficiency, flexibility and other demand-side solutions, in particular to the DSO, which result in reduced long-term operational or network development costs.

5. In their distribution network development plans, DSOs should provide transparency on the potential, as well as practical use, of RECs and CECs to better manage the network in a cost-efficient way.

6. Member States must ensure that citizens have sufficient access to advice on technical and financial aspects of setting up RECs. To the extent that RECs already provide guidance, training and information to the broader public on benefits to becoming active through production or demand side management, Member States should provide finance and capacity support so these initiatives can be scaled up.

ANNEX – National Legal Studies

Deliverable 6.3

National Policy Recommendations

Citizens Energy Communities in Italy

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

Italian provisions on energy efficiency

Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012 establishes a common framework of measures for the promotion of energy efficiency (EE) in order to ensure the achievement of the Union's EE target of 20 % by 2020 and to pave the way for further EE improvements beyond that date.

Directive 2012/27/EU has been transposed in Italy by Lgs Decree 102/2014, subsequently amended by Lgs Decree 141/2016. Both the provisions are the base for all the actions put in place by the legislative authority to effectively promote efficiency intervantions, both in the public and in the private sector (either enterprises or citizens).

Even though it has been registered a delay in transposing Directive 2012/27/EU into national law, Italy today is not facing significant legal barriers to efficiency and renewables interventions. Having said that, some main issues need to be considered in order to improve energy performances.

Decree 102/12 allocated to the Italian Regulatory Authority for Energy, Networks and the Environment (ARERA) specific functions as regards district heating and cooling; within this context, the Authority also exercises control, inspection and sanctioning functions as provided for by the law establishing its jurisdiction, and exercises sanctioning powers under Article 16 of Decree 102/2014.

The Italian Regulatory Authority for Energy, Networks and the Environment (ARERA) work focuses on ensuring the promotion of competition and efficiency in the energy sectors, as well as ensuring uniform availability and distribution of the services, for all regulated sectors and throughout the country. The Authority also establishes adequate levels of quality for services, certain and transparent tariff schemes based on predefined criteria, while promoting user and consumer protection. These functions are performed by harmonising the economic and financial goals of the operators with more comprehensive objectives, with a focus on social issues, environmental protection and efficient use of resources.

Referring to energy sector, the Authority regulates the areas of competence, through rulings (resolutions) and, specifically:

- It establishes the tariffs for the use of infrastructures and guarantees equal access for operators;
- Defines the criteria for determining the users' fee for connection to the district heating network and the procedures for exercising the right to "disconnection";
- Ensures advertising and transparency of service conditions;
- Promotes higher levels of competition and more acceptable safety standards in procurement, with particular attention to harmonizing regulation for the integration of markets and networks internationally;
- Establishes provisions on accounting separation for the electricity and gas sectors, the water sector and the district heating service, as well as on the compulsory functional separation for the electricity and gas sectors;
- Defines the minimum quality levels for services in terms of technical and contractual aspects and the service standards;
- Encourages the rational use of energy, especially with regard to the dissemination of energy efficiency and the adoption of measures for sustainable development;
- Until the complete opening of the markets scheduled for July 1, 2020, it updates the reference economic conditions for customers who have not chosen the free market in the energy sectors, on a quarterly basis;
- Increases levels of protection, awareness and information to consumers;

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- Monitors, supervises and controls the service quality, safety, access to networks, tariffs, incentives for renewable and similar sources, including in collaboration with Tax Police and other bodies, including Fund for Energy and Environmental Services (CSEA) and the Energy Services Manager (GSE).

In art. 9 of decree 102/2014 legislator specify that ARERA must define specifications so that smart meter reading and standards are guaranteed from DSOs in order to:

- Provide to final customers detailed information on actual consumption
- Make energy efficiency target and consumers benefits fully considered in defining the basic functionalities of meters and requirements to be followed by market players;
- Guarantee meter safety and data protection accordingly with legislation in force;
- Wheter requested by final customer, give access to data on energy delivered to the grid;
- Data on energy either delivered or withdrawed from the grid are made available, comprehensible, and comparable with other offers, to customer or to third parties in charge;

All above means that, whereas today the DSO provides consumption data to suppliers and customers on a monthly base, in a few years this improvement will allow citizens to know accurately their consumption curve with data available every 15 minutes. The access to nearly real time data will be very helpful in order to detect avoidable waste of energy or to evaluate case by case the opportunity of producing and autoconsuming renewable energy.

The newly Regional law of Piedmont on energy communities 12/2018 has the aim to allows private citizens to become more confident with rational use of energy. At this purpose, those communities that will better know their consumption profiles, thanks to appropriate measurement tools, will be the first capable to respond successfully to energy need of their territory.

Clean Energy Package

Thanks to the new Clean Energy Package, agreed by the EU in 2018, Citizens and energy communities have the right to produce, consume, sell and store renewable energy are all now.

The Electricity Market Directive (EU) 2018/2001 introduces the definition of ‘active customer’ as a “final customer or a group of jointly acting final customers who consume or store electricity generated within their premises located within confined boundaries or where allowed by Member States, on other premises, or sell self-generated electricity or participate in flexibility or energy efficiency schemes, provided that these activities do not constitute their primary commercial or professional activity”.

In the Electricity Market Directive 'Citizens energy community' (CEC) are acknowledged as legal entities based on voluntary and open participation, effectively controlled by shareholders or members who are natural persons, local authorities, including municipalities, or small enterprises and microenterprises. The primary purpose of a citizens energy community is to provide environmental, economic or social community benefits for its members or the local areas where it operates rather than financial profits. A citizens energy community can be engaged in electricity generation, distribution and supply, consumption, aggregation, storage or energy efficiency services, generation of renewable electricity, charging services for electric vehicles or provide other energy services to its shareholders or members.

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The revised Renewable Energy Directive (REDII) contains several new definitions that acknowledge different ways that citizens can get involved in renewables:

• Individually: People, families and SMEs (small and medium-sized enterprises) will be able to install their own renewable energy system on their roofs or premises.

• By acting jointly in a building: the directive recognises that for the over 40% of Europeans living in apartment blocks, acting together to install renewable technology may be the best way to benefit from renewable energy.

• Through a renewable energy community: People, local authorities and SMEs can set up a legal entity in order to collaborate in the production of renewable energy. Through an energy community, citizens can now generate financial resources in order to provide services or to meet local needs. The directive also gives the option for companies to install renewable energy technologies on private houses.

• Aggregators, a market participant that can pool smaller independent producers together, can help to optimise the use of their installations, and advise them on when it is best to consume, sell or store the generated electricity.

• Peer-to-peer trading: This system allows consumers to trade renewable energy among themselves without a middleman, resulting in higher payments and quicker payback periods.

The REDII requires that by 30 June 2021, Member States need to transpose the laws (and the citizen energy rights). EU Member States to put in place enabling frameworks that support citizens and communities investing in renewables.

Governments are invited, but not required, to develop objectives for renewable energy produced by self-consumers and energy communities. This provides a unique opportunity for citizens to advocate for a high level target for self-consumption, or for community ownership.

In order to remove legal, technical, social, cultural obstacles to the implementation of energy communities, ènostra, will involve all crucial stakeholder on a pilot project where a certain number of customers with a consumption profile corresponding to the production profile of photovoltaic systems (e.g. industrial or residential customers with heat pumps and/or electric vehicles) will be aggregated within the perimeter of a primary distribution cabin. This should lead to maximise the real time consumption with advantages in terms of lower energy price and potential benefit on network tariffs for avoided costs of dispatching and transport on the national transmission system and avoided network losses. The result of the case study will help to propose specific amendments on NECP

Action on Italian National Energy and Climate Plan

The next stage for EU Member States is to begin transposing and revising their national laws to ensure they are consistent with the new EU legislation.

While doing so, Member States are required to deliver the ‘national energy and climate plans’ (NECP) to the EU Commission containing objectives, policies and measures showing how they aim to meet their 2030 renewables, energy efficiency and greenhouse gas targets. These have to include objectives, policies and measures to support self-consumption and renewable energy communities. By the end of 2019, national governments are expected to deliver finalised plans for their NECPs.

Last January Italian Government has submitted to Bruxelles the first draft of its NECP. In 2019 will be organized: 1) wide public consultation, including local authorities, through the institutional NECP web site platform 2) public auditions with Italian Parliament 3) thematic meeting with energy and climate stakeholders 4) public consultation on the Environmental

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Report of the NECP elaborated in the framework of the Strategic Environmental Assessment (SEA).

The dialogue with the Parliament will benefit from the work performed by the Commission X of the Chamber of Deputies, aimed to understand how the following target can be met: delivery to the market of sustainable technologies, improvement of energy efficiency, ensure energy security and flexibility and reduce energy costs. A dialogue with regions and municipalities will start in order to share targets and some measures.

Year 2019 is therefore the moment to propose amendments, integration and to work on more ambitious objectives.

Right of renewable communities: have the right to engage in generating, storing, consuming (including self-consuming) and selling renewable energy. They also have the right to access suitable markets individually or through aggregation. Significantly, energy communities now have the right to share energy. This is a new opportunity, as energy sharing is still illegal in most countries. As this provision is quite vague, citizens have the responsibility to come forward with detailed proposals (e.g. including virtual net metering, which is currently possible in Greece; peer-to-peer energy trading, etc.). For this to be effective, EU Member States need to ensure that grid operators cooperate with energy communities.

Right of citizens: every citizen has the right to participate in a renewable energy community without discriminatory conditions, and must be able to keep their consumer rights. This is important because as a member of an energy community, they are engaging in an economic activity and, as such, they could be vulnerable to losing energy-related consumer rights. All members should have equal standing within the community itself, meaning that there should be no discriminatory treatment among members. Citizens also have a right to information, awareness raising, guidance and training, to help them to exercise their rights.

According to the directive, these enabling frameworks have to cover a number of points:

• Reduction of unjustified regulatory and administrative barriers. Once identified by an assessment, unjustified administrative and regulatory barriers to the development of renewable energy communities must be removed.

• Non-discrimination. Renewable energy communities must not be discriminated against in their activities particularly by other market actors (e.g. DSOs or utilities), but also by governments.

• Fair, proportionate and transparent licensing and registration procedures. When assessing licensing requirements and other rules for renewable energy communities, Member States must ensure that these do not disproportionately burden energy communities.

• Fair, proportionate, transparent and cost reflective network and other charges.

Member States must ensure that energy communities' contributions to network and other system costs are fair. These have to be determined through a cost-benefit analysis, which provides an opportunity to frame energy communities in terms of the benefits they can provide to the energy system and the community (see pilot project). If the national energy regulator conducts this analysis, it is governed by specific transparency, participation and accountability rules.

• Access to finance and information. Since many communities do not know where to start when it comes to technical and financial aspects of setting up an energy community, enabling frameworks should propose ways of ensuring that these issues are dealt with. In particular, many communities struggle to fund feasibility studies, which determine whether developing a

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project is possible. This is an opportunity for citizens to advocate for the establishment of funds or investment support such as favourable loans, grants, or tax reductions for members' investments.

• Access for citizens that are vulnerable, energy poor, or tenants. Energy communities must provide opportunities to ensure that vulnerable and energy-poor households can participate. Many REScoops also use renewables to address energy poverty. Ideally, Member States should put in place specific policies and measures to promote this, but it will be up to citizens to advocate for specific ideas.

Opportunities

Revolving funds: Denmark, Scotland, England and the Netherlands recognise the financing challenges faced by energy communities and have included revolving funds in their plans and policies in order to finance upfront project development costs (e.g. feasibility studies, obtaining permits). These funds often come in the form of grant-to-loan schemes in order to limit investment risks for communities.

Tackle fuel poverty: developing solidarity schemes to help vulnerable members with their energy bills, by providing services and education to their members on reducing their consumption, and using revenue from renewable energy generation to improve the living standards of vulnerable and low income households.

Renewable support scheme: The REDII addresses this issue by requiring EU Member States to take the specificities of renewable energy communities into account when they are developing support schemes. Member States should provide measures to ensure that energy communities can compete for support on an equal footing with other market participants. If they fail to assess how the design of their support schemes impact on energy communities, they could be subject to legal action.

The role of local authorities

Local authorities are proving to be a key player for democratisation of energy. Thanks to the new REDII they both gain legal leverage to support new business models around community control and ownership of renewable energy, and they gain the right to participate as shareholders in renewable energy communities. Involving local authorities can build trust and legitimacy for projects and can link with broader political strategies and plans for decarbonisation and scaling up of renewables. To do this they should also be empowered to put in place local measures to support energy communities e.g. local planning, financial policies, or public procurement.

Local authorities gain from supporting community energy and not only because they deliver renewable energy or efficiency gains. In many EU Member States, community energy projects also help local authorities to tackle fuel poverty. As cooperatively-owned projects are often mission- rather than profit-driven, they regularly offer more favourable tariffs to vulnerable households while reinvesting in energy efficiency.

Main resources:

- *Italian draft of National Energy and Climate Plan (NECP)*
- *Decree 102/2014 on energy efficiency*
- *REDII and MDI EU Directives*
- *Booklet "Unleashing the power of community renewable energy" released by Friends of the Earth, Greenpeace EU, and Energy Cities, RESCoop Federation*

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Deliverable 6.3
National Policy Recommendations Flanders

Citizens Energy Communities in Flanders

For Ecopower: Jim Williame, Tom Willems, Dirk Vansintjan, Jan De Pauw, Geert Van den Berge.

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I. Definition of Citizens Energy Communities

Wind and solar energy are common goods. They belong to nobody and are therefore available to everyone. The exploitation of these renewable energy sources should therefore benefit the community and not just be privatised for the benefit of the few.

In the context of the European Energy Law and the Clean Energy Package, there is a recognition, acknowledgement and support of the role of citizens and communities in achieving the energy transition.

This gives an opportunity to introduce this in the Flanders legislation. It is advisable to come to one definition. With this definition specific rules for these Energy Communities are possible.

1. Citizens
In the Electricity Directive the Energy Community is named as a Citizens Energy Community. This feels as the closed definition to be sure that the Energy Community will for Citizens and not a group of companies.

2. Community
It should be a gathering of citizens in a community. It is not meant to be for individuals. This means that at least 7 members should be involved and that the number of members should be in accordance with the level of activity.

3. Open
In accordance with the principles of the cooperatives, the Community should be open for new members.

4. Autonomy
The Energy Communities should be autonomous from commercial companies. This is reflected in the statutes, the projects and the board of directors.

5. Democratic
A Citizens Energy Community should be democratic. This means one person, one vote or another way of having a democratic way of working. It could be acceptable to have more votes for larger shareholders, but never with more than 10% of the votes in one hand.

6. Direct participation
The members of the Citizens Energy Community should participate directly in the assets of the community.

7. SME
The Citizens Energy Community should be a small or medium enterprise. It could also be an organisation or an association of co-owners.

II. Overview of relevant elements in Clean Energy Package

The Renewable Energy Directive

The Renewable Energy Directive explicitly acknowledges the potential for renewable energy communities to advance energy efficiency in households and address energy poverty (Recital 53a). In Article 22, Member States are required to develop an 'enabling framework' for renewable energy communities, which must ensure, inter alia: the reduction of unjustified regulatory and administrative barriers for energy communities, and that participation in renewable energy communities is accessible to low-income and vulnerable households. These provisions provide opportunities for the development of national and local level initiatives that empower energy communities to include, and to help, vulnerable and energy poor households, through energy efficiency interventions.

The Governance Regulation

The enabling framework mentioned above must be included by Member States in their integrated reports on NECPs that is required under the Governance Regulation.

In addition, under Annex I Part I 3.2 of the Governance Regulation, in their NECPs Member States must, where applicable, include policies and measures to support the role of energy communities in achieving other energy efficiency policy objectives. Concretely, this means that in their NECPs Member States should include policies and measures to:

- support participation by energy communities in energy efficiency schemes and alternative measures with a social purpose under Article 7 of the EED;
- Support energy communities in the renovation of public and private buildings;
- Promote the delivery of energy efficiency services by energy communities;
- Promote participation by energy communities in the delivery of energy efficient public procurement; and
- Support energy communities in undertaking information and training measures for citizens.

III. How does existing legislation complies with the new measures

Belgium

Belgian legislation includes the cooperative as a form of enterprise. To the light of the 7 ICA principles it leaves a lot of possibilities to create a cooperative that is far from these principles. It doesn't need to be open or transparent. It doesn't need to be democratic. There are many examples were the cooperative is not autonomous. It can be a financial vehicle.

There is a recognition by the National Council for Cooperatives possible. This gives control on the open character of the cooperative and the democratic rules.

Despite the fact that the legislation is not perfect, it is good that the type of company is recognised. There are organisations such as Coopkracht that form a network of cooperatives that work according to the principles of ICA.

New company legislation is being drafted in Belgium, in which the cooperative may no longer be included as a form of company. This would be a step backwards.

Flanders

There is no legislation the recognises groups of citizens as an actor in the development of renewable energy or energy savings. Though in the Flemish parliament groups of citizens are often named.

Energy of wind and sun are not validated as a natural resource that is owned by the community.

Renewable energy can receive green certificates, following the Flemish legislation. In some cases a cooperative can receive a slightly higher amount of green certificates, because the operational cost is assumed to be higher.

Local administrations

Some local administrations vote rules to give specific rights to Energy Communities. When it comes to decisions, the Flemish Government doesn't recognise these decisions, because it is not the competence of the local administrations.

Also in public tenders, some local administrations insert rules to promote Energy Communities. Usually these are detours to reach the goal they want, because Energy Communities are not included in any legislation.

IV. Relevant policies and measures that can help the work of REScoops

Differentiated targets for renewable energy

The renewable energy targets are divided into sub-targets per region. By establishing the Citizens Energy Communities, a set of extra sub-targets can be set for the Citizens Energy Communities. This can be a motivation to give extra support to projects in which the Citizens Energy Communities are involved.

Filling roofs with solar panels

If we want to install solar panels as much as possible in Flanders, the current legislation is not enough. Only very large-scale projects can – in specific conditions – be realised without local consumption of the production. For smaller projects, profitability depends on local consumption. There is a support with green certificates: 1000 kWh = 1 GC x banding factor. In the calculation of the banding factor for green certificates, it is assumed that 60% of the production is consumed locally and the profit is maximum 5%. This means that roofs are very often not filled with solar panels because there is insufficient local consumption for a profitable project. For the energy transition these roofs should be filled with solar panels.

On the other hand, we see that citizens who do not have a roof that is sufficient for installing solar cells (orientation, shade or other technical limitations) do not have the possibility to reduce their own consumption partly with solar panels. A great deal has already been thought up for this in the context of 'Sun Sharing', but it never came to a workable model.

Specifically for Citizens Energy Communities there could be a relaxation of the rules. There are various possibilities for this. An interesting possibility comes from Germany, with the system of 'under the same roof'. In the case of houses under the same roof (such as an apartment building) with solar cells on that roof that are owned by the residents, it is provided that there is also a deduction of distribution costs for the meters of the different individual houses. Of course in proportion to the electricity production that goes on the grid, the investment that the citizen has made and the consumption of that citizen (or a standard consumption). The investment can be made through an organisation that exists specifically for that building (e.g. an association of co-owners) or through a cooperative that complies with the rules of the Citizens Energy Community that includes (part of) the owners and also the common installation.

By extension, this can also be provided for exchange between homes behind the same medium-voltage cabin (or between two medium-voltage cabinets).

Banding factor for Citizen Energy Communities

Cooperatives are given a slightly higher banding factor for solar projects. This system can be further improved. First of all, these cooperatives can be expected to be Citizens Energy Communities to get the differentiated banding factor. A higher banding factor can then be attributed on the basis of production on the network (less than 60% consumption before the counter), the investment made by the citizens and the consumption of those citizens (or a standard consumption).

The result would be that Citizens Energy Communities can fill up roofs when in normal circumstances they would not be filled up. Other investors will ask Citizens Energy Communities to invest in their projects.

Decree on the use of the wind

Some larger companies have contracts on almost all open space in Flanders for the installation of wind turbines. They speculate on changing legislation or play citizens off against each other. They don't necessarily develop in a short time. They start when it suits them. The government has no power whatsoever to organise the development.

There is legislation in Flanders for the exploitation of natural resources, e.g. for the use of water, but not for wind, which belongs also to everyone. It would be logical for a government to attach an operating permit to the use of wind. The Flemish government can then determine conditions in which the citizen is put at the centre. There are already quite a few local authorities that put these kind of condition first. They ask that 50% of the investment is open to the citizens via a Citizens Energy Community. Optionally, a part of this (e.g. up to 25%) can be filled in by the local government.

Exemption for green certificates and CHP certificates for Energy Communities

Green certificates are used in Flanders to support renewable energy. Every supplier should submit a percentage of these quotum certificates for every MWh that is supplied to its customers. In 2019 it's 21,5%.

With solar cells on their own roof and through Citizens Energy Communities, citizens are increasingly becoming owners of installations that do not receive green energy certificates. Installations don't receive any certificates after 10 years and new solar installations on roofs of households (up to 10 kWp) don't receive any certificates.

Nevertheless, citizens are paying almost all the costs of the energy transition. The cost of the green certificates is mainly incorporated in the cost of electricity of household. Electricity supplied via a Citizens Energy Community could therefore be exempted from the submission of green energy certificates and combined heat and power certificates for the part of the electricity that comes from installations that do not receive green energy certificates (anymore).

Such an exemption is not exceptional. Large electricity consumers gradually pay less towards the cost of green certificates and combined heat and power certificates. It can therefore easily be included in the reporting.

This system ensures that older installations retain their value and continue to be operated. It also ensures that citizens can get a reasonable price for the electricity from their own solar cells, which they sell via the grid, after they have received a digital meter.

In addition, these small injections of private solar cells must also be covered by guarantees of origin. Otherwise, no green electricity would be supplied for the electricity bought from households.

Supporting initiatives for citizens

Many local authorities support citizens and citizens' initiatives. They want to put the citizen at the centre and also protect him or her. It would be logical that the Flemish government would also provide funding to support citizens' initiatives. Just think of 'Hier opgewekt' in the Netherlands.

Existing government investment organisations could be given the task of setting up a specific investment fund for Citizens Energy Communities. This can be very useful for starting Energy Communities or for larger projects of mature Energy Communities. Because the organisations will

collect public funding in the years to come, the funding can be returned. Therefor it can be a rolling fund.

At the same time, it seems appropriate to provide professional guidance for starting Energy Communities. For example via VLAIO. It would also be appropriate to foresee monitoring.

Property where wind turbines can be build or buildings where solar panels can be installed, owned by the government, should preferably go to Citizens Energy Communities.

When Citizens Energy Communities are clearly defined, they can also be targeted in tenders.

Deliverable 6.3

National Policy Recommendations

Citizens Energy Communities in Spain

Deliverable 6.3 National Policy Recommendations Spain

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I) INTRODUCTION

Energy efficiency is one of the five dimensions of the Energy Union, together with energy security, the internal energy market, decarbonisation and research, innovation and competitiveness (Article 1.2 Regulation 2018/1999).

It is defined as energy efficiency, the ratio of output of performance, service, goods or energy, to input of energy (Article 2.4 Directive 2012/27).

The main objective of the Union to improve energy efficiency is at least 32.5% in 2030 (Article 1.1 Directive 2012/27 and Article 2.11 Regulation 2018/1999).

By the principle "energy efficiency first", "*taking utmost account in energy planning, and in policy and investment decisions, of alternative cost-efficient energy efficiency measures to make energy demand and energy supply more efficient, in particular by means of cost-effective end-use energy savings, demand response initiatives and more efficient conversion, transmission and distribution of energy, whilst still achieving the objectives of those decisions*" (Article 2.18 Regulation 2018/1999).

Directive 2018/2001 defines renewable energy communities as legal entities whose shareholders or members of which are natural persons, SMEs or local authorities, including municipalities, based on open and voluntary participation, controlled by shareholders or members that are located in the proximity of the renewable energy projects and whose purpose is to provide environmental, economic or social community benefits for such shareholders or members. The Directive explicitly excludes financial profits from the concept of benefits (Article 2.16).

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II) EU legislative measures in the Energy Efficiency Directive, the Renewables Directive and the Governance Regulation that pertain to REScoops and their work on energy efficiency.

II.1.- Directive 2018/2001

Directive 2018/2001, approved on the same day as the Regulation on Governance, recognizes in paragraph 67 the opportunity it presents for renewable energy communities to advance energy efficiency at household level and help fight energy poverty, the regulation of collective self-consumption since it allows both the reduction of consumption and a decrease in supply tariffs[1]. And the same Directive, in paragraph 71, insists on the idea that renewable energy communities should be able to share the energy produced by community-owned installations between themselves[2].

These provisions find their concrete expression in the enacting part of the Directive, specifically in the definition of them made by Article 2.16[3], which attributes to these

[1] (67) **Empowering jointly acting renewables self-consumers also provides opportunities for renewable energy communities to advance energy efficiency at household level and helps fight energy poverty through reduced consumption and lower supply tariffs.** Member States should take appropriate advantage of that opportunity by, inter alia, assessing the possibility to enable participation by households that might otherwise not be able to participate, including vulnerable consumers and tenants.

[2] (71) The specific characteristics of local renewable energy communities in terms of size, ownership structure and the number of projects can hamper their competition on an equal footing with large-scale players, namely competitors with larger projects or portfolios. Therefore, it should be possible for Member States to choose any form of entity for renewable energy communities, provided that such an entity may, acting in its own name, exercise rights and be subject to obligations. To avoid abuse and to ensure broad participation, renewable energy communities should be capable of remaining autonomous from individual members and other traditional market actors that participate in the community as members or shareholders, or who cooperate through other means such as investment. Participation in renewable energy projects should be open to all potential local members based on objective, transparent and non-discriminatory criteria. Measures to offset the disadvantages relating to the specific characteristics of local renewable energy communities in terms of size, ownership structure and the number of projects include enabling renewable energy communities to operate in the energy system and easing their market integration. **Renewable energy communities should be able to share between themselves energy that is produced by their community-owned installations**. However, community members should not be exempt from relevant costs, charges, levies and taxes that would be borne by final consumers who are not community members, producers in a similar situation, or where public grid infrastructure is used for those transfers.

[3] 16) 'renewable energy community' means a legal entity: (a) which, in accordance with the applicable national law, is based on open and voluntary participation, is autonomous, and is

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communities, as a primary purpose, provide environmental, economic and social benefits, excluding obtaining financial gains. The primary role of these communities towards energy efficiency is clear: it is not about obtaining financial profits, projects are not treated as investment projects, but rather, they are aimed at promoting an improvement in energy efficiency, which happens, mainly, through the promotion of energy saving and for self-generation of energy.

Article 15.3[4] provides that Member States shall ensure that their competent authorities at national, regional and local level include provisions for the integration and deployment of renewable energy communities and Article 18.6[5], that they carry out information actions to the citizens so that they become active consumers and of the modalities of developing and using of the renewable energies through, among others, of the renewable energy communities.

For its part, Article 22, in section 4 b), expressly provides for the possibility that renewable energy communities, beyond promoting the production of electricity from renewable energy sources, can provide, in addition to the supply service of energy or aggregation

effectively controlled by shareholders or members that are located in the proximity of the renewable energy projects that are owned and developed by that legal entity; (b) the shareholders or members of which are natural persons, SMEs or local authorities, including municipalities; (c) the primary purpose of which is to provide environmental, economic or social community benefits for its shareholders or members or for the local areas where it operates, rather than financial profits;

[4] Article 15.3. Member States shall ensure that their competent authorities at national, regional and local level include **provisions for the integration and deployment of** renewable energy, including for renewables self-consumption and **renewable energy communities**, and the use of unavoidable waste heat and cold when planning, including early spatial planning, designing, building and renovating urban infrastructure, industrial, commercial or residential areas and energy infrastructure, including electricity, district heating and cooling, natural gas and alternative fuel networks. **Member States shall, in particular, encourage local and regional administrative** bodies to include heating and cooling from renewable sources in the planning of city infrastructure where appropriate, and **to consult the network operators to reflect the impact of energy efficiency and demand response programs as well as specific provisions on renewables selfconsumption and renewable energy communities, on the infrastructure development plans of the operators**.

[5] Article 18.6. Member States, where appropriate with the participation of local and regional authorities, shall develop suitable information, awareness-raising, guidance or training programmes in order to inform citizens of how to exercise their rights as active customers, and of the benefits and practicalities, including technical and financial aspects, of developing and using energy from renewable sources, including by renewables self-consumption or in the framework of renewable energy communities.

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of demand, "other commercial energy services"[6]. To this end, Member States will have to provide a framework that encourages and facilitates the provision of such services. It can be easily deduced that from such regulatory provisions it follows that the Member States, among others, will have to allow renewable energy communities to acquire the status of energy service companies.

II.2.- Directives 2012/27 (energy efficiency) and 2010/31 (energy performance of buildings)

EU regulation of energy efficiency has also been subject to modifications. Directive 2018/2002 has modified Directive 2012/27 while maintaining, as mechanisms for achieving the new objectives of savings for the European Union[7], the right to choose to establish an energy efficiency obligations scheme - already foreseen in the initial wording

[6] Article 22.4. Member States shall provide an enabling framework to promote and facilitate the development of renewable energy communities. That framework shall ensure, inter alia, that: (a) unjustified regulatory and administrative barriers to renewable energy communities are removed; **(b) renewable energy communities that supply energy or provide aggregation or other commercial energy services are subject to the provisions relevant for such activities;** (c) the relevant distribution system operator cooperates with renewable energy communities to facilitate energy transfers within renewable energy communities; (d) renewable energy communities are subject to fair, proportionate and transparent procedures, including registration and licensing procedures, and cost-reflective network charges, as well as relevant charges, levies and taxes, ensuring that they contribute, in an adequate, fair and balanced way, to the overall cost sharing of the system in line with a transparent cost-benefit analysis of distributed energy sources developed by the national competent authorities; (e) renewable energy communities are not subject to discriminatory treatment with regard to their activities, rights and obligations as final customers, producers, suppliers, distribution system operators, or as other market participants; (f) the participation in the renewable energy communities is accessible to all consumers, including those in low-income or vulnerable households; (g) tools to facilitate access to finance and information are available; (h) regulatory and capacity-building support is provided to public authorities in enabling and setting up renewable energy communities, and in helping authorities to participate directly; (i) rules to secure the equal and non-discriminatory treatment of consumers that participate in the renewable energy community are in place.

[7] Article 7 Energy savings obligation 1. Member States shall achieve cumulative end-use energy savings at least equivalent to: (a) new savings each year from 1 January 2014 to 31 December 2020 of 1,5 % of annual energy sales to final customers by volume, averaged over the most recent three-year period prior to 1 January 2013. Sales of energy, by volume, used in transport may be excluded, in whole or in part, from that calculation; (b) new savings each year from 1 January 2021 to 31 December 2030 of 0,8 % of annual final energy consumption, averaged over the most recent three-year period prior to 1 January 2019. (…)

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of the Directive - or to adopt alternative policy measures - also foreseen in the previous wording of the Directive - (see articles 7a and 7b)[8].

The energy efficiency obligations scheme will affect obligated parties, among others, energy distributors and retail energy sales companies, to which the Member States must set, for each of them, a required amount of savings, both in terms of primary energy consumption and in terms of final energy consumption (Article 7a).

The alternative policy measures to this obligations scheme may or may not be related to taxation and require that energy savings be achieved among the final customers (Article 7b) (the initial wording of the Directive related the set of possible policy measures, list that has now been removed[9]).

As for the energy performance of buildings, Directive 2018/844 amends Directive 2010/31 and redefines the obligation on Member States need to develop a strategy for *Long-term renovation strategy* (Article 2a), to support the renovation of the national stock of residential and non-residential buildings, both public and private, into a highly energy efficient and decarbonised building stock by 2050, facilitating the cost-effective transformation of existing buildings into nearly zero-energy buildings[10]. (The initial wording of Article 4 of Directive 2012/27 already contemplated such obligation but Article

[8] Directive 2012/27/EU defines policy measure as follows: Article 2 18) 'policy measure' means a regulatory, financial, fiscal, voluntary or information provision instrument formally established and implemented in a Member State to create a supportive framework, requirement or incentive for market actors to provide and purchase energy services and to undertake other energy efficiency improvement measures;

[9] Article 7.9 2º paragraph: The policy measures referred to in the first subparagraph may include, but are not restricted to, the following policy measures or combinations thereof: (a) energy or CO2 taxes that have the effect of reducing end-use energy consumption; (b) financing schemes and instruments or fiscal incentives that lead to the application of energy-efficient technology or techniques and have the effect of reducing end-use energy consumption; (c) regulations or voluntary agreements that lead to the application of energy-efficient technology or techniques and have the effect of reducing end-use energy consumption; (d) standards and norms that aim at improving the energy efficiency of products and services, including buildings and vehicles, except where these are mandatory and applicable in Member States under Union law; (e) energy labelling schemes, with the exception of those that are mandatory and applicable in the Member States under Union law; (f) training and education, including energy advisory programmes, that lead to the application of energyefficient technology or techniques and have the effect of reducing end-use energy consumption.

[10] Article 2.2) Directive 2010/31. 'nearly zero-energy building' means a building that has a very high energy performance, as determined in accordance with Annex I. The nearly zero or very low amount of energy required should be covered to a very significant extent by energy from renewable sources, including energy from renewable sources produced on-site or nearby;

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2a introduced to Directive 2010/31 by Directive 2018/2002, extends the scope of this Strategy, linking it to the objective of having to get nearly zero-energy buildings).

One of the elements to take into consideration in the framework of this Strategy will be **energy performance contracts**. The need to promote these contracts is referred to in Directive 2018/2002 in its explanatory memorandum, paragraph 4[11]. A first step to promote this type of contracts in the public sector was taken by the European Commission, specifically by its Statistical Office, which on September 19th, 2017, published some explanatory notes on how to record these contracts in national accounts. We attach the link http://europa.eu/rapid/press-release_MEMO-17-3269_en.htm[12]. Directive 2018/2001 also calls for the use of these contracts by regional and local authorities to achieve more ambitious renewable energy targets (see paragraph 62) [13].

II.3.- Regulation 2018/1999

Where the relation between renewable energy communities and energy efficiency is most clearly expressed, in the regulation of the European Union, is in Regulation 2018/1999. According to this regulation, the MS are required to have an Integrated National Energy and Climate Plan (NECP) by December 31st, 2019 (Article 3.1). As of December 31st, 2018, the draft plan should have been submitted to the Commission (Article 9.1).

[11] (4) Reaching an ambitious energy efficiency target requires barriers to be removed in order to facilitate investment in energy efficiency measures. One step in that direction is the clarification provided by Eurostat on 19 September 2017 on how to record energy performance contracts in national accounts, which removes uncertainties and facilitates the use of such contracts.

[12] The main complaint of the MS was that the accounting rules for public contracts required that all investment in energy rehabilitation be computed as public expenditure, even if this investment was undertaken and financed, in whole or in part, by the private sector, unless the investment represented 50% of the value of the asset after the performance. This fact entailed a brake on the actions in energy efficiency by the public sector, and therefore, hindered the development of the market for energy services in countries that, like Spain, were subject to strict fiscal discipline (as stated in the National Action Plan for Energy Efficiency 2017-2020).

[13] (62) Regional and local authorities often set more ambitious renewable targets that exceed national targets. (…) . Other innovative measures to attract more investment into new technologies, such as energy-performance contracts and standardisation processes in public financing, should also be considered.

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The NECP must include a section on policies and measures focused on energy efficiency (Article 3.1 in relation to Annex I section 3.2). This section must also include a **description of policies and measures to promote the role of local energy communities in contributing to the implementation of the following policies and measures**:

i. **Energy efficiency obligation schemes and alternative policy measures** in accordance with Articles 7a and 7b and Article 20, paragraph 6, of Directive 2012/27/EU and pending preparation in accordance with Annex III to this Regulation

ii. **Long-term renovation strategy to support the renovation of the national stock of residential and non-residential buildings (both public and private),** including policies, measures and actions aimed at stimulating efficient renovations in in-depth costs and policies and actions aimed at the segments with less performance of the national stock of buildings, in accordance with article 2a of Directive 2010/31/EU

iii. Description of **policies and measures to promote energy services in the public sector and measures to remove the regulatory and non-regulatory barriers that impede the uptake of energy performance contracting and other energy efficiency service models**

iv. **Other policies, measures and programs envisaged to achieve the indicative national contributions energy efficiency by 2030 and other objectives** presented in section 2.2 (e.g. Measures to promote the exemplary role of public buildings and energy-efficient public procurement practices, measures to promote energy audits and energy management systems, consumer information and training measures and other measures to promote energy efficiency).

It is therefore observed that the European Union legislator has expressly linked the communities of renewable energy and energy efficiency through the provisions that should be contained in the Integrated National Energy and Climate Plan.

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III) Gap analysis of how existing national legislation and policy complies with the new relevant EU legislative measures on REScoops and energy efficiency

In accordance with the regulatory provisions described in the previous sections, it will have to be in the NECP where the Spanish State identifies its strategies for energy efficiency and sets out what the participation of the renewable energy communities should be.

Once this document has been analyzed, it will be possible to assess whether the Spanish State has complied with the demands of the European Union on the role of renewable energy communities in energy efficiency policies. All of this without prejudice to the fact that this plan must derive the appropriate legislative measures to comply with what has been established there and it will be through the analysis of these legislative measures and their level of execution, that it will become possible to determine, in a definitive manner, the fulfillment of the demands of the European Union in this sector.

Although the Spanish State had the obligation of submitting a draft NECP to the European Commission before December 31st, 2018, this obligation today has not yet been fulfilled. The Spanish Council of Ministers approved the NECP project at the meeting held last Friday, February 22nd. And it has not been until this same date that the document entitled *Draft of the Integrated National Energy and Climate Plan 2021-2030* (https://www.miteco.gob.es/es/cambio-climatico/participacion-publica/documentoresumendelborradorplannacionalintegradodeenergiayclima2021-2030_tcm30-487345.pdf has been made public). Coinciding with the submission of the Plan to the European Commission, a consultation process that ends on March 22nd has been opened. Citizen participation will have a second phase throughout 2019, within the framework of the strategic environmental assessment of the plan. What emerges is that the analyzed is a document far from being closed and is still subject to change.

Together with the draft of the NECP, the Draft Act of the Climate Change and Energy Transition Act (https://www.miteco.gob.es/es/cambio-climatico/participacion-publica/1anteproyectoleyccyte_tcm30-487336.pdf), and the Draft of the Just Transition Strategy (https://www.miteco.gob.es/es/cambio-climatico/participacion-

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publica/5borradorestrategiatransicionjusta_tcm30-487304.pdf) have also been approved. Both documents have a significant impact on energy efficiency.

Given this situation, in a first section we will analyze the Draft of the NECP, the Draft Act of the Climate Change and Energy Transition Act, and the Draft of the Just Transition Strategy. In a second section, we'll analyze the current regulations and identify the modifications that should be introduced in ones and others to comply with Regulation 2018/1999, Directive 2012/27, Directive 2010/31 and Directive 2018/2001.

III.1.- Draft Act on Climate Change and Energy Transition, draft of NECP 2021-2030 and draft Just Transition Strategy.

Regarding energy efficiency, the Spanish State, through the Draft Act of the Climate Change and Energy Transition, seeks to contribute to the improvement in energy efficiency of 32.5% set in the Union of energy for the year 2030 through a reduction of primary energy consumption for the referred year by at least 35% with respect to the baseline in accordance with EU regulations (Article 3). This objective goes in parallel to achieving a penetration of renewable energy sources in the final energy consumption mix of at least 35% and, by 2050, it is expected that the electrical system is based exclusively on generation sources of renewable origin.

In this document, the NECP is incorporated into the Spanish legal system - despite the fact that Regulation 2018/1999, by definition, is of directly applicable - and its approval is foreseen through a Royal Decree (Article 4).

In terms of public procurement (Article 25), the preliminary draft of the Act provides that the General State Administration and all the bodies and entities of the state public sector include amongst their award criteria "the savings and energy efficiency that propitiate a high level of thermal insulation in buildings, renewable energies and low emissions of the facilities".

Looking now at the NECP document, it foresees that 37% of the more than 230,000 million euros foreseen for the period between 2021 and 2030 in concept of investments are destined to investment in savings and efficiency.

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The NECP adopts as objectives the 32.5% improvement in energy efficiency contained in the EU directives, although it maintains that, with the proposed measures, it is expected that a **39.6%** improvement in the year 2030 will be achieved.

Regarding renewable energy communities, which are also named as **energy communities**, the NECP expressly provides, within the specific measures for promoting renewable energies, and more specifically within the *development of self-consumption with renewable and distributed generation (Measure 1.3),* the development of local energy communities through the promotion of shared self-consumption, the rationalization of economic and administrative burdens and the promotion of empowerment and training for local energy communities so they can have the necessary resources to manage projects and mobilize investments. The NECP also foresees that the energy communities will play an important role in the development of district heating and cooling systems (*Measure 1.5 Framework for the development of thermal renewable energies*) and specifies that such development will be carried out through a normative development. It also includes as one of the measures that will affect these communities the simplification of administrative procedures to streamline projects and avoid unnecessary burdens and barriers or regulatory gaps that prevent the participation of these communities (*Measure 1.11 Revision and simplification of administrative procedures*). In the section dedicated to the Dimension of the internal market for energy, it is also foreseen, in *Measure 4.4, the integration of the electricity market*, the promotion of consumers participation in the electricity market through self-consumption and renewable energy communities, as already advanced by Royal Decree Law 15/2018 with the elimination of the barriers for self-consumption.

We observe that the NECP delegates in subsequent instruments (normative and planning) the concretion of the energy communities intervention regarding electric power generation. We do not find in the NECP a concretion of the requirement contained in Regulation 2018 / 1999 on the obligation to specify the intervention of these communities regarding energy efficiency in the terms set forth in section II.3 above. In the section on measures related to energy efficiency (3.2 Dimension of energy efficiency), we find no specific mention to these communities but only, and as a horizontal measure, the promotion of energy services that will include, among others, a new regulation in terms of self-consumption that should allow the figure of the **energy prosumer** -or active consumer as a consumer and producer- and the **aggregator** and, in short, of new

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business models around the generation of energy from renewable sources and the reduction of demand.

III.2.- Spanish Regulations

- Electricity Sector Act 24/2013, of December 26th (Article 50 and Third Final Provision).

- Royal Decree-Law 6/2010, of April 9th, on measures for economic recovery and employment (articles 19 - energy services companies - and 20 - specialties in the contracting of energy services companies in the public sector) (Validation agreement published by Resolution of July 10, 2014).

- Royal Decree- Law 8/2014, of July 4th, on the approval of urgent measures for growth, competitiveness and efficiency (Articles 69 to 86, which regulate, the national system of energy efficiency obligations, other measures in subject of energy efficiency and a sanctioning regime).

- Act 18/2014, of October 15th, approving urgent measures for growth, competitiveness and efficiency (articles 69 and ss).

- Royal Decree 56/2016, of February 12th, transposing Directive 2012/27 / EU of the European Parliament and of the Council, of October 25, 2012, on energy efficiency, in relation to audits energy, accreditation of service providers and energy auditors and promotion of energy supply efficiency.

- National Action Plan for Energy Efficiency 2017-2020

III.3.- Promotion of renewable energy communities.

Article 15.3 Directive 2018/2001 expressly provides that Member States have to ensure that state, autonomous (regional) and local authorities adopt provisions to promote renewable energy communities, whilst Article 18.6 established that Member States have

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to implement informational and awareness rising measures so that citizens become active consumers and, if appropriate, within the framework of renewable energy communities.

Although these measures have a broader scope than energy efficiency only, Public Administrations will certainly promote citizens awareness regarding renewable energy communities as active agents in the context of energy efficiency.

The Electricity Sector Act only contains a reference to these communities in its Third Final Provision, entitled "*New legal and economic regime of the production activity from renewable energy sources, cogeneration and waste with economic primacy*", recently introduced by Act 6/2018, of July 3rd, which states as follows:

> *6. The Government is enabled to provide, to all generation facilities owned by energy communities, understood as non-profit organizations, individuals, or small and medium-sized companies whose shareholders or majority members are individuals, local entities or provincial, or other small and medium-sized companies, a special compensation scheme as the indispensable mean for ensuring their necessary permanence in the power generation market.*

We observe that this law offers indeed a definition of energy communities, but it obviates its role as stakeholders of the energy efficiency dimension and focuses rather on the possibility of distributed generation and its intervention in the production market.

III.4.- Renewable energy communities as energy services companies

As discussed before, Directive 2018/2001 establishes in its Article 22.4 that renewable energy communities can provide "other commercial energy services" beyond the services of energy supply or demand aggregation.

We must bear in mind that the Directives, in context to European Union Regulations, are not directly applicable and must be transposed. However, once the maximum transposition period has been exceeded, they will produce direct effect. In the case of Directive 2018/2001, the maximum transposition period is June 30th, 2021.

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The aim here is to analyze if the current legislation of the Spanish legal system allows this type of communities to act as energy service companies and, in the case, it does not allow so, to present the necessary modifications.

The definition of energy service companies contained in Article 19 of RDL 6/2010[14] allows the inclusion of renewable energy communities, since they are endowed with their own legal personality and their main purpose - environmental, economic and social benefits - is fulfilled through their performance in the field of energy efficiency. Regarding the risk that the energy services companies assume by billing their services according to the achieved performance, this does not suppose any impediment for this type of communities, no matter which corporate form they adopt (association, cooperative, etc.). Regarding territorial scope in which they can provide their services, renewable energy communities are due to their partners and the local areas in which they operate (Article 2.16 c) Directive 2018/2001). Therefore, its action should be based, a priori, on such areas.

Royal Decree 56/2016 regulates the accreditation system for energy service providers and energy auditors. From a reading of the requirements for legal persons to be considered energy service companies, we observe that none of them has an impeding effect for renewable energy communities[15]. The same can be said regarding the

[14] Article 19. Energy service companies.1. Energy services company is understood for the purposes of this royal decree-law that nat**ural or legal person who can provide energy services**, in the manner defined in the following paragraph, **in the facilities or premises of a user and face a certain degree of risk economic when doing it**. All this, **provided that the payment of the services provided is based, either partially or totally, in obtaining energy savings by introducing energy efficiency improvements and in meeting the other agreed performance requirements.**

[15] Art. 7 RD 56/2016 Article 7. Requirements for the exercise of the professional activity of energy service provider. To exercise the professional activity of energy service providers, the following requirements must be met and documentation must be provided: a) Have the documentation that identifies the provider, which in the case of being a legal entity, must be legally constituted and include in its corporate purpose the activities related to the provision of energy services or to improve energy efficiency in a user's facilities or premises, and in the case of being a natural person being registered in the Employers' Census , Professionals and Retainers in any of the groups of Tax Rates on Economic Activities corresponding to the economic activities of providing energy services. b) Proof of an adequate technical qualification. i. In the case of a natural person, that qualification accredits fulfill any of the following conditions:

1st To hold a university degree or other undergraduate degrees, university degrees or master's degree in which knowledge in energy matters is taught.

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requirement to be licensed as installer or maintainer of thermal installations (air conditioning and hot water)[16]. Equally, there is not a need to facilitate or simplify the

2nd To have the theoretical and practical knowledge about energy, understanding that they possess such knowledge persons who accredit any of the following situations:

1st) Have a vocational training certificate or a certificate of professionalism included in the National Catalog of Professional Qualifications whose field of competence includes matters related to energy.

2nd) To have recognized a professional competence acquired by labor experience, in accordance with the stipulations of Royal Decree 1224/2009, of July 17, of recognition of professional competences acquired by work experience, in the field of energy.

ii. In the case of a legal person, the qualification will be considered accredited when at least one of the owners of the company complies with any of the conditions described above or the company has among the hired labor personnel with at least one person who complies with Some of them, who will be responsible for, with their signature, all the technical documents that the company must issue.

c) Be in a position to have the appropriate technical means to provide energy services in the area of activity in which the company acts, at the time of the concrete action. **d)** Be registered in the corresponding Social Security system, or corresponding professional, and up-to-date in the fulfillment of the obligations before the Social Security, for which the holder may authorize the competent body to collect information regarding the fulfillment of obligations against Social Security. **e)** If they are not citizens of a Member State of the European Union or of a State Party to the Agreement on the European Economic Area, and reside in Spain, comply with the provisions established in the current Spanish legislation on immigration and immigration. **f)** Have signed a civil liability insurance or other financial guarantee that covers the risks that may arise from their actions, for a minimum amount of 150,000 euros, in accordance with article 76 of Law 18/2014, of October 15, approval of urgent measures for growth, competitiveness and efficiency. The amount established will be updated by order of the Minister of Industry, Energy and Tourism, with prior agreement of the Delegate Commission of the Government of Economic Affairs, whenever necessary to maintain the economic equivalence of the guarantee. **g)** In the case of companies that provide **services that include installation and / or maintenance tasks, meet the requirements established for installation and / or maintenance companies in the Regulation of Thermal Installations in Buildings (RITE),** approved by Royal Decree 1027 / 2007, of July 20. When the energy services are provided by a Temporary Union of Companies (UTE), it will be sufficient that among its members the requirements established in the aforementioned Regulation are met.

[16] RD 1027/2007 Artículo 37. Requisitos para el ejercicio de la actividad. Para el ejercicio de la actividad profesional de instalador o de mantenedor, las empresas deberán cumplir los siguientes requisitos y disponer de la documentación que así lo acredita: **a)** Disponer de la documentación que identifique al prestador, que en el caso de persona jurídica, deberá estar constituida legalmente e incluir en su objeto social las actividades de montaje y reparación de instalaciones térmicas en edificios y/o de mantenimiento y reparación de instalaciones térmicas en edificios. **b)** Estar dados de alta en el correspondiente régimen de la Seguridad Social y al corriente en el cumplimiento de las obligaciones del sistema. En caso de personas físicas extranjeras no comunitarias, el cumplimiento de las previsiones establecidas en la normativa española vigente en materia de extranjería e inmigración. **c)** Tener suscrito un seguro de responsabilidad civil profesional u otra garantía equivalente que cubra los daños que puedan derivarse de sus actuaciones, por una cuantía mínima de 300.000 euros. **d)** Disponibilidad, como mínimo, de un operario en plantilla con carné profesional de instalaciones térmicas de edificios. **e)** En los casos que proceda, la empresa deberá disponer, en función del tipo de instalaciones que se instalen, reparen o mantengan, de personal Certificado conforme a lo dispuesto en el Real Decreto 795/2010, de 16 de junio, por el que se regula la comercialización y manipulación de gases fluorados y equipos basados en los mismos, así como la certificación de los profesionales que

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applicable administrative procedure to acquire such conditions since in both cases no ex ante authorization, but just the presentation of an affidavit[17] is required.

However, despite the fact that within the current regulation there are no impediments for energy communities to become energy services companies, it would be positive, for the purposes of increasing their visualization, to introduce an explicit reference to the possibility of them acquiring such condition, as well as to specify the obligation of the Ministry responsible for energy to have to promote their market incorporation, within the scope of action of these communities (basically, local). For this purpose, we propose to include following paragraph in Royal Decree-Law 6/2010, specifically in its article 19:

> *The Ministry of Energy Transition, through the Institute for the Energy Diversification and Saving, will promote the incorporation of energy communities in the sector of energy service companies in order to be able to carry out interventions in the field of renovation of energy building stocks from the local areas in which they operate.*

It is specified that this promotion is carried out through the IDAE since it is the institute that manages both the Energy Efficiency Fund (Article 73.2 Law 18/2014) and the different programs related to energy efficiency.

los manipulan. **f)** Para aquellas empresas que trabajen con instalaciones térmicas sujetas a este Reglamento y afectadas por el Real Decreto 138/2011, de 4 de febrero, por el que se aprueban el Reglamento de seguridad para instalaciones frigoríficas y sus instrucciones técnicas complementarias, y de conformidad con sus artículos 9, 11, y 14 la empresa instaladora/mantenedora térmica contará con los medios técnicos, y materiales de la I.F. 13, así como con el plan de gestión de residuos y en caso de trabajar con instalaciones térmicas que dispongan de un circuito frigorífico clasificado como instalación frigorífica de nivel 2, deberá tener suscrito un seguro de responsabilidad civil profesional u otra garantía equivalente que cubra los posibles daños derivados de su actividad por una cuantía mínima de 900.000 euros, y disponer también de Técnico Titulado Competente. A los efectos de acreditar el cumplimiento de los requisitos exigidos a las empresas instaladoras o mantenedoras a las que hace referencia este reglamento se aceptarán los documentos procedentes de otro Estado miembro de los que se desprenda que se cumplen tales requisitos, en los términos previstos en el artículo 17.2 de la Ley 17/2009, de 23 de noviembre, sobre el libre acceso a las actividades de servicios y su ejercicio.

[17] Art. 9 RD 56/2016 and art. 36 RD 1027/2007.

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III.5.- Renewable energy communities undertakings regarding energy efficiency in private buildings

Much of the regulatory focus, in the field of energy efficiency in buildings, has been placed in the public sector due to the consideration that the private sector was a mature sector[18]. Article 50 of the Electricity Sector Act, however, includes as one of the purposes that the energy saving and efficiency plans should pursue the "*Renew the energy systems of the residential and commercial building stocks, to increase the electric power saving and improve the energetic efficiency in the thermal installations of air conditioning, ventilation, illumination, elevators and others that use electrical energy* ".

Also, the new directives introduce the consideration of the need to deal with energy poverty through energy efficiency[19], affecting though this aspect to private sector buildings.

Renewable energy communities, which must pursue environmental, but also economic and social benefits (Article 2.16 of Directive 2018/2001), are called upon to play a relevant role in this area. This is explicitly recognized in paragraph 67 of the descriptive part of Directive 2018/2001 [20].

[18] National Action Plan for Energy Efficiency 2017-2020, p. 79. "*The actions to boost the market for energy services required by Directive 2006/32 / EC of the European Parliament and the Council, of 5 April, have been directed in Spain, preferably to the public sector, which is also required an exemplary role in the application of energy saving and efficiency measures and in the promotion of the contracting of energy services. The private sector has been considered, in our country, mature for the adoption of this business model, for having done, for twenty years, multiple financing projects for savings in processes of transformation of energy, cogeneration and renewable energy*."

[19] See the expositive section of Directive 2018/2002, specifically paragraphs 1, 23, 24 and 25 and art. 7.11 *(When devising action measures to fulfill their obligation to obtain energy savings, Member States should take into account the need to alleviate energy poverty, in accordance with the criteria they have established and taking into account their available practices in this regard. scope, demanding, to the appropriate extent, a quota of energy efficiency measures within the framework of their national systems of energy efficiency obligations, alternative action measures or programs or measures financed from a National Energy Efficiency Fund to be applied priority among vulnerable households, including those affected by energy poverty and, where appropriate, social housing, Member States will include information on the outcome of measures taken to alleviate energy poverty in the context of this Directive in your integrated situation reports in the field of energy and climate, in accordance with Regulation (EU) 2018/1999).*

[20] See footnote 1.

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In the previous section it has already been explained how there is a priori no impediment for these communities to become energy service companies. Nor is there any impediment to providing services to third parties (understood as those who are not partners), provided those third parties are located in the local areas where the communities operate (Article 2.16 Directive 2018/2001).

The only impediment will be to obtain the economic resources necessary to carry out such actions. To this end, the Directive itself already establishes that these actions are financed through the national systems of energy efficiency obligations, the alternative action measures or the National Energy Efficiency Fund (Article 7.11 Directive 2018/2002). It should therefore be analyzed how the Spanish State allocates public resources for these actions. Today, the IDAE has activated the PAREER II program whose objective is the promotion of energy efficiency in existing buildings and whose beneficiaries can be, among others, energy service companies. To the extent that energy communities can become energy service companies, they can also benefit from such lines of finance.

Given the obligation on the Member States to encourage these energy communities to become active in the field of energy efficiency, and given the role they can play in eliminating energy poverty, these programs should include specific provisions to finance this type of undertakings.

III.6.- Renewable energy communities' undertakings regarding energy efficiency in public buildings

We have already explained that many Public Administration´s efforts have focused on promoting energy efficiency in public buildings, considering the private sector a mature sector. That said, it is worth asking if it makes sense that renewable energy communities can submit tenders to Public Administrations to be awarded contracts for energy performance on public buildings.

Such undertaking would be possible as long as the intervention is carried out in a public building located in the local area where the community operates. None withstanding the fact that the community may have a territorial scope not specified in a particular locality or local area -to avoid unnecessary limitation of its scope of action-, it will be necessary

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indeed for its participation in a tender in a given area, that it can demonstrate a previous intervention in that given territorial area.

On the other hand, the limitations that could arise if a member of the renewable energy communities is a Town Hall or a local Administration of superior level should be taken into account.

A mechanism to promote this type of communities through Spanish public procurement legislation would be to introduce in Article 147 of the Public Contracts Act, a new award criterion for tie cases, that favors in those cases energy services company that are renewable energy communities. It would be a matter of configuring these communities as those companies that have a certain percentage of workers with disabilities in their workforce, insertion companies, non-profit organizations in the third sector, fair trade organizations or companies that promote equal opportunities between men and women.

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IV) Definition of renewable energies community of users.

It has already been stated in section III.3 that the Electricity Sector Act contains a single initial reference to energy communities in its Third Final Provision, introduced by Act 6/2018. This provision does not have the sole objective of introducing a legal definition of this type of community, but rather seeks to ensure that they can have a specific remuneration regime as owners of generation facilities.

For this reason, and in view of the European Union regulations, it is necessary to require the Spanish legislator to introduce in the Electricity Sector Act a definition of an energy community that includes all the areas in which they can act. The proposal is as follows:

> *Energy Communities: non-profit organizations, individuals or small and medium-sized companies whose shareholders or majority members are individuals, local or provincial entities, or similarly small and medium-sized enterprises, whose main purpose is to provide environmental, economic or social benefits to its members or the local areas in which they operate, instead of financial gains, through the promotion of renewable energies, the management of demand, shared self-consumption, the promotion of energy efficiency at household level, the fight against energy poverty and any other action aimed at favoring citizen participation in the electricity and energy efficiency sectors.*

The first part of the definition has been extracted from the aforementioned Third Final Provision of the Electricity Sector Act (*non-profit organizations, individuals or small and medium-sized companies whose shareholders or majority members are individuals, local or provincial entities, or similarly small and medium-sized enterprises)* and it has incorporated the purpose that these communities must pursue according to the definition of renewable energy communities contained in Directive 2018/2001 (*is to provide environmental, economic or social benefits to its members or the local areas in which they operate, instead of financial gains),* and the areas of action through which to achieve this purpose have been identified (*through the promotion of renewable energies, the management of demand, shared self-consumption, the promotion of energy efficiency at*

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household level, the fight against energy poverty and any other action aimed at favoring citizen participation in the electricity and energy efficiency sectors).

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V) Recommendations and policy asks to Spanish authorities

Picking up the exposed in the previous sections, the following proposals are listed:

- Incorporating in Spanish Act 24/2013, of December 26th, of the Electricity Sector, a precept dedicated to "communities of renewable energy users" or "energy communities", including its definition and having to contemplate, in this definition, all areas in which these communities can be involved: the promotion of renewable energies, the management of demand and the promotion of energy efficiency. The definition to add may be as follows:

  Energy Communities: non-profit organizations, individuals or small and medium-sized companies whose shareholders or majority members are individuals, local or provincial entities, or similarly small and medium-sized enterprises, whose main purpose is to provide environmental, economic or social benefits to its members or the local areas in which they operate, instead of financial gains, through the promotion of renewable energies, the management of demand, shared self-consumption, the promotion of energy efficiency at household level, the fight against energy poverty and any other action aimed at favoring citizen participation in the electricity and energy efficiency sectors.

- Incorporating of an explicit reference in Royal Decree-Law 6/2010, of April 9th, on the possibility that energy communities can become licensed suppliers and providers of energy efficiency services. For example, a section 2 bis could be added in article 19, which content could be as follows:

  The Ministry of Energy Transition, through the Institute for the Diversification and Saving of Energy, will promote the incorporation of energy communities in the sector of energy services companies in order to be able to carry out interventions in the field of the renovation of building parks in the local areas in which they operate.

- Promoting that part of the resources of the National Energy Efficiency Fund (financed in part by the system of energy efficiency obligations) be allocated to

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programs to promote the intervention of energy communities as energy services companies.

- Incorporating of an explicit reference in the Public Contracts Act, specifically in its article 147 tiebreaker criteria, that the specific award criteria for tiebreakers may favor proposals submitted by energy service companies that are energy communities.

- In compliance with Article 3.1, in relation to Annex I, section 3.2 of Regulation (EU) 2018/1999, require the concretion of policies and measures in the Integrated National Energy and Climate Plan 2021-2030, in order to promote the intervention of renewable energy communities in the following areas of energy efficiency:

    - Energy efficiency obligation schemes and alternative policy measures;
    - Long-term renovation strategy to support the renovation of the national stock of residential and non-residential buildings (both public and private);
    - Policy and measures to promote energy services in the public sector and measures to remove regulatory and non regulatory barriers that impede the uptake of energy performance contracting and other energy efficiency service models;
    - Other planned policies, measures and programmes to achieve the indicative national energy efficiency contributions for 2030.

To this end, the deadline for a first process of consultations on the Spanish draft of NECP (NECP) 2021-2030, ends on **March 22nd, 2019**. Throughout 2019 will open a second period of consultations and public information in the framework of the strategic environmental assessment of the Plan.

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Citizen Energy Communities in Portugal

Deliverable 6.3 National Policy Recommendations Portugal

Coopérnico - Cooperativa de Energia Renováveis Portuguesa

February 2019

Coopérnico and National context

Coopérnico is the first Portuguese renewable energy cooperative (REScoop) that combines its sustainability oriented and social nature with the support of solidarity, education and environmental protection projects. Coopérnico's mission is to engage citizens and companies in the creation of a new energetic, economic and social paradigm that benefits both society and the environment: renewable, efficient, fair and decentralized energy model.

Coopérnico has 3 main activity areas: renewable energy production, energy efficiency and commercialization (retail). Currently, Coopérnico has over 1200 members who have already invested in a total of 21 PV decentralized projects, up to 1,3 MWp (so far). All of these projects create environmental, economic and social value – the first for obvious reasons, the second because they are profitable projects and members get a reasonable return on investment and the latter through direct collaboration with educational or social economic organizations – and represent a rupture with the traditional models used for the promotion of RES projects in Portugal

Coopérnico is operating in the electricity supply market through an agreement with a supplier, acting as an aggregator but also generating all contractual procedures and customer support ourselves. The goal is now to become an independent supplier.

The National context is not favourable to energy cooperatives. Coopérnico faces several barriers as the first Portuguese REScoop with 5 years old of existence. Most of these barriers are regulatory and prevent market access by small players.

The energy sector in Portugal is highly dominated by large utility companies, and some of them have long lasting and deep relationships with Public Authorities and decision makers in the energy industry. As a result, the most popular model used in the Portuguese market puts aside citizen participation in the energy sector. Coopérnico is beginning to change that.

At the end of 2018 / beginning of 2019 the Portuguese government presented two very important documents for discussion. The first, the Roadmap for Carbon Neutrality 2050 (RNC2050). The main objective of the Roadmap for Carbon Neutrality 2050 (RNC2050) is to identify and analyse the implications associated with technically feasible, economically viable and socially accepted alternative trajectories, thus allowing the Portuguese economy to reach the objective of carbon neutrality by 2050. The second, the National energy and climate Plan (NECP), that will soon be available for public consultation.

In this national context the Clean Energy Package is even more important due to the fact that put more pressure on issues as Energy Communities, Energy Poverty, and new targets to Energy Efficiency and Renewables and Energy.

Overview of relevant elements in Clean Energy Package

The Renewable Energy Directive

The Renewable Energy Directive explicitly acknowledges the potential for citizens renewable energy communities to advance energy efficiency in households and address energy poverty (Recital 53a). In Article 22, Member States are required to develop an 'enabling framework' for these renewable energy communities, which must ensure, inter alia: the reduction of unjustified regulatory and administrative barriers for Citizens Energy Communities, and that participation in renewable energy communities is accessible to low-income and vulnerable households. These provisions provide opportunities for the development of national and local level initiatives that empower energy communities to include, and to help, vulnerable and energy poor households, through energy efficiency interventions.

The Energy Efficiency Directive

The Energy Efficiency Directive stresses the importance and the positive effects of Energy Efficiency as one of the five strategies of the European Union. It must be seen as an energy source that must be able to compete with other sources. Member states are obliged to make long term strategies for energy efficiency, following the principle of energy efficiency first (art. 1). "energy efficiency policies should be inclusive and should therefore ensure accessibility to energy efficiency measures for consumers *affected by energy poverty.*" (Recital 23)

The Governance Regulation

The enabling framework mentioned above must be included by Member States in their integrated reports on NECPs that is required under the Governance Regulation.

In addition, under Annex I Part I 3.2 of the Governance Regulation, in their NECPs Member States must, where applicable, include policies and measures to support the role of Citizens Energy Communities in achieving other energy efficiency policy objectives. Concretely, this means that in their NECPs Member States should include policies and measures to:

- Support participation by Citizens Energy Communities in energy efficiency schemes and alternative measures with a social purpose under Article 7 of the EED;
- Support energy communities in the renovation of public and private buildings;
- Promote the delivery of energy efficiency services by Citizens Energy Communities;
- Promote participation by Citizens Energy Communities in the delivery of energy efficient public procurement; and
- Support energy communities in undertaking information and training measures for citizens.

Opportunities for Portugal in the Clean Energy Package

1. High level objectives for energy communities

In the new Governance Regulation, Portugal is required to provide a certain level of transparency about how it will support citizen participation across the energy system, including in energy efficiency, renewables self-consumption and in energy communities, including measures to reduce unjustified barriers to participation. This must be based on an assessment not just of the barriers but also potential. Portugal is not required, but should include a 2030 objective/trajectories for RES produced by energy communities, self-consumers and cities.

National policy asks:

- ✓ National level 2030 target/trajectory/policy objective for RES production by renewable energy communities;
- ✓ An assessment of potential, and unjustified regulatory and market barriers for the development of energy communities and self-consumption by the national government;
- ✓ As a result of the assessment above, come up with an action plan that includes specific measures and policies to reduce market and regulatory barriers for energy communities;
- ✓ A definition of renewable/energy communities that reflects the cooperative/social enterprise/collaborative business model, while also allowing space for local authorities to set up and/or participate in energy communities. More specifically:
    - The definition should reflect an aim to promote social innovation, citizen/community empowerment, local social and economic development, and energy democracy
    - The definition should distinguish energy communities from other traditional market actors, particularly in terms of ownership, governance and purpose. (i.e. *effective local control, internal and external autonomy, openness based on non-discriminatory membership/participation, community aim/purpose*).
    - The determination of 'local' should not be too restrictive so as to arbitrarily limit participation.
    - The definition should prevent abuse from larger energy companies.

2. Specific enabling policies and measures (i.e. development of "enabling frameworks")

In both the Renewable Energy Directive and the Electricity Directive, there are requirements for Member States to put an 'enabling framework' in place so that energy communities are able to exercise specific rights. Portugal has to develop policies and measures that assist low-income and vulnerable households can benefit from, and can access, cheap renewables and energy efficiency services through participation in energy communities

National policy asks:

- ✓ A clear framework with fair conditions that give energy communities the ability and option to set up, operate and manage physical micro-grids, as well as virtual infrastructure that allows the energy community to aggregate different distributed resources and act like a virtual power plant. The framework should be flexible to allow energy communities to choose from different options depending on their level of professionalisation and ambition;

- ✓ A review of rules on concession contracts to operate/manage distribution networks/systems, to ensure they are clear, transparent, and provide a level playing field for energy communities, and which don't implicitly or explicitly discriminate against them. In this specific topic it is relevant to refer that the current concessions are expiring and the proposals that have been put forward by the regulator undermine the capacity of local energy communities to manage distribution networks by establishing a minimum of 600k consumers per concession;
- ✓ A mandate for the national regulator to monitor energy communities (including their numbers, growth, how they are different from other market actors, and the challenges they face operating in the market), and a mandate to report publicly on this information;
- ✓ Policies/measures to help tenants, and vulnerable and lower-income consumers, to participate in energy communities, (e.g. through collective self-consumption, solidarity mechanisms, etc), including incentives for developers and building owners, and financing tools (e.g. grants, loans, and incentives, such as a special tariff for consumers);
- ✓ Specific policies to encourage involvement of energy communities in energy efficiency and renovations in private and public buildings (including through energy efficiency obligation schemes, provision of energy services, information and training, partnerships with local authorities, and addressing energy poverty and vulnerable customers);
- ✓ Specific measures to support collaboration between cities/municipalities and citizen initiatives to develop energy communities (including through public procurement rules and guidance, as well as regulatory and capacity building support for local authorities).

3. Directly applicable rights that need to be effectuated

The Renewable Energy and Electricity Directive provides a set of specific rights that citizens or market actors can automatically rely upon.

National policy asks:

- ✓ Clarification of the legislation and market regulations so that energy communities are able to have fair and equal access to different markets (retail, balancing, forward, day-ahead, ancillary service, local flexibility markets) both individually or through aggregation;
- ✓ Measures/mechanisms to ensure all citizens (including vulnerable and low-income households) have easy to access and understandable information on how to exercise their rights to participate (including entering, leaving, dispute resolution) in an energy community, and support they can benefit from in order to participate, including practical information on technical and financial assistance;
- ✓ Ensure that in legislation/regulation the consumers can participate in an energy community without losing their status as a final consumer;
- ✓ Clear, understandable rules to ensure consumption (including collective) of self-produced renewables onsite (at least up until installations of 50 kW) is not charged any taxes or levies
- ✓ Legislation that defines an entitlement to engage in energy sharing by the energy community (using the grid and/or behind the meter, i.e. collective self-production/consumption/peer-to-peer trading/virtual net metering), including clear rules and procedures that establish how DSOs must support and facilitate these energy transfers.

4. Support schemes for renewable energy communities

The Renewable Energy Directive recognize that the support schemes for electricity from renewable sources or 'renewable electricity' have been demonstrated to be an effective way of fostering deployment of renewable electricity. Member States should established support schemes, including through the use of financial instruments, to facilitate investments in renewable energy projects.

National policy asks:

- ✓ A specific renewables support scheme should be developed for "renewable energy communities" so the citizens can participate on an equal playing field with other generators;
- ✓ Special access to a single administrative contact point to help guide renewable energy communities through participation in competitive bidding processes or other procedures for accessing support;
- ✓ A guarantee fund and other investment support to cover the sunk costs of renewable energy community participation in getting necessary permits to participate in the auction;
- ✓ Direct access to fixed remuneration (e.g. fixed Feed-in-tariffs) for smaller projects (250 kW) or for renewable energy community projects.
- ✓ Exemptions from participating in competitive bidding for smaller projects (1 MW and 6 MW or 6 generation units for wind energy) and/or for community energy projects.
- ✓ Community based bidding criteria (including citizen participation, local acceptance, return to the local community) in national auctions/tenders;
- ✓ A special bidding window for renewable energy communities in the auction/tender, with a certain amount or capacity being auctioned, so that RECs compete against each other instead of larger project developers.

5. Simplification of administrative procedures for community renewables projects

EU legislation sets general requirements for Member States to reduce administrative barriers for renewable energy projects. The revised rules have been reinforced, providing more specificity about what Member States must do, including the establishment of a single administrative contact point, the establishment of timelines for the approval of projects, and thresholds for simple notification of small installation projects. While thresholds for small installations is provided in provisions in the State aid guidelines regarding support schemes, EU legislation does not define 'small installations', therefore Portugal will have to define it.

National policy asks:

- ✓ A categorisation / definition of small installations that provides enough space for energy community projects (*at least* an installed capacity of less than 2 MW);
- ✓ Within the single administrative contact point for getting renewable energy community projects approved, a special window to handle applications and provide guidance for community and self-consumption renewable energy projects (either online or locally, e.g. through the local authority or a third party);
- ✓ Simplified/priority grid access procedures for renewable energy communities requesting access to the grid (that have an installed capacity of less than 2 MW);
- ✓ Simplified permitting requirements for installing renewable energy community projects (that have an installed capacity of less than 6 MW);
- ✓ Appropriate exemptions from licenses to build and operate renewable energy community generation installations (that have an installed capacity of less than6 MW);
- ✓ Spatial planning at local/regional level contain specific provisions on energy communities (including objectives for projects developed by renewable energy communities, integration

of citizen and renewable energy community participation in to planning considerations for new and repowered installations);
- ✓ A scheme that includes incentives for the approval of repowering projects that include participation of local citizens;
- ✓ A guarantee that renewable energy communities and self-consumers have access to out of court dispute resolution for disputes concerning permit or license granting processes.

6. Proportionate responsibilities

The Clean Energy Package not only establishes rights for energy communities, it also establishes responsibilities. It is essential to understand thet the energy communities are different from other market actors (either in terms of size and impact on the energy system or in terms of business model e.g. cooperative, social enterprise), so identical responsibilities may not be appropriate in all cases, lest it discriminate against energy communities.

National policy asks:

- ✓ Simplified/streamlined administrative procedures for authorisation, certification, and licensing related to new renewable energy projects;
- ✓ Simplified/streamlined procedures and rules for becoming a retail supplier, including relaxation of responsibilities where possible, and ability to meet other responsibilities through alternative means;
- ✓ Renewable energy communities should continue to benefit from priority dispatch where they have renewable energy installations that have an installed capacity of less than 3 MW;
- ✓ Energy communities that supply their own members with renewable electricity that is generated locally or regionally, and owned by the energy community, should benefit from priority dispatch;
- ✓ Exemption from balancing responsibility for small installations owned by renewable energy communities (installed capacity of less than 3 MW) or where there is no choice between different balancing service providers;

7. Specific Processes

Some provisions of the clean energy package must be implemented by the regulator or the DSO/TSO, through specific processes.

National policy asks:

- ✓ Legislation mandating the national regulatory authority (ERSE) to identify potential benefits that can be provided by active customers and energy communities (e.g. through self-consumption and providing flexibility) using a cost-benefit analysis. This cost-benefit analysis should be developed by ERSE (and NOT by the national government) through a transparent and participatory process and be used to develop network tariffs for active customers and energy communities that incentivizes them to provide flexibility and other services to the DSO which serve as cost-effective alternatives to traditional grid expansion.
- ✓ DSOs consult with local energy communities and consumer groups on distribution system plans, which should provide transparency about where and how energy communities can install and operate different distributed energy resources (e.g. distributed renewable production, storage, micro-grids, virtual power plants, EV charging infrastructure, etc)

- ✓ DSOs engage energy communities and include them in the development of flexibility markets that ensures energy communities can compete on a level playing field to provide such services.

8. National energy and climate Plan (NECP)

In the implementation of NECPs, Portugal must design policies and measures that maximise the potential synergies between support for renewable energy communities and investments or actions that result in behavioural change around energy efficiency and building renovations.

In the Portuguese NECPs, Portugal has to provide concrete policies and measures to support energy communities in encouraging energy efficiency at household level and in addressing energy poverty, particularly in the areas of:

a. Energy efficiency schemes and alternative measures with a social purpose under Article 7 of the EED
b. Renovation of public and private buildings
c. The delivery of energy efficiency services
d. In the delivery of energy efficient public procurement
e. Information and training measures for citizens

D 6.3 Rescoop Plus Terms of Reference
Focus: District Heating

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1. European Framework

The European legislative background for district heating is based on the following pillars:

1.1 Paris Agreement [1)]

At the Paris climate conference (COP21) in December 2015, 195 countries adopted the first-ever universal, legally binding global climate deal.
The agreement sets out a global action plan to put the world on track to avoid dangerous climate change by limiting global warming to well below 2°C and pursuing efforts to limit it to 1.5°C.
Key points:

- a long-term goal of keeping the increase in global average temperature to well below 2°C above pre-industrial levels;
- to aim to limit the increase to 1.5°C, since this would significantly reduce risks and the impacts of climate change;
- on the need for global emissions to peak as soon as possible, recognising that this will take longer for developing countries;
- to undertake rapid reductions thereafter in accordance with the best available science.

1.2 Clean Energy Package [2)]

The new policy framework empowers European consumers to become fully active players in the energy transition and fixes two new targets for the EU for 2030:

- a **binding renewable energy target of at least 32%**
- **an energy efficiency target of at least 32.5%** - with a possible upward revision in 2023
- for the electricity market, it confirms the **2030 interconnection target of 15%**, following on from the 10% target for 2020

These ambitious targets will stimulate Europe's industrial competitiveness, boost growth and jobs, reduce energy bills, help tackle energy poverty and improve air quality.
A further part of the package seeks to establish a **modern design for the EU electricity market**, adapted to the new realities of the market – more flexible, more market-oriented, better placed to integrate a greater share of renewables.

The package includes 8 different legislative texts as shown below (as of December 2018):

1.2.1 Energy Performance in Buildings Directive - 19/06/2018 - Directive (EU) 2018/844 [3)]

The EU has agreed new rules for the energy performance of buildings directive aiming to help address these issues, create economic opportunities in the construction industry and alleviate energy poverty.

- Low and zero-emission building stock in the EU by 2050
- Smarter buildings
- Smart readiness indicator
- E-mobility in buildings
- Incentives for renovations
- Combat energy poverty

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1.2.2 Renewable Energy Directive - 21/12/2018 - Directive (EU) 2018/2001 [4)]

It requires the EU to fulfil at least 20% of its total energy needs with renewables by 2020. All EU countries must also ensure that at least 10% of their transport fuels come from renewable sources by 2020.
On 30 November 2016, the Commission published a proposal for a revised Renewable Energy Directive to make the EU a global leader in renewable energy and ensure that the target of at least 27% renewables in the final energy consumption in the EU by 2030 is met.
EU countries set out how they plan to meet these targets and the general course of their renewable energy policy in national renewable energy action plans.
Progress towards national targets is measured every two years when EU countries publish national renewable energy progress reports.

1.2.3 Energy Efficiency Directive - 21/12/2018 - Directive (EU) 2018/2002 [5)]

- reduced energy consumption for households and businesses – thereby lowering energy bills
- lower consumption, making Europe less reliance on energy imports
- incentives for producers/manufacturers to use new technologies and innovate
- more investment, for example in the building sector, thereby creating jobs
- clearer information in household bills

1.2.4 Governance - 21/12/2018 - Regulation (EU) 2018/1999 [6)]

- meet the objectives and targets of the energy union and the long-term EU greenhouse gas emissions commitments, consistent with the Paris Agreement goals and in particular the EU's 2030 targets for energy and climate
- ensure a transparent and coordinated planning, reporting and monitoring process, and promote closer cooperation between EU countries in these areas
- offer more clarity and predictability to unlock clean energy investments across the EU
- ensure consistent reporting by the EU and its member countries under the UN Framework Convention on Climate Change and the Paris Agreement.

1.2.5 Electricity Directive

1.2.6 Electricity Regulation

1.2.7 Risk-Preparedness Regulation

1.2.8 Rules for the regulator ACER

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2. National Framework

The Italian energy market is basically regulated by 5 authorities: [7)]

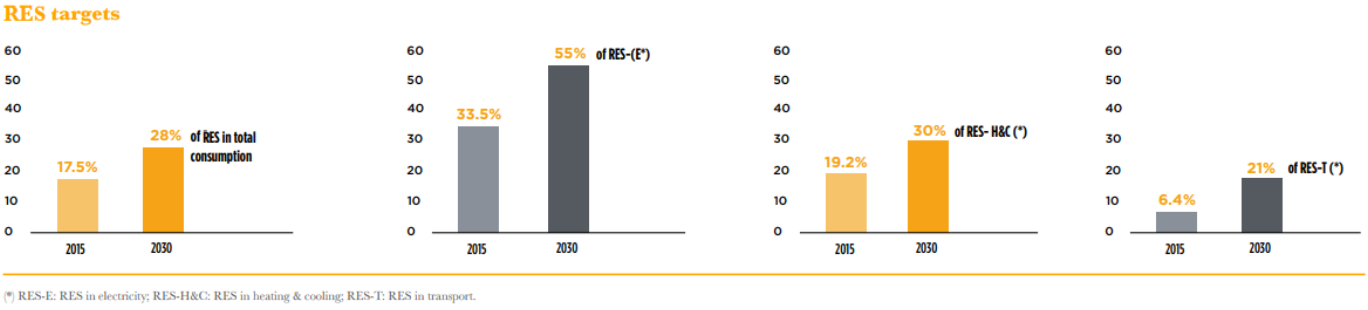
2.1 The Ministry of Economic Development (MISE)

MISE is responsible for all the authorisation procedures of state competence and for the enforcement of all statutes and regulations concerning the energy sector

2.1.1. Italy´s National Energy Strategy 2017 [8)]

Targets:

- reduction of emissions by at least 80% from their 1990 levels enhancing Italy's competitiveness, by continuing to bridge the gap between Italian energy prices and costs and European ones, in a global context of rising energy prices
- continuing to improve the security of energy supply and the flexibility of energy systems and infrastructures
- attaining Europe's environmental and decarbonisation targets by 2030 in sustainable ways, in line with the future targets set by COP211 by focusing on:
    - Energy-Efficiency Targets
    - Decarbonisation Targets
    - Research and Development Targets



2.1.2 Proposal for the energy and climate plan - Proposta di Piano nazionale integrato per l'Energia ed il Clima (PNIEC) – 08.01.2019 [9)]

The ministry of economic progress has sent the proposal for the energy and climate plan to the European Commission on the 08.01.2019.

The objective of this proposal is a percentage of RES energy production in the final Gross Energy Consumption equal to 30%, in line with the objectives set for our Country by the EU and a share of RES energy in the final Gross Energy Consumption of 21.6 % compared to 14% for the EU. Furthermore, the Plan provides for a reduction in primary energy consumption compared to the PRIMES 2007 scenario.

The article is mainly structured in the following 5 pillars:

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- decarbonisation
- energy efficiency
- energy security
- internal energy market
- research, innovation and competitiveness

2.2. The Regulatory Authority for Energy, Networks & Environment (ARERA)[10)]

'The Italian Regulatory Authority for Energy, Networks and the Environment (Autorità di Regolazione per Energia Reti e Ambiente, ARERA) is an independent body created under Italian Law No. 481 of 14 November 1995 for the purposes of protecting consumer interests and promoting the competition, efficiency and distribution of services with adequate levels of quality, through regulatory and control activities. Initially limited to electricity and natural gas, the Authority's scope of action has been extended by means of some regulatory interventions.'

In June 2018 a new law has been implemented for distrct heating plants:Delibera 18 gennaio 2018 24/2018/R/tlr

This new law brings 2 new points:

a) Right of withdrawal
b) Standard forms

The Italian regulation authority „ARERA" plans minimum standards to protect the customers

Minimum Standards for clients:

1) Regulation of the contractual quality of district heating service (start June 2018)
2) Regulation of the service cost for the separation of apartment building operating costs (for the future)
3) Regulation of the attachment costs (for the future)

Proposal for the future from the authority: total of 30-40 minimum requirements, all of which must be accurately documented.

→ For example: How many minutes does a customer wait at the information desk until he gets an information?

The problem: the authority makes only a very small difference between plants with 100.000 clients and 500 employees and plants that have 30 clients and only 0,5 employees.
The new laws published by ARERA put a huge bureaucratic workload on all district heating plants, especially on the small heating plants.

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2.3 The Compensation Fund for the electricity sector (CCSE) [7)]

The CCSE is a non-economic public body that collects certain tariff components payed by the industry operators, which are then stored in management accounts in favour of the businesses.

2.4 Energy Services Manager (GSE)

The GSE is a public limited company, with the function of promoting renewable energy sources in Italy, mainly through the distribution of economic incentives and information campaigns aimed at spreading the culture of environmental protection in the energy field.

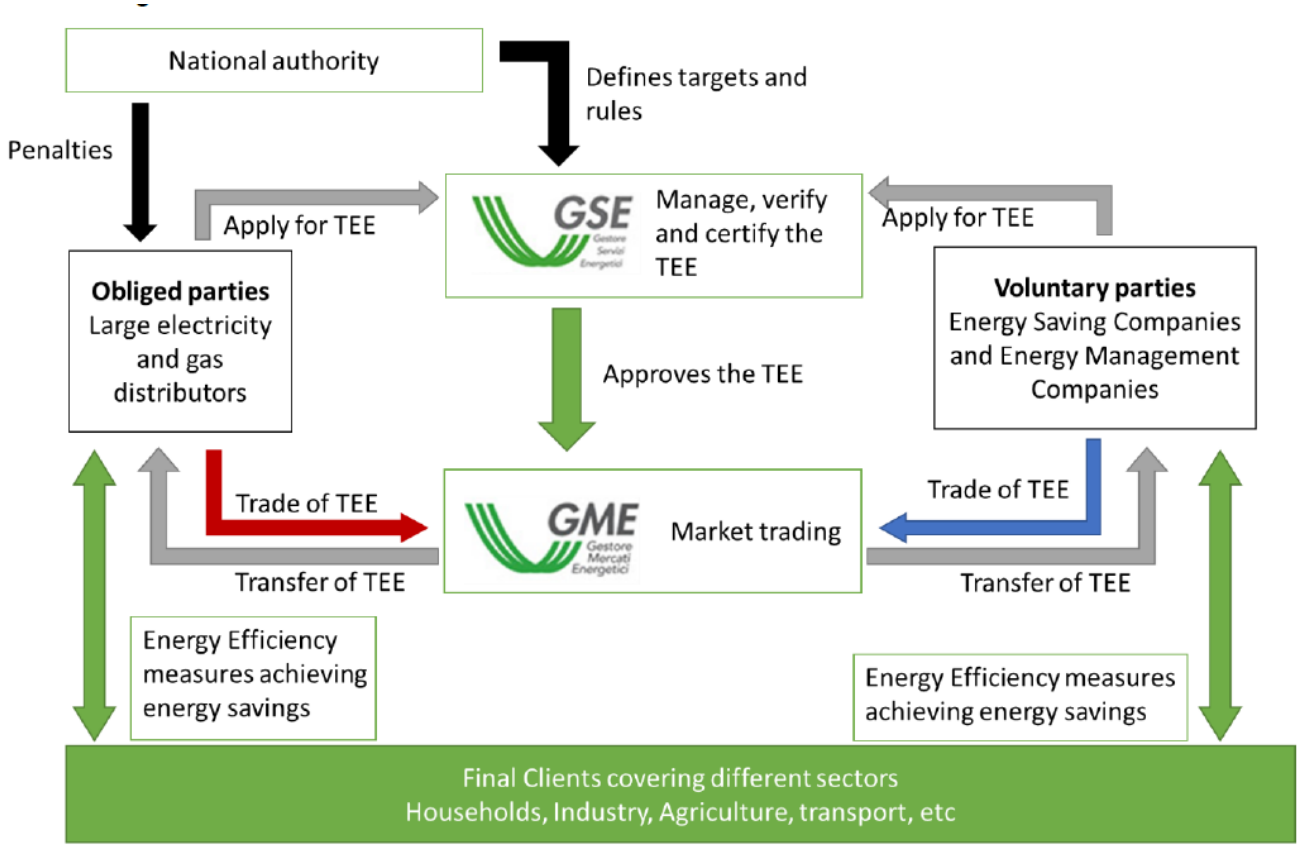

Figure 1: Actors involved in the Italian "Titoli di Efficienza Energetica" scheme

2.5 Energy Market Manager (GME)

The company GME, wholly owned by the GSE is responsible for organising and managing the electricity, natural gas and environment markets, respecting neutrality, transparency, objectivity and competition criteria.

A really important measure to foster the implementation of energy efficiency is the **Italian White Certificate System,** which serves as a financing basis for many EE measures.

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The European Energy Efficiency Directive has been put into national law (Lgs. Decree 102/2014), however, an Energy Efficiency obligation scheme has been put into action in 2005, making Italy a pioneer in promoting energy efficiency through such a scheme.

A **white certificate** is a tradable instrument and is the proof of end-use energy savings through energy initiatives. One certificate equals one ton of oil equivalent (toe).

Every year companies defined as “obliged subjects” (gas and electricity distributors with more than 50,000 end users) have to achieve a certain amount of quantitative primary energy saving targets. In order to achieve their objective, those companies can invest in energy efficiency projects and/or buy those certificates from other parties.

Next to the obliged companies there is a pool of eligible contributors which can invest in energy efficient projects, get recognised white certificates for their investments, and monetize the titles through trading operations (either through bilateral transactions or through a regular market session organised by GME – Gestore dei Mercati Energetici).

The white certificate system in Italy has delivered substantial savings in electricity and heat use across many sectors. The primary energy savings certified in 2017 amounted to about 1.92 Mtoe, of which more than 55% was achieved through the reduction of natural gas consumption and 26% from savings in electricity consumption.

In Italy a higher level of incentive was necessary to deliver target energy efficiency savings in industry than in the residential sector. The system initially focused on residential sector savings that were achieved under a price cap, but once extended to the industrial sector the cap was removed and higher market prices were realised. Energy savings in the industrial sector were also awarded a higher number of certificates, to create a stronger incentive than that experienced by other sectors.

Where energy efficiency incentive systems overlap, a more consistent incentive can be achieved by excluding technologies that would otherwise receive a double incentive. Over the years the Italian system went through three major reviews aimed to harmonise the regulatory framework, during these reviews project types subject to other incentive measures were excluded, to try to create a fairer incentive landscape.

In Italy the carbon price incentive provided by the EU ETS was insufficient to meet energy savings targets (especially in the industrial sector) and had to be complemented by this energy efficiency scheme.

Pros	Cons
- For district heating plants this saving scheme is easy to adopt - Revenue or investment subsidy can be calculated beforehand and is usually a quite stable Euro amount based on the achieved savings - SEVs best practise can be used as a standard calculation template which serves	- Minimum energy savings of 50 TEP (= 50 tons of oil equivalent is the minimum project size); that means that only bigger energy efficiency projects can benefit from the TEE scheme (50 tons oil are roughly 45.000 litres that corresponds a calorific value of 450.000 kWh). This limit can only be avoided by accumulating the same type of project. SEV is addressing this issue by offering generic energy efficiency measures like the return flow temperature optimization to reach the

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as a basis for other Italian district heating plants;	required savings level by accumulating one measure across multiple cooperatives - System is valid in Italy only, there is no European market for energy savings - A professional ESCo for savings certification is needed;

Relevance for REScoop+ best practise
All energy efficiency measures, such as SEVs proposed return flow temperature optimization best practise can use this scheme. Also most of the other measures proposed in the REScoop Plus toolbox can take advantage of this scheme, however limits for the minimum project size apply also here.

3. The provincial framework – South Tyrol

The legislation for energy in general in Italy is under national law and the regulation of the energy sector is competence of the state Italy. This means that the primary legislation is on a national level and not a regional or provincial level.
There are only two exceptions where South Tyrol can take a decision autonomously:

- the assignment of water concession for hydropower plants
- incentives for energy efficiency measures

For district heating there was no written regulation until June 2018. Until then the district heating plants in South Tyrol have been built exclusively upon support of the Autonomous Province Bolzano through 30 % incentive.

The State also provides different measure of incentives for renewable energy plants, e.g. green and white certificates, Conto Energia, Conto Termico (which is an investment incentive), FER, incentives for energetic renovations, etc.

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4. Policy Recommendations

1. When the newly proposed Energy Commnunities (Clean Energy Package) are being translated into national law there needs to be an easy applicable rule. Such a regulation needs to make sure that local energy communities can fully contribute to the decentralisation and democratisation of energy systems and foster sustainable economic and social development locally.

2. A clear and stable regulatory framework for self-consumption should help building stronger local networks. District heating and electrical grids can benefit tremendously when you think of sector coupling. Water is one of the best opportunities to buffer imbalances on the electric grid, what is needed is the opportunity also from the legal side to allow such systems also on the long run.
   Moreover, self-consumption should not only be thought as a single household or single person cycle. Condos or larger areas could easily establish self-sustaining networks when a stable regulatory framework permits investments in such solutions.

3. Generally speaking, investments in renewables are highly incentivised, however energy efficiency depends on a single system. When a kWh produced by renewable sources gets subsidised with up to 40c€/kWh, investments decreasing the energy demand usually receive only a subsidy up to 5c€/kWh. To reach the newly proposed targets the focus on renewables shall be rethought.

4. The current market design for energy efficiency favours bigger projects. However, there is still a huge potential when households or SMEs can aggregate smaller scale energy efficiency measures and take advantage from the Italian TEE system.

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5. Source

1) taken from: https://ec.europa.eu/clima/policies/international/negotiations/paris_en
2) taken from: https://ec.europa.eu/energy/en/topics/energy-strategy-and-energy-union/clean-energy-all-europeans
3) taken from: https://ec.europa.eu/energy/sites/ener/files/documents/buildings_performance_factsheet.pdf
4) taken from: https://ec.europa.eu/energy/en/topics/renewable-energy/renewable-energy-directive
5) taken from: https://ec.europa.eu/energy/sites/ener/files/documents/energy_efficiency_factsheet.pdf
6) taken from: https://ec.europa.eu/energy/sites/ener/files/documents/governance_regulation_factsheet.pdf
7) taken from: https://thelawreviews.co.uk/edition/the-energy-regulation-and-markets-review-edition-6/1144326/italy
8) taken from: https://www.mise.gov.it/images/stories/documenti/BROCHURE_ENG_SEN.PDF
9) taken from: https://www.mise.gov.it/index.php/it/per-i-media/notizie/2039046-piano-nazionale-integrato-per-l-energia-e-il-clima-inviata-la-proposta-a-bruxelles
10) taken from: https://www.autorita.energia.it/it/inglese/

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EBO Consult A/S

05.02.2019

Legal Study on 2018-EU-Legislation Impact on Danish District Heating Cooperatives

Erik Christiansen, CEO, Master of Laws; MLL, EBO Consult.

2018 has been a busy year for the European Union in the process of implementing legislation concerning the Energy Union.

The following EU-regulations have impact on Danish energy cooperatives:

- **Energy Performance in Buildings Directive (EPBD)**,
- **Renewable Energy Directiv (RED)**,
- **Energy Efficiency Directive (EED)**,
- **Electricity Directive (ED)** and
- **Electricity Regulation (ER).**

This study is about the impact on *Danish district heating cooperatives*.

1. Energy Communities.

The definitions of Renewable Energy Communities and Citizens Energy Communities are appreciated, though the latter definition doesn't follow the traditional Danish legal understanding of energy cooperatives. According to Danish legal traditions energy communities or cooperatives are autonomous. In this context communities are regarded as cooperatives.

The abovementioned EU-legislation sets in certain areas new standards for the energy sector and for the way cooperatives can operate.

This study concerns the need for changes in Danish legislation and recommendations for future adjustments in Danish energy legislation concerning district heating.

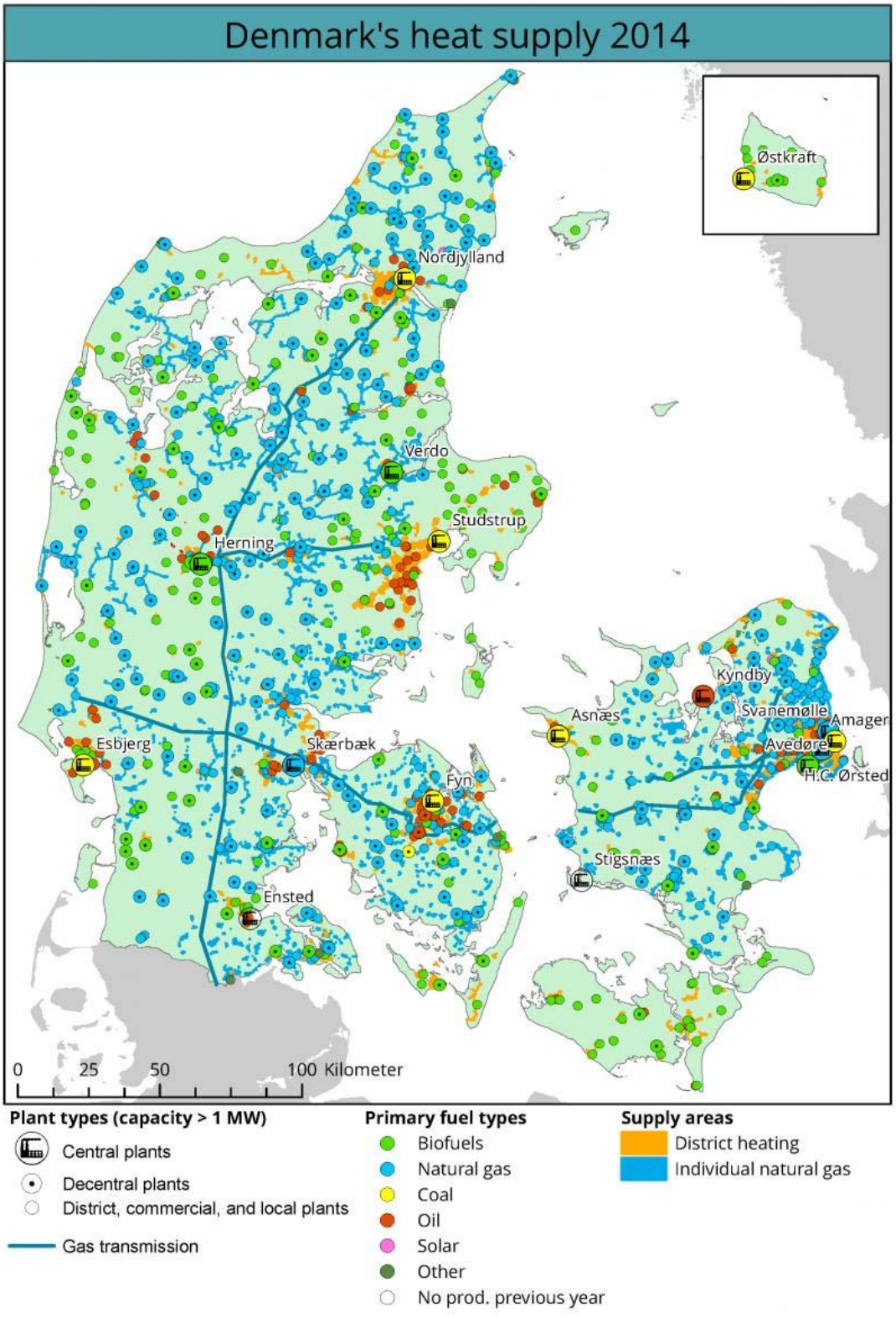
The contents of the EU-legislation are in many ways similar with the energy structures in the Nordic countries.

2. Changes in organization and mind-set.

For many decades Danes have participated and operated within local energy systems concerning electricity and/or heating.

The EU-legislation is influenced by a new approach towards citizens under the headline: "Clean Energy for All Europeans".

As an overall view of the development of the infrastructure for heat supply you can observe the Danish district heating infrastructure like this:



Map from The Danish Energy Agency.

In the 20th century the district heating infrastructure has developed from local initiatives to big centralized combined heat and power plants (CHP), especially in urban areas. Urban district heating entities are typically owned by municipalities while suburban and rural areas are dominated by consumer controlled district heating cooperatives.

There are approx.. 340 consumer controlled district heating cooperatives in Denmark.

In urban areas the district heating transmission and distribution organization can look like this:

The Copenhagen organization with blue (different fuel types) and green (waste incineration plants) CHPs and local distribution entities.

Based on several national energy plans approved by an almost unanimous Parliament renewable energy is an increasing fuel in many district heating cooperatives and in some CHPs. Since the plans are directed towards a conversion into more electricity in the energy system many district heating cooperatives plan to convert their heat production into renewable heating by e.g. heat pumps. In 2018 65% of the Danish electricity production was based on renewables, e.g. wind turbines.

The conversion into electricity has the following consequences for district heating cooperatives:

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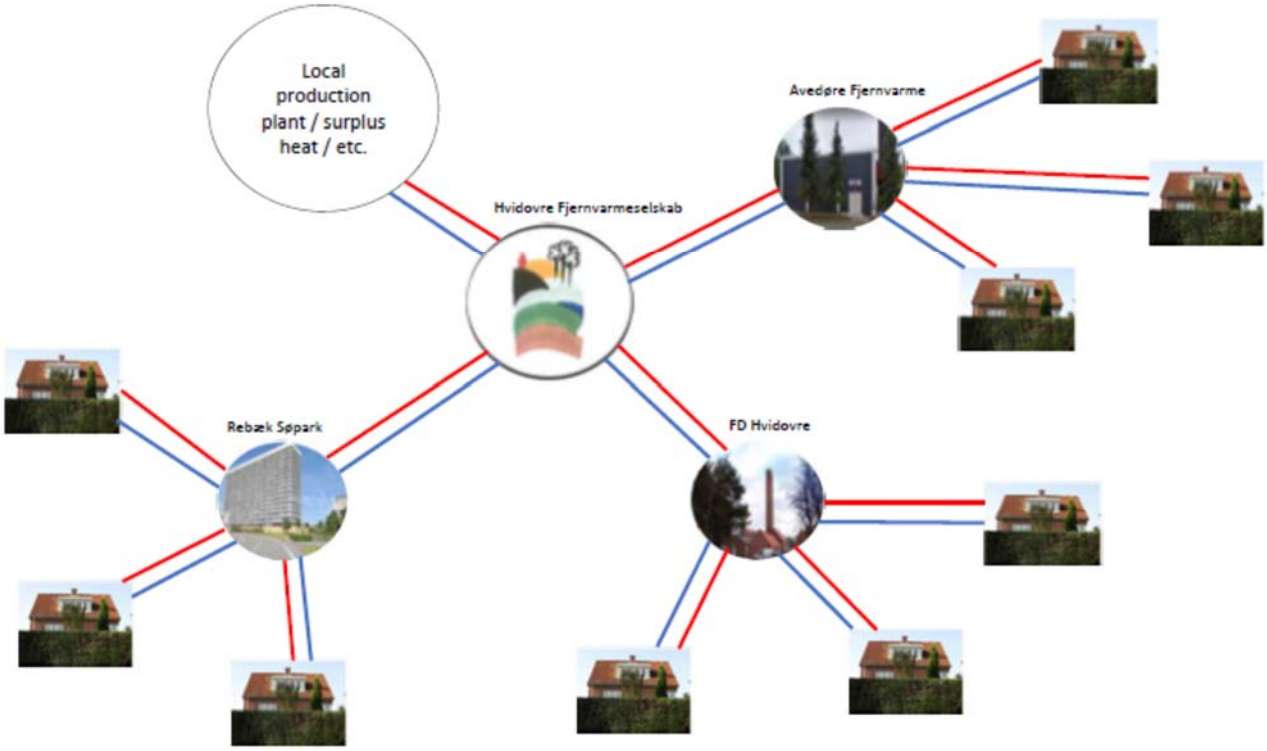
- legally since the heat production will be based on electricity regulations, e.g. from EU institutions,
- in economic terms since heat prices will be influenced by electricity tariffs,
- in planning terms since district heating cooperatives will be interested in establishing local renewable electricity production that has to be combined with local planning instruments performed by municipalities and
- general Danish energy policy.

The future district heating is expected to be more decentralized, e.g. by closing some of the central CHPs and by establishing local heat production. In that respect the Danish district heating cooperatives will be less dependent on one heat resource because many cooperatives tend to establish multiple renewable heat production plants.

A decentralized district heating organization with local heat production can look like this:



The organization of Hvidovre (suburb to Copenhagen) district heating cooperatives.

Following the new EU-legislation (the Clean Energy package) changes are needed in the Danish district heating set-up and the legislation opens new opportunities for the cooperatives.

Therefore, the EU-legislation can push necessary changes forward in Danish district heating legislation – the Heat Act.

In the following comments are given to some of the more influencing legislative consequences of the EU-regulatory. The necessary changes in the mind-set of district heating cooperatives are not described.

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3. Consequences for Danish district heating cooperatives and recommendations for changes in Danish legislation.

a. The EPBD and EED.

Many Danish district heating cooperatives have largescale housing associations as members. Some of them own estates which need to be refurbished.

EPBD and EED are interacting in regulating heat supply of buildings.

The EPBD:

Preamble (1, 6, 11, 15, 16, 22, 29, 30, 33) and Art 2a: Decarbonization, energy poverty, technology, finance, refurbishment strategy

The focus is on energy efficiency and decarbonization in buildings.

Housing associations are members of district heating cooperatives and it should be obligatory to develop energy plans for the refurbishment of buildings in a cooperation between the housing associations and district heating cooperatives.

Danish housing associations have their own way of financing and planning energy refurbishment, thoroughly regulated by the Parliament. In the national energy strategy focus should be on the interaction between refurbishment and local district heating planning where renewables such as solar thermal or PV installations should be considered. A cooperation might lead to new financing instruments for refurbishment, which can prevent energy poverty in housing areas.

Art 6,2:

A district heating system based on renewables should have priority instead of individual energy solutions. Today's Danish legislation allows individual solutions as long as they are based on energy renewables but the experience is that individual solutions might end up with long term poor energy solutions due to bad service and energy inefficiency. An example can be noisy heat pumps in bad condition, i.e. exceeding energy consumption limits/standards.

In rural areas it should be possible for district heating cooperatives to provide heat pumps for households situated outside the district heating grid – in so-called "oil-villages", where it is impossible to establish district heating. At the moment it is illegal for district heating cooperatives to let these households become members of the cooperative and provide them with individual heat pumps, managed and serviced by the cooperative.

EED Art 4:

See the comments to the EFBD Preamble etc.

The EED:

Preamble (18, 32, 33): New technology, heat meters

Energy savings shall be carried out by sustainable energy solutions in district heating. In the present Danish building regulatory it should be regulated, that district heating has a sole priority in heat supply of housing including refurbished buildings, if district heating is based on renewables and is available locally.

Heat meters: see below – art 9a-c.

Art 7: Energy savings obligations and fulfillment of EU climate targets

Obligatory energy savings in Denmark: for almost 15 years it has been obligatory for district heating cooperatives to find energy savings at the consumers' households. The Danish Parliament has pushed obligatory energy savings to a high level which has created an "energy savings stock market" where prices in some respect have run out of control. High prices and administrative heavy burdens have created severe problems for many district heating cooperatives. Though the present energy saving measures will be closed by the end of 2020 they still create a high degree of administrative burdens.

Danish legislation on climate including regular measurable climate targets are missing though the Parliament has decided overall climate targets for 2030 etc.. There is a need for national regular measurable targets, e.g. measured every 3rd year, which can be followed by district heating cooperatives. Though the district heating cooperatives are in the lead in the conversion from fossil fuels into renewable heat energy, they need targets to plan and finance renewable energy projects.

Art 9a-c: Meters and services

Smart meters: it should be possible for district heating cooperatives to establish their own meter controlling system if the controlling standards are fulfilled.

It should be possible to exchange meter data between the members of the cooperative with the aim to obtain energy savings for the individuals and the cooperative.

Some cooperatives have free technical services towards their members and the service includes a report about the energy performance of each single house, owned by a member of the cooperative. It should be possible to use the data, including heat meter data, in the reports for comparative studies concerning possible energy savings for the members of the cooperative. Finally, it should be available information for consumers who want to join a common tender of possible energy savings, e.g. roof insulation.

Art 20: Financing energy savings

An overall tool for making energy savings in buildings valuable for homeowners and other estate owners is missing in Denmark. Scoring energy savings according to a certified catalogue supported by a financial scheme, e.g. for energy savings mortgage loans, should be developed. It could make it obvious for everybody that energy savings create value for money on short and long terms. Some Danish estate brokers claim that conversion into district heating raises the house value. That statement must be certified by public – e.g. building authorities – and/or private – e.g. mortgage institutions – stakeholders.

The RED

In 2018 the Danish Parliament has decided to target almost 100 % renewable energy heating in 2030.

The comments below are based on that decision.

The RED has several new regulations concerning heating, and district heating plays an important role in the conversion into renewable energy.

Preamble (48, 49, 75, 78, 79); art 2,19-20; art 7,3; art 15,3-4; art 20,3; art 24: District heating

RED stipulates that district heating plays an important role in the Energy Union as a tool to forward renewable energy.

Focusing on renewable energy as an important basis of district heating and the organizational structure including consumer rights, RED follows the Danish guidelines for district heating as they are performed by Danish district heating cooperatives.

It has to be mentioned that in certain urban areas in Denmark district heating cooperatives are obliged to buy and distribute heat produced by central combined heat and power plants (CHP). Some of the plants are sustainable and based on renewables while others are old and will be closed; but it is still obligatory to be connected to these CHPs. For many years district heating cooperatives in these areas have worked on loosening the ties to CHPs and it seems as if it will happen by allowing decentralized heat production in these areas, mainly by heat pumps. The legislation needs to push that development forward.

Preamble (26, 27, 66-72); art 2,15-16) and art 22: Renewable Energy Community (REC)

RECs – defined as district heating cooperatives - play an important role in the Danish energy production and distribution of heat. Value-setting is already above profit since Danish district heating is non-profit business.

RED describes the formalities for being a REC and provides possibilities for RECs to intervene in the energy market.

Since the RED gives RECs certain possibilities to intervene in the Danish energy market there is urgent need for defining the interventions for RECs in the Danish legislation including the Heat Act.

Today the establishment of district heating cooperatives are depending on local heat planning, approved by the municipalities. With the new EU-regulations it can be questioned if the establishment of a REC is depending on that procedure. If local stakeholders have the power to intervene in the market without the formal procedure it is obvious that the municipalities need to adapt to that situation.

The Preamble (71) and art 22 allow RECs to exchange energy which may open new possibilities for district heating cooperatives to cooperate with e.g. wind energy cooperatives. Today it isn't possible for Danish district heating cooperatives and wind energy cooperatives to work together to provide heat for the members of the district heating cooperative. Local wind energy produced to provide a local heat pump with electricity can be an example of how local heat production can change.

Thus, RECs call for changes in the Danish heat structure and pricing. Peer-to-peer trade will represent something new in the Danish energy market and tariffs for transmission and distribution must be coordinated in a new way.

Pricing will need to be differentiated to a higher degree than today, and the market design must focus on renewable energy and decentralized resources.

That calls for increasing digitalization in the Danish heat market, including heat metering – a so called smart energy system. And the smart energy system calls for a legislation, allowing the use of data to make energy cheaper and orientated towards the end-users' needs.

Preamble and art about heat prosumers:

RED does not include prosumers who produce heat by solar thermal installations on roofs.

Danish district heating cooperatives have different internal regulations concerning solar thermal installations. Some cooperatives allow these installations while others refuse to accept them.

If prosumers want to sell surplus heat to the district heating system it must be regulated, that there is a possibility to exchange heat.

In some areas where district heating cooperatives allow solar thermal installations for the individual member of the cooperative it might be necessary to establish storage possibilities. That might be financed and controlled by the district heating cooperative.

Preamble (49); art 2 (9); art 15,3-4; art 20,3; art 23,1; art 24,4a-b : Excess heat

RED stipulates that EU members shall focus on excess heat for the production of heat to district heating.

It is a Danish national target to use excess heat e.g. from industries, offices and shops, but the target has not been fulfilled yet. It is still a political question to convert taxes into a legislation which is in favor of the excess heat use for district heating.

Many projects concerning the use of excess heat end up with a negative taxation result hindering that kind of heat in district heating.

To achieve a renewable standard for the use of excess heat there is a need for certified excess heat. A certification of excess heat must prove that excess heat is solely a result of a process where the production of heat is secondary, i.e. not the primary aim of the process. The certification process has to be legalized.

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At the time for making this legal study the final versions of ED and RE were not available. The following comments are based on documents following the final trilogue, i.e. consolidated texts dated 11 January 2019 from the General Secretariat of the Council.

The ED:

Preamble (42); art 31,4 and art 58 d: Heat

Though electricity plays an important role in the conversion from fossil fuels to energy renewables, heat is hardly mentioned in the directive.

It mentions that electricity for heat pumps should be generated by DSOs.

Preamble (4, 30, 30 a-d), art 2,7; art 6,2a; art 16: Citizens energy Community

Citizens energy communities can be established in connection with a district heating cooperative, providing electricity for heat production units e.g. heat pumps. The definition of the citizens energy community is vital for the cooperation in order to have partners working together on equal terms and backgrounds.

The implementation of the directive into Danish legislation must follow the principles for the local energy community, defined in the RED.

Preamble (6, 29, 42, 42a-c); art 1; art 2,6b; art 2,7; art 2,39a; art 2,45; art 2,47-47a; art 8,2,ka; art 15. 1c; art 31,5c; art 32; art 36; art 38,2bc: Energy storage

According to the definition of energy storage (art 2,47) electricity can be converted ***into a form of energy which can be stored, the storing of that energy, and the subsequent reconversion of that energy back into electrical energy or use as another energy carrier.***

It means that electricity can be converted into heating by storing electricity in water storages connected to district heating. Water is considered as one of the best storage possibilities for surplus

wind electricity during windy days, and the district heating system is capable of extracting heat from the storages even at low temperatures.

Danish legislation has to adapt to that situation by allowing and easier exchange of energy between electricity and district heating operators. District heating cooperatives shall be allowed to participate in that exchange on equal terms.

The RE:

Preamble 3 (b); art 2 s; art 11: Priority dispatch

Renewable energy sources from small power generation facilities shall be granted priority dispatch.

This is important for the future local production of both electricity and heat, since the grid has to be open for all small stakeholders. Unfortunately, the priority dispatch is limited based on the scale of the power generating facility. That limitation makes it almost impossible to integrate local power production, generated by renewables, into district heating.

Energy storage:

See the comments on ED above.

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Energy Communities

Citizens Energy Communities and Renewables Energy Communities: Towards new actors in the energy sector?

The present note sets out the background of the REScoop Plus project, and more specifically, regarding the EU level report that will be produced by REScoop.eu, compiling several national reports.

Therefore, the note contains a gap analysis, identifies barriers and makes recommendations to contribute to the collective debate that will take place to best translate into national laws the provisions of the Clean Energy Package (mainly from the Renewable Directive and from the Electricity Directive) dedicated to Energy Communities.

To conduct such analysis, we decided to split the issues as follows:

First, we looked at Energy Communities as new legal entities (**I.**)

Then, we worked on the relationship between the Energy Communities and their members (**II.**)

Finally, we analyzed the interplay between the Energy Communities and the rest of the electric system (**III.**).

I. Creation of new legal structures

I.A. Relevant provisions in the CEP*

	Renewable Energy Communities	Citizens Energy Communities
Legal form	Recital 71: "it should be possible for Member States to choose any form of entity for renewable energy communities, provided that such an entity may, acting in its own name, exercise rights and be subject to obligations"	Recital 30(a): "Therefore, it should be possible for Member States to choose any form of entity for citizens energy communities, for example an association, a cooperative, a partnership, a non-profit organisation or SME, as long as such an entity may, acting in its own name, exercise rights and be subject to obligations"
Membership	Article 2(16) (a): Open and voluntary	Article 16§1(a): open and voluntary
	Recital 71: "Participation in renewable energy projects should be	Recital 30(a): "Citizens energy community membership is open to all

* Similar / Different

	open to all potential local members based on objective, transparent and non-discriminatory criteria" Article 2(16) (b): the shareholders or members of which are natural persons, SMEs or local authorities, including municipalities Article 22§4(f): "the participation in the renewable energy communities is accessible to all consumers, including those in low-income or vulnerable households	categories of entities"
Governance	Article 2(16) (a): "[…] and is effectively controlled by shareholders or members that are located in the proximity of the renewable energy projects that are owned and developed by that legal entity	Recital 30(a): "the decision-making powers within a citizens energy community should be limited to those members or shareholders that are not engaged in large scale commercial activity and for which the energy sector does not constitute a primary area of economic activity" Article 2§7: "[…]effectively controlled by shareholders or members who are natural persons, local authorities, including municipalities, or small enterprises and microenterprises".
Main purpose(s)	Article 2(16) (c): "the primary purpose of which is to provide environmental, economic or social community benefits for its shareholders or members or for the local areas where it operates, rather than financial profits"; 2. Member States shall ensure that renewable energy communities are entitled to: (a) produce, consume, store and sell renewable energy, including through renewables power purchase agreements;	Recital 30: "Community energy initiatives focus primarily on providing affordable energy of a specific kind, such as renewable energy, for their members or shareholders rather than prioritizing profit-making like a traditional energy company. […]. Community energy can also advance energy efficiency at household level and help fight energy poverty through reduced consumption and lower supply tariffs". Article 2§7: The primary purpose of a citizens energy community is to provide environmental, economic or social community benefits for its members or the local areas where it operates rather than financial profits. A citizens energy community can be engaged in electricity generation, distribution and supply, consumption, aggregation, storage or energy efficiency services, generation of renewable electricity, charging services for electric vehicles or provide other energy services to its shareholders or members;
Geographic scope/limitation	The governance should remain in the hands of members located nearby the production project..	None

I.B. Transposition of these provisions into French law

Defining a legal and regulatory framework applicable to Energy Communities – Renewable Energy Communities and Citizens Energy Communities – assumes that these concepts are defined beforehand. A legal regime can not be established if the concept has not been previously defined.

However, because the two concepts remain very different, both of them need to be transposed separately into French law.

I.B.1. Renewable Energy Communities

The definition of Renewable Energy Communities (hereinafter REC) and the legal regime applicable to this new actor could be introduced in the French Energy Code under: Section 5 "Renewable Energy Communities" – Chapter IV, Title I, Book III.

With regard to the definition itself, the following constraints must be taken into consideration:

- **Legal form:** According to the text of the Directive, Member States should remain free to choose any form of entity for Renewable Energy Communities.
- **Ministerial approval (ethic charter):** As the primary purpose of the Renewable Energy Community should be "to provide environmental, economic or social community benefits for its shareholders or members or for the local areas where it operates, rather than financial profits", the legal entity should not be considered as a Renewable Energy Community unless it has received a ministerial approval by which it is recognized that it will act in accordance with these purposes (e.g. by signing an ethics charter). However, where the legal entity is a "Cooperative of collective interest" according to article 19 quinquies of the French Act (10 September 1947), the ministerial approval referred to above should not be necessary.
- **Membership:** it should be open and voluntary. Even if the criteria provided by the Directive do not seem very prescriptive, membership appears to be limited to "small consumers", either natural person, SMEs or municipalities. But, we do not understand the provisions of the directive as strictly limiting the participation to local consumers.
- **Governance:** the decision-making powers should remain in the hands of those members/shareholders that are located "in the proximity of the renewable energy projects". "Proximity" is a rather vague notion. We think that it should not be interpreted too restrictively and could be linked to the borders of an administrative region
- **Purposes:** The Renewable Energy Community should be linked to a project of renewable energy generation.

I.B.2. Citizens Energy Communities

The definition of Citizens Energy Communities (hereinafter CEC) and the legal regime applicable to this new actor could be introduced in the French Energy Code under: Chapter 5 "Citizens Energy Communities" – Title II "Public service obligations and Consumer protection", Book I

With regard to the definition itself, the following constraints must be taken into consideration:

- **Legal form:** According to the text of the Directive, Member States should remain free to choose any form of entity for Citizens Energy Communities.
- **Ministerial approval (ethic charter):** As the primary purpose of the Citizens Energy Community should be "to provide environmental, economic or social community benefits for its shareholders or members or for the local areas where it operates, rather than financial profits", the legal entity should not be considered as a Citizens Energy Community unless it has received a ministerial approval by which it is recognized that it will act in accordance with these purposes (e.g. by signing an ethics charter). However, where the legal entity is a "Cooperative of collective interest" according to article 19 quinquies of the French Act (10 September 1947), the ministerial approval referred to above should not be necessary.
- **Membership:** it should be open and voluntary. As stated in recital 30(a), "membership is open to all categories of entities". Unlike renewable energy communities, there are no restrictions on membership or shareholder status applicable to Citizens Energy Communities.
- **Governance:** the decision-making powers should remain in the hands of those members/shareholders that are "natural persons, local authorities, including municipalities, or small enterprises and microenterprises" and should not belong to professional actors of the energy sector (incumbents operators or any other actors of the sector).
- **Purposes:** The activity(ies) of a Citizens Energy Community can be very broad and cover all aspects of the energy sector: producer, supplier (with social tariffs), DSO, energy services provider (energy efficiency…). The main feature of a Citizens Energy Community is not the activity itself but the way the activity is carried out. It must be "consumer/citizens-centric".

I.B.3. Interactions and incompatibilities with provisions of the French Energy Code or other texts:

At this stage, the definition in the French Energy Code of the notions of Renewable Energy Communities and of Citizens Energy Communities does not raise heavy concern linked to potential incompatibilities with the existing provisions of the French legal framework.

In order to ensure harmonious development of Energy Communities, it may be appropriate to involve local public authorities (**i.**) and regulators (**ii.**).

i. The involvement of public local authorities

Public local authorities might be involved in the development of Energy Communities (either REC or CEC) in four different ways.

Firstly, because of the expected benefits at the local level, local authorities (municipalities and/or associations of municipalities involved in the energy matters) should be encouraged to promote the development of the Energy Communities. A provision could be introduced to make it compulsory for local authorities to promote or facilitate the development of Energy Communities: in article L.2224-32 of the General Local Authorities Code (Code Général des Collectivités Territoriales - hereinafter CGCT) for REC and in article L.2224-34 for CEC (see Section 6 "Energy", Chapter IV "Industrial public services").

Secondly, the possibility for municipalities to become members of an Energy Community must be expressly provided for in article L. 2253-1 CGCT.

Thirdly, in order to oblige distribution system operators to facilitate the development of Energy Communities , it is important to complete article L. 2224-31 CGCT dedicated to the competences of the Authority organizing the distribution of electricity (Autorité organisatrice de la distribution d'électricité) in that perspective and to complete the Distribution concession contract.

Fourthly, in order to encourage local authorities to participate in an Energy Community, the article L. 221-7 of the Energy Code could provide that such participation constitutes an action eligible for the *Certificats d'économies d'énergie* that could be valued by the Energy Communities.

ii. The involvement of the Energy regulators

The competencies of the *Commission de regulation de l'énergie* and of the *Médiateur de l'énergie* defined in the Energy Code (art. L. 131-1 and following; art. L. 122-1) could be broadened to enable them to facilitate the creation and operation of Energy Communities. The *Commission de regulation de l'énergie* could be recognized as competent to take all measures to ensure that Energy Communities are not subject to discriminatory treatment in access to the electricity system (access to networks, participation in calls for tenders, etc.). The *Médiateur de l'énergie* could be recognized as competent to rule on any disputes arising between the members of the Energy Community or between the Community and its members.

Focus on the differences between Article L.314-28 of the Energy Code and the REC

"II. – Cooperative companies governed by law No. 47-1775 of 10 September 1947 on cooperative status set up to develop a renewable energy generation project may, when raising or making changes to the capital, offer a share to individuals, particularly residents living near the project's location, as well as local authorities and their associations linked to the territory in which it is located. They can also propose that they participate in the financing of the renewable energy generation project"

Even if, at first glance, subparagraph 2 of Article L.314-28 of the Energy Code appears to be very close to the regime of the Renewable Energy Communities, three differences need to be highlighted.

Firstly, there is a difference of material scope: under article L.314-28 of the Energy code, the scope of the project is limited to renewable generation. The cooperative is not entitled to sell electricity to end consumers and it cannot share the electricity among its members either.

Secondly, the proximity within the meaning of this article is very narrow and limited to territory adjacent to the renewable energy project.

Thirdly, the open participation is not mandatory. It is only a possibility and it is limited to individuals and local authorities (not open to medium and small companies).

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II. Energy Communities: The services and the activities for their members

II.A. Relevant provisions in the CEP

	Renewable Energy Communities	Citizens Energy Communities
Energy sharing	Recital 71 "Renewable energy communities should be able to share between themselves energy that is produced by their community-owned installations However, community members should not be exempt from relevant costs, charges, levies and taxes that would be borne by final consumers who are not community members, producers in a similar situation, or where public grid infrastructure is used for those transfers". Article 22§2-(b): "share, within the renewable energy community, renewable energy that is produced by the production units owned by that renewable energy community, subject to the other requirements laid down in this Article and to maintaining the rights and obligations of the renewable energy community members as customers"	Recital 30: "Community energy offers an inclusive option for all consumers to have a direct stake in producing, consuming or sharing energy between each other" Recital 30(c): "Electricity sharing enables members to be supplied with electricity from the generation plants within the community without being in direct physical proximity or behind a single metering point. Where electricity is shared it should not affect the collection of network charges, tariffs and levies related to electricity flows. The sharing should be facilitated according the obligations and correct timeframes for balancing, metering and settlement" Article 16§2a-(e): "are entitled to arrange within the community sharing of electricity that is produced by the production units owned by the community subject to the provisions of this article and retaining community members' rights and obligations as consumers. Where electricity is shared, this shall be without prejudice to applicable network charges, tariffs and levies, in line with a transparent cost-benefit analysis of distributed energy resources developed by the national competent authority".
Consumer-centric	Article 22§1: "Member States shall ensure that final customers, in particular household customers, are entitled to participate in a renewable energy community while maintaining their rights or obligations as final customers, and without being subject to unjustified or discriminatory conditions or procedures that would prevent their participation in a renewable energy community, provided that for private undertakings, their participation does not constitute their primary commercial or professional activity" Article 22§4-(f): "the participation in the renewable energy communities is accessible to all consumers, including those in low-income or vulnerable households"	Recital 30: "Community energy offers an inclusive option for all consumers to have a direct stake in producing, consuming or sharing energy between each other. […]. By directly engaging with consumers community energy initiatives are demonstrating their potential in facilitating the up-take of new technologies and consumption patterns, including smart distribution grids and demand response, in an integrated manner. Community energy can also advance energy efficiency at household level and help fight energy poverty through reduced consumption and lower supply tariffs"

DSO	Article 22§4-(c): "the relevant distribution system operator cooperates with renewable energy communities to facilitate energy transfers within renewable energy communities"	Article 16§1(d): "relevant distribution system operator shall, subject to faire compensation as assessed by the regulatory authority, cooperate with citizens energy communities to facilitate transfers within citizens energy communities"

II.B. Transposition of these provisions into French law

Our understanding of the provisions of the Clean Energy Package on Energy Communities is that both communities (renewable and citizens) are mainly being seen as a means for consumers to empower an entity to produce, share, sell, distribute electricity and/or to provide energy services. However, the flow of energy or services always goes from the community to its members and not from the members to the community nor from one member to another member of the community.

In other words, members of an Energy Community are not "active" in the sense that they receive or buy electricity or services from their community. Therefore, an Energy Community within the meaning of the Clean Energy Package is not an entity that brings together a group of consumers and of producers of energy (see below the focus on article L.315-2 of the Energy Code).

This approach seems consistent with the provisions on the sharing of energy (**II.B.1.**) and with the provisions on other services or activities (**II.B.2.**).

II.B.1. The sharing of energy

Beforehand, it is worth noting that article 22 of the Renewable Directive and article 16 of the Electricity Directive state that the energy that could be shared among the members of a community is the energy that has been produced by the installations owned by the community. Therefore, if one member of a community is also a producer of renewable energy, the sharing of this energy among other consumers will not be dealt with through the Energy community.

The translation into French law of the sharing of energy by the Energy Community to the benefit of its members raise significant questions/issues.

Firstly, the notion of "electricity sharing" does not exist in the French legal framework. The electricity consumed by an end-consumer has been either self-produced (either individually or collectively) or supplied by a supplier who has been granted a license in accordance with article L.333-1 of the Energy code.

However, requiring communities to benefit from such license could impede their development. Indeed, small communities would hardly meet the condition related to financial and technical guarantees

Secondly, Energy sharing raises the question of the application of taxes based on electricity consumption: mainly CSPE and TCCFE. Should the sharing of the electricity produced by the Community be considered as a taxable event for CSPE and TCCFE? And if so, should those taxes been collected by the community itself? Requiring energy communities to collect CSPE and TCCFE on the electricity shared with their members would clearly impede their development.

Thirdly, should the consumption of the shared electricity be subject to the obligations laid down in articles L.335-1 and following of the Energy Code (related to the capacity mechanism)? Because of the complexity of this mechanism, requiring energy communities to hold capacity certificates in accordance with article L.335-2 would also impede their development (especially for small communities).

Fourthly, energy sharing also raises the question of network tariffs. The question may arise whether the full network tariff should be paid by the members of the community. In France, network tariffs are subject to the principle of tariff equalization (péréquation tarifaire). However, there are exceptions to this principle in certain cases (e.g. collective self-consumption, see below). The sharing of electricity produced by an energy community could be another exception and we could imagine a specific network tariff; particularly if it is possible to show that there are avoided costs for the network operator.

Fifthly, the rules must also require DSOs to facilitate energy transfers. This could be done in two ways. First, DSOs could be obliged to set up metering and technical documentation that is appropriate for electricity sharing among the members of the Energy Community. Second, in order to facilitate the development of Energy Communities, distribution system operators should also be required to provide them with a certain amount of data coming from the network such as the data they provide to local authorities or buildings managers.

Focus on article L.315-2 of the Energy Code dedicated to collective self-consumption and the interplay with energy communities

"Self-consumption is collective when the electricity exchange is made between one or more electricity producers and one or more final consumers, linked together by a legal entity, and from which the injection and exit points are on the same low-voltage loop of the public distribution grid. Chapter V of title III of this Book, the implementation of special pricing known as " a staple product " pursuant to Articles L. 121-5 and L. 337-3 of this Code and section 1 of chapter IV of Title II of Book II of the French Consumer Code are not applicable to users taking part in a collective self-consumption operation".

Collective self-consumption within the meaning of article L.315-2 is very different from Energy Communities (either REC or CEC):

→ A project of collective self-consumption must bring together consumers and producers within the same legal entity. The main role of that legal entity is to be the intermediary between the set of consumers and producers involved in the project and the network operator and to notify to the DSO the allocation of the electricity produced within the perimeter between the participants. This is very different from an Energy Community that should gather consumers who decide to empower the community to produce and share electricity and other energy services.

→ In a project of collective self-consumption, there is no requirements such as environmental, economic or social community benefits.

→ The scope/perimeter of a project of collective self-consumption is – for the time being – still very limited (to a low voltage loop).

If we try to find the lowest common denominator and find a case where collective self-consumption and Energy Community could overlap, it could be the following: a project of collective self-consumption could be considered as an Energy Community if the legal entity organizing the project of collective self-consumption is the Energy Community itself and if it owns all the installations producing renewable energy within the perimeter of the project.

At this stage, the interplay between articles 21 and 22 of the Renewable Directive and between articles 15 and 16 of the Electricity Directive remains unclear.

II.B.2. Other services and activities that an Energy Community can provide to its members

In addition to the sharing of electricity, the Energy Community can provide the following services to its members:

- supply of electricity (with or without social tariffs)
- provide demand management services to optimize and reduce end-use of electricity
- provide services to improve energy efficiency
- operate electrical vehicles charging stations
- […]

To undertake those activities, the Energy Community will have to comply with the conditions and obligations laid down by the French legal framework. Potential barriers to the development of the energy communities will be studied in the chapter III below.

However, at this stage, it is important to note that when the Energy Community provides its members with all this services, it must always respect the rights and the obligations of those customers (e.g. freedom to choose the supplier…).

III. Energy communities and the rest of the electric system

III.A. Relevant provisions in the CEP

	Renewable Energy Communities	Citizens Energy Communities
General principles	Recital 71: "Measures to offset the disadvantages relating to the specific characteristics of local renewable energy communities in terms of size, ownership structure and the number of projects include enabling renewable energy communities to operate in the energy system and easing their market integration". Article 22§2-(c): "access all suitable energy markets both directly or through aggregation in a non-discriminatory manner". Article 22§4-(a): "unjustified regulatory and administrative barriers to renewable energy communities are removed". Article 22§4-(b): "renewable energy communities that supply energy or provide aggregation or other commercial energy services are subject to the provisions relevant for such activities".	Recital 30(b): "The provisions on citizens energy communities contain a catalogue of applicable rights and obligations, which could be deduced from other, already existing rules, such as the freedom of contracting, supplier switching rules, distribution system operator responsibilities, network charges, balancing obligation". Recital 30(c): "should be allowed to operate on the market on a level-playing field without distorting competition subject to rights and obligations as the other electricity undertakings in a non-discriminatory and proportionate manner" "The rights and obligations should apply according to the roles undertaken such as the roles of final customers, generators, suppliers, distribution system operators" Article 16§2a: "Member States shall ensure that citizens energy communities: (a) can access all electricity markets either directly or through aggregation in (b) are treated in a non-discriminatory and proportionate manner with regard to their activities, rights and obligations as final customers, generators, suppliers, distribution system operators or market participants engaged in aggregation"

Production - Generation	Recital 26: "Member States should ensure that renewable energy communities can participate in available support schemes on an equal footing with large participants" Recital 70: "Measures to allow renewable energy communities to compete on an equal footing with other producers also aim to increase the participation of local citizens in renewable energy projects and therefore increase acceptance of renewable energy" Recital 71 "However, community members should not be exempt from relevant costs, charges, levies and taxes that would be borne by final consumers who are not community members, producers in a similar situation, or where public grid infrastructure is used for those transfers". Article 22§2-(a): "Member States shall ensure that renewable energy communities are entitled to produce, consume, store and sell renewable energy, including through renewables power purchase agreement".	
DSO		Recital 30(d): "The Directive foresees a possibility for Member States to allow a citizens energy community to become a distribution system operator either under the general regime or in accordance with Art. 38 as the so-called "Closed Distribution System Operator". Once a citizens energy community is granted the status as a distribution system operator, it should be treated and be subject to the same obligations as distribution system operators". Article 16§2-(b): "are entitled to own, establish, purchase or lease distribution networks and to autonomously manage them subject to conditions set out in Article 16 (2b); Article 16§2-(c):"are subject to exemptions foreseen by Article 38(2)" Article 16§2b. Member States may decide, to grant energy communities with a right to manage distribution network in their area of operation and define the relevant procedures, without prejudice to the provisions of Chapter IV and

		other rules and regulations applying to distribution system operators. If such right is granted, Member States shall ensure that: (a) energy communities may conclude an agreement with a relevant distribution system operator or transmission system operator to which their network is connected on the operation of the energy community's network; (b) energy communities are subject to appropriate network charges at the connection points between the community network and the distribution network outside the energy community. Such network charges shall account separately for the electricity fed into distribution network and the electricity consumed from the distribution network outside the energy community in line with Article 59 (8); (c) energy communities do not discriminate or harm customers remaining connected to the distribution system.
Supplier		Article 16§2a-(b): "energy communities are treated in a non-discriminatory and proportionate manner with regard to their activities, rights and obligations as […] suppliers".
Balance responsible party (BRP)		Article 16§2a-(c):: "shall be financially responsible for the imbalances they cause in the electricity system. To this extend they shall be balance responsible parties or shall delegate their balance responsibility in accordance with Article 4 of the [Electricity Regulation]".

III.B. Transposition of these provisions into French law

Before going into details of each activity that an Energy Community could undertake, it is important to underline the main principle that should apply to the action of the Community. When an Energy Community undertakes a specific activity (supplier, producer, DSO, balance responsible party), it should "operate on the market on a level-playing field without distorting competition subject to rights and obligations as the other electricity undertakings in a non-discriminatory and proportionate manner".

Therefore, the issue is not to create a tailored legal framework dedicated to Energy Communities but rather to make sure that the general legal framework (applicable to all stakeholders) will not impede Energy Communities to act on those markets.

III.B.1. Energy Communities as (renewable) electricity producers

Renewable electricity generation is a very competitive activity. Most of the projects benefit from specific support scheme and are selected through tender process. Energy Communities (mainly REC) may encounter difficulties to enter this market because, in most cases, they will not be as competitive as pure stakeholders (e.g. because of less satisfactory financial and technical guarantees).

We do not think that the solution should be to organize specific tender only open to Energy Communities. We believe that it would be more effective to reward objective criteria that would favor Energy Communities such as:

- A % of local participants to the project
- A social criteria
- A % of natural persons and/or local public entities
- […]

Therefore, in order to create a level-playing field, we believe that the terms of reference of the call for tender should be adapted to the participation of Energy Communities.

III.B.2. Energy Communities acting as DSOs

As a preliminary remark, it is important to underline that it is not compulsory for Member States to enable Energy Communities to become DSO. The Electricity Directive "only foresees a possibility for Member States to allow a citizens energy community to become a distribution system operator".

In France, such a possibility is unlikely to happen as distribution of electricity is subject to a legal monopoly (article L.111-52 of the Energy Code).

However, if it is unlikely that an Energy Community becomes a DSO, it may well be that a DSO could become an Energy Community. Indeed, among the local DSO (Entreprise locale de distribution), some of them are incorporated as cooperative entities (société d'intérêt collectif agricole).

Finally, the possibility for an Energy Communities to operate a closed distribution network (article 16§2-(c)) does not seem obvious. How to comply with, on the one hand, the requirement of no residential customer within a closed distribution network, and, on the other hand, the open and voluntary membership to an Energy Community?

III.B.3. Energy Communities as suppliers

If energy communities decide to act as electricity suppliers, they will need to apply for the license laid down in article L.333-1 of the Energy Code.

This should not be too much of a problem except for small Energy Communities.

Regarding energy saving (art. L.221-1 of the Energy Code), it should be noted that if the Energy Community reaches the threshold beyond which energy suppliers are subject to energy saving obligations, it will have to comply with such obligations. However, these obligations should be lowered compared to those applicable to other suppliers because of the features of Energy Communities (e.g.: "the primary purpose of which is to provide environmental, economic or social community benefits for its shareholders or members or for the local areas where it operates").

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