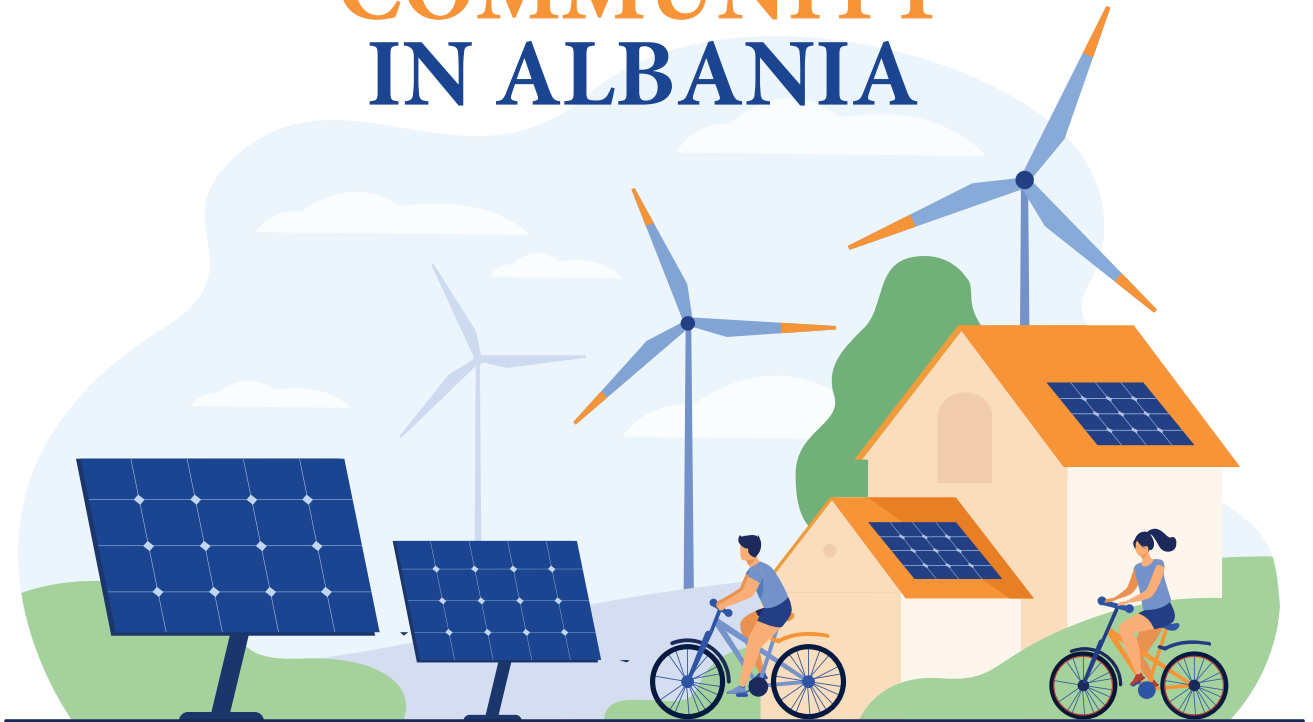




REGULATORY FRAMEWORK CITIZENS ENERGY COMMUNITY IN ALBANIA



Supported by:



Federal Ministry
for the Environment, Nature Conservation
and Nuclear Safety



European
Climate Initiative
EUKI

based on a decision of the German Bundestag

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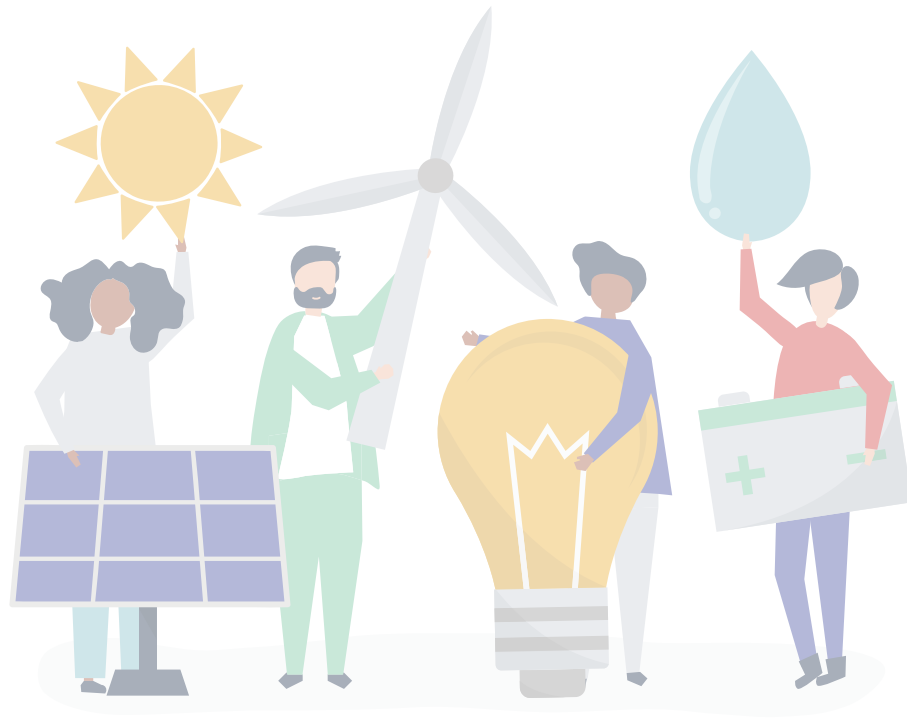


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NEA	National Environment Agency
NEEAP	National Energy Efficiency Action Plan
NGO	Non-Governmental Organization
NSE	National Strategy on Energy
NTPA	National Territorial Planning Agency
NZEB	Nearly Zero Energy Buildings
OSHEE	Electric Energy Distribution Operator
OST	Transmission System Operator
PPA	Power Purchase Agreement
PV	Photovoltaic
RE	Renewable Energy
RED	Renewable Energy Directive
REIC	Regional Education and Information Centre
REO	Renewable Energy Operator
RES	Renewable Energy Sources
RRA	Renewable Readiness Assessment
SHPP	Small Hydro Power Plant
SME	Small and Medium-sized Enterprises
SSCM	Sustainable Supply Chain Management
TDA	Territorial Development Agency
TSO	Transmission System Operator
UNFCCC	United Nations Framework Convention on Climate Change
USAID	United States Agency for International Development
VaW	Violence against Women
WB	World Bank

1. BACKGROUND

In 2018 the European Commission's Clean Energy Package acknowledged the right of local communities and citizens to play an active role in the energy sector by defining “**Energy Communities**”.

“Energy communities” are specified in two separate laws of the Clean Energy Package. The revised Renewable Energy Directive (EU) 2018/2001 sets the framework for “Renewable Energy Communities” covering renewable energy. The revised Internal Electricity Market Directive (EU) 2019/944 introduces new roles and responsibilities for “Citizen Energy Communities” in the energy system covering all types of electricity.

1.1. Definition

As per the Directive (EU) 2019/944, Article 2(11)¹, ‘*citizen energy community*’ means a legal entity that:

- (a) *is based on voluntary and open participation and is effectively controlled by members or shareholders that are natural persons, local authorities, including municipalities, or small enterprises;*
- (b) *has for its primary purpose to provide environmental, economic or social community benefits to its members or shareholders or to the local areas where it operates rather than to generate financial profits; and*
- (c) *may engage in generation, including from renewable sources, distribution, supply, consumption, aggregation, energy storage, energy efficiency services or charging services for electric vehicles or provide other energy services to its members or shareholders;*

1.2. Key Elements and Conditions

Energy Communities are characterized by some key elements and conditions described in the corresponding EU directives and defined in national legislation of several countries. These elements and conditions are listed below:

- **Governance:** Participation is ‘open and voluntary’. More specifically, participation in energy projects is open to all potential local members based on non-discriminatory criteria.
- **Ownership and control:** Participation and effective control by citizens, local authorities and smaller businesses whose primary economic activity is not the energy sector.
- **Purpose:** The primary purpose is to generate social and environmental benefits rather than focus on financial profits.
- **Geographical scope:** The proximity between the renewable energy project and the Energy Community is of high importance.
- **Activities:** Energy Communities can cover a broad range of activities referring to all forms of renewable energy in the electricity and heating sectors.
- **Participants:** Natural persons, Local authorities and micro, small and medium-sized enterprises whose participation does not constitute their primary economic activity. Energy Communities should also ensure that participation is accessible to consumers in low-income or vulnerable households.

¹ <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019L0944>

- **Autonomy:** An Energy Community ‘should be capable of remaining autonomous from individual members and other traditional market actors that participate in the community as members or shareholders.

1.3. Cooperative Principles

Energy Communities must also respect the seven (7) Cooperative Principles outlined by the International Cooperative Alliance (ICA). The principles are:

1. *Voluntary and Open Membership*
2. *Democratic Member Control*
3. *Economic Participation through Direct Ownership*
4. *Autonomy and Independence*
5. *Education, Training and Information*
6. *Cooperation among Cooperatives*
7. *Concern for Community*

1.4. Types of Activities

The definition of Citizen Energy Communities (CECs) identifies different types of activities that CECs could engage in (see Figure 1, below). This is not meant to be looked at through one particular frame, for instance as an entity that performs an integrated set of activities. Rather, it is acknowledgment that the CEC organizational structure can be used by citizens, small businesses and local authorities to participate in activities across the energy sector.



Figure 1: CECs types of activities

While integrated activities may be foreseen, it is not the main reason for listing the activities in the definition. Also, activities not specifically mentioned in the relevant articles are not excluded.

1.5. CECs and Climate Change

As the International Panel on Climate Change (IPCC) has made clear, there is an urgent need to change how we generate, use and think about energy². Pressures brought on by the need to mitigate climate change, increasing energy demands and energy security concerns require that we move towards a decarbonized and more efficient energy system.

‘Energy community’ - where citizens own or participate in the production and/or use of sustainable energy - is an essential element in low carbon energy transition. In Europe, it has been instrumental in triggering the low carbon energy revolutions that are taking place in countries like Denmark and Germany. Along with other community initiatives, it has also contributed to creating public awareness of the need to reduce greenhouse gas (GHG) emissions, the uptake of renewable energy technologies and broader energy efficiency measures across the EU.

Energy community also produces benefits that far outstretch the production of clean sustainable energy. It enables communities to harness local natural resources to build social capital, create employment opportunities in the region, create revenue to address community development needs, and combat fuel poverty. Community ownership and participation in energy projects can also help to generate public support and acceptance for energy projects and reduce local opposition.

1.6. New concepts

The Prosumer

The idea that citizens are not just consumers, but that they also have potential to be energy producers, particularly of renewable energy. The prosumer can play an active role in the generation of energy, energy storage and demand side management (e.g., through smart meters and equipment to monitor, control and operate energy usage).

Energy Citizenship

The idea that through triggering a wider consciousness among citizens and communities of energy issues, they can contribute more broadly to the energy schemes. This encompasses the prosumer and energy community, but it also goes further and includes citizens beginning to participate in owning or operating distribution grids (e.g., through co-operative and/or municipal ownership/management), and in supply (not just producing and exporting electricity to the grid, but also supplying end of the line customers – either through participation in wholesale energy markets or through direct supply) and energy service companies (ESCOs). This concept recognizes that as a precondition for engaging in these roles citizens need to be provided with the capacity to become knowledgeable participants and to exercise their rights to effectively participate in the political dimension of energy policy.

² See Edenhofer, O et al (2014). Climate Change 2014: Mitigation of Climate Change, Chapter 7, IPCC WGIII, AR5



2. REGULATORY ANALYSIS AND POTENTIAL MAPPING FOR ALBANIA

During the last years, several national efforts have been made in the country to sustain economic development and meet the commitments of EU standards and legislation as regards energy efficiency (EE) and renewable energy (RE) implementation.

2.1. Overview of relevant documents and gender mainstreaming

2.1.1. Legal framework

Albania has adopted the following legislative framework on EE and RE:

- **Law on Energy Efficiency:** In November 2015, Albania adopted the Law on Energy Efficiency (Law No. 124/2015), to transpose the provisions of the EU Directive 2012/27/EU into the Albanian legislative framework.
- **Law on Energy Performance of Buildings:** Albania has prepared a stand-alone law transposing the EU Directive on Energy Performance of Buildings - EPBD (Law no.116/2016). This includes the requirements for new buildings occupied and owned by public authorities to meet the Nearly Zero Energy Buildings (NZEB) definition.
- **Law on Labelling of energy-related products:** In 2012 Albania adopted the Law on Indication of Consumption of Energy and Other Sources by Energy-related Products (Law no.68/2012, date 21.06.2012) which fully transposes the EU Directive 2010/30/EU. This law establishes obligation for informing the consumers with the energy consumption of energy-related products.
- **Law on Renewable Energy Sources:** The Albanian Parliament approved a new Law on RES (Law no.7/2017), which replaced the former Law on RES. The new RES Law partially transposes the Directive 2009/28/EU. The objective of the RES Law is to facilitate the harnessing of Albania's significant RE resources, in particular in the area of SHPPs, Solar Hot Water Systems, PV Power Plants, efficient traditional and industrial biomass heating systems as well as other RE sources.
- **Law on the production, transporting and trading of biofuels and other renewable fuels used in transport:** This Law (no. 9876, date 14.02.2008) promotes the production and use of renewable biofuels so as to replace oil by-products in the transport sector. The Law aims at fulfilling the obligations established by the Kyoto Protocol and ensuring the supply of renewable energy resources by promoting the cultivation of energetic plants to protect the environment
- **Law on the establishment of facilities for construction of new power generation capacities** (Law no. 8987, date 24.12.2002).
- **Law on the ratification of The Energy Community Treaty (EnCT)** (Law No. 9501, date 03.04.2006), which provides a legal framework for convergence with the European Union's energy acquis.³

Apart from the above legal framework, Albania has also adopted the following secondary legislation on EE and RE:

- **Decision of the Council of Ministers (DCM) no.852**, date 7.12.2016 on establishment and manner of organization and functioning of the Agency for Energy Efficiency.
- **DCM no.407**, date 19.06.2019 on approval of procedures, categories, conditions and requirements of qualifications and professional experience for energy which defines the procedures, categories and requirements for issuance of the energy auditing certificates.
- **DCM no.342**, date 22.05.2019 on approval of procedures, categories, conditions and requirements of qualifications for energy auditors.
- **DCM no.256**, date 27.03.2020 on calculation methodology of optimum cost levels for the minimum energy performance of buildings and building units and elements.

³ The EU's "acquis communautaire on energy" is defined in Annex I of the Energy Community Treaty and includes a number of EU Directives and Regulations that are core to the regulation of the energy sectors of EU member states.

- **DCM** no.537, date 8.07.2020 on minimum requirements of energy performance of buildings and elements of buildings.
- **DCM** no.934, date 25.11.2020 establishing the criteria and procedures for the selection manner of energy performance certificates of buildings which shall be subject of evaluation and their monitoring process.
- **DCM** no.1094, date 24.12.2020 approving the national methodology of calculation of energy performance of buildings.
- **DCM** no. 580, date 28.08.2019 on approval of consolidated National Renewable Energy Action Plan 2019-2020, which establishes the national overall RES target and specific targets for different RES technologies including the supporting measures required to be taken for reaching the objectives.
- **DCM** no.839, date 5.12.2007 on setting conditions and procedures of reimbursement of excise tax and establishing the facilities for construction of power generation capacities with installed capacity not less than 5 MW, as amended.
- **DCM** no.687, date 22.11.2017 on approval of methodology for setting the annual purchasing price of electricity from existing Priority Producers. The Priority Producers include the small HPPs commissioned before the date of entering in force of Law no.7/2017 on RES with installed capacity less than 15 MW.
- **DCM** no.369, date 26.04.2017 on approval of methodology for setting the purchasing price of electricity produced by small solar and wind power generators.
- **DCM** no.27, date 17.01.2018 on approval of methodology for setting the purchasing price of electricity produced by small RES power generators using the biodegradable part of solid industrial, urban and rural wastes.
- **DCM** no. 349, date 12.06.2018 on approval of supporting measures for promotion of electricity use from solar and wind energies and the procedures of selection of their projects, as amended.
- **DCM** no. 822, date 7.10.2015 on approval of rules and procedures for construction of new power generation capacities that are not subject of concessions, as amended.
- **DCM** no. 519, date 13.07.2016 on approval of electricity market model.
- **DCM** no. 430, date 11.07.2018 on the establishment of the governmental database for the electronic permit system (*e-permit*)
- **Decision of ERE's Board of Commissioners** no.214, date 28.12.2017 on approval of Electricity Market Rules and Agreement for Participation on the Albanian Power Exchange.
- **Decision of ERE's Board of Commissioners** no.229, date 20.12.2019 on approval of Regulation for issuance, transferring and cancelling of Guarantees of Origin for electricity produced by RES.
- **Instruction of MIE** no. 3, date 20.6.2019 on the Approval of the Authorized Procedure for the Connection to the Distribution System of Small Renewable Projects for Self-Generating Solar Power Generators

2.1.2. National Policies

The drafting of strategic and policy documents is a very special moment for the energy sector in Albania. These documents set the main milestones for the development models of one of the main promoters of the Albanian economy.

Strategic and policy documents are designed to have a minimal impact on public expenditures, as the required investments are designed in such a way that they can be provided from private sources, donors, development banks, as well as local banks, international technical assistance and finally from the state budget.

The referred documents are listed below:

- **National Strategy on Energy (NSE)** approved by DCM no. 480, date 31.07.2018: This document has defined the *country's energy targets* to enable Albania's European integration in the entire European energy infrastructure. Achieving the following objectives will be an absolute necessity for government, specialized agencies and energy companies:
 - **Continuation of losses reduction** in the electricity distribution network from 26.4% in 2017 to 10% in 2030 - a level comparable to all European countries;
 - **Continuation of electricity receipts increase** from 90% in 2018 to 98% in 2030 - a level compared to all European countries;
 - **Increasing the contribution of primary energy sources** versus total supply of primary energy sources up to the level of 52.5% in 2030;
 - **Reaching 100% of the electricity market rate of opening** in 2025 while building a simple and applicable scheme in terms of protection of low-income household consumers. In this context, the Government of Albania in cooperation with the Government of Kosovo, with the support of USAID and the Energy Secretariat are working to integrate the electricity markets of Albania and Kosovo, the establishment of the Albanian Electricity Exchange with the long-term objective the integration of our markets in the European market;
 - Albanian economy and society to **achieve a level of energy savings against total consumption by 15% in 2030**;
 - **Target of renewable energies** against total consumption reach 42% in 2030;
 - **Reduction of GHG emissions** against the total reach 11.5% in 2030;
 - **Penetration of natural gas versus total supply** of primary energy sources reach 20% by 2030.

- **National Energy Efficiency Action Plan (NEEAP):** The Albanian Government has approved the 1st, 2nd and 3rd NEEAP defining the EE targets for all economic and social sectors. Measures undertaken during the 1st NEEAP were predominantly done with either the direct support of an international financing institution (IFI) or other donors or were provided via local commercial bank loans supported by an IFI or other donors. This support came both via financial and technical means according to the analysis carried out and presented under the 2nd and 3rd NEEAP. Such international support may continue, but to scale-up EE actions the availability of increased domestic funds (public and private) is required. In order to realize many of the EE measures, the EE law calls for development of an Energy Efficiency Fund, as a mechanism of financial support for the implementation of EE projects in the public and private sectors. The funding proposed from the State Budget should be seen as a tool to leverage greater resources from external parties (IFI and donors as well as private banks). To do this the EE Fund, in addition to direct financing, has the option of providing loan guarantees, subordinate debt, investment gap financing or interest-rate buy-downs.

- **National Renewable Energy Action Plan (NREAP):** The Albanian Government has approved the 1st and the 2nd NREAP and they are defining the RES targets for all electricity, transport and heat sectors. The NREAP is based on Albania's obligations as a Contracting Party to the Energy Community Treaty to comply with EU Directives on the promotion of renewable energy sources. Albania is obliged to increase the portion of renewables to 38% of the total final energy consumption by 2020, which should be further increased up to 42.5% by 2030.

2.1.3. EU Legal Framework

The most important aspects of the relevant European legal framework are as following:

- **The Clean Energy Package**, i.e., Energy Efficiency Directive, Energy Performance in Buildings Directive, provisions for energy communities and for individual or collective self-consumption,

The “Clean Energy for all Europeans” Package is described as a comprehensive update of the EU’s energy policy framework to facilitate the transition away from fossil fuels towards cleaner energy and to deliver on the EU’s Paris Agreement commitments for reducing greenhouse gas emissions. The completion of this new energy rulebook marks a significant step towards the implementation of the energy union strategy, adopted in 2015. It consists of several legislative acts that will be in force by mid-2019 (EU countries have 1-2 years to transpose the new Directives into national law). The legislative acts, inter alia, concern the electricity market design in general, renewable energy, energy efficiency and energy performance in buildings.⁴

The amending Directive on Energy Efficiency⁵ (EED), in place since December 2018, and the Energy performance in Buildings Directive⁶ (EPBD) are of specific importance. The latter outlines specific measures for the building sector to tackle challenges, updating and amending many provisions from the 2010 EPBD.⁷ Furthermore there can be found relevant provisions regarding new market actors like energy communities and renewable energy in general in the Internal Electricity Market Regulation (IEM-Reg.), the Internal Electricity Market Directive (IEM-Dir.) and in the recast of the Renewable Energy Directive⁸ (RED II), which entered into force in December 2018.

- **The Crowdfunding Service Providers Regulation.** The European Parliament describes⁹ crowdfunding as an innovative funding opportunity that allows entrepreneurs to make an “open call” to the wider public for the collection of financial support for a specific business project, generally done through an internet-based platform. It therefore provides a much-needed alternative to bank lending because this type of bank lending currently available for entrepreneurs, start-ups and small enterprises is often As a result of the broadening access to finance for innovative companies, start-ups and other unlisted firms as a key aspect of the Capital Markets Union Action Plan (CMU Action Plan) alternative sources of finance such as crowd and peer-to-peer finance (“crowdfunding”) can be an important source of non-bank financing in support of innovative companies and start-ups provided that appropriate safeguards are in place.

Therefore, the Commission proposed the European Crowdfunding Service Providers (ECSP) for Business Regulation on 8 March 2018. It introduces an optional EU regime that enables crowdfunding platforms to easily provide their services across the EU Single Market. Instead of having to comply with different regulatory regimes, platforms will have to comply with only one set of rules, both when operating in their home market and in other EU Member States. This is expected to widen the pool of investors and the number of projects to pick from, as well as provide legal certainty as regards the applicable investor protection rules.

- **The upcoming InvestEU Programme.** This will be the successor of the European Fund for Strategic Investments (EFSI) initiative which has recently reached the end of its timeframe. The deadline for approval of EFSI operations by the EFSI Investment Committee was December 31st, 2020. The scope and functioning of EFSI and EFSI-backed investment platforms as well as combination of

⁴ See the official website of the European Union: <https://ec.europa.eu/energy/en/topics/energy-strategy-and-energy-union/clean-energy-all-europeans>.

⁵ Directive (EU) 2018/2002 of the European Parliament and of the Council of 11 December 2018 amending Directive 2012/27/EU on energy efficiency.

⁶ 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.

⁷ <https://ec.europa.eu/energy/en/topics/energy-strategy-and-energy-union/clean-energy-all-europeans>.

⁸ 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.

⁹ <http://www.europarl.europa.eu/legislative-train/theme-deeper-and-fairer-internal-market-with-a-strengthened-industrial-base-financial-services/file-crowdfunding-service-providers-for-business>.

EFSI and ESIF funding are broadly determined by a series of key reference documents, such as EFSI Regulation, EFSI Strategic Orientation Note, as well as other guidance documents and manuals.

2.1.4. National legislation vs. EU legislation

In the frame of Albania's efforts for EU accession, another aspect that must be kept in mind is the existence of the two levels of legislation. There is the European and the national/regional level, which both interfere with each other through a dynamic interdependency. That means, on the one hand, the national legislation can be seen as the initial point for each of the pilot schemes, as this legislation is the more concrete and more sector and/or location-specific, on the other hand, the European legislation affects the national legislation for the very simple reason of accession process and the national legal framework alignment with EU legal framework, and therefore national legislation must not contradict European legislation. That means that, the European legislation (as long as it is directly applicable in all Member States) has to be transposed into Albanian law. Here, a certain discretion may exist and the country be allowed to create its own legislation as long as it is in line with the European set of rules. The implementation is likely to follow the already existing national legislation as far as it is aligned with the European legislation. Thus, if there are changes in one level it is most likely that the other level will change as well, which then again may affect the other level. The following figure illustrates this dynamic interdependency.

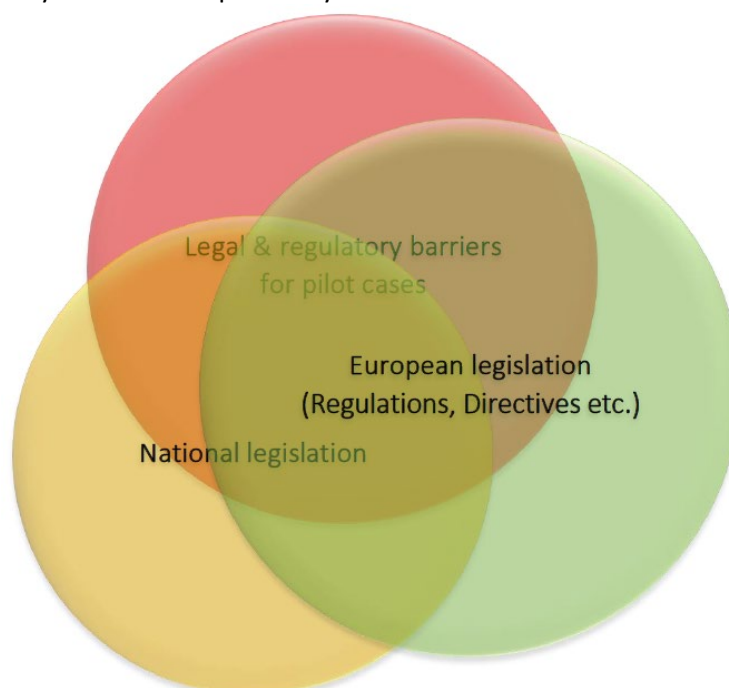


Figure 2: Dynamic interdependency of legislation levels

Source: CitizEE Project - Legal & Regulatory Framework Analysis

2.1.5. Energy community inclusion in the legal and policy framework

Albania signed the Paris Agreement on April 22, 2016, entering the new era of the international climate policy process. In fact, Albania adhered to the United Nations Framework Convention on Climate Change (UNFCCC) in 1995 and the Kyoto Protocol in 2005. Albania has begun the process of changing its status from a developing country to a developed country, in the context of UNFCCC. This process is an integral part of the European Union integration process and includes capacity building at the national level for annual greenhouse gas (GHG) monitoring and reporting, formulation and implementation of policies to reduce GHG and adaptation to climate change, transposing and implementing the European Union *acquis* on climate change.

2.1.5.1. Climate change aspects in Albania

Albania's total greenhouse emissions are relatively low (8,4 M tons in 2009, of which roughly 60% is of the CO₂ emissions) it is aiming to take its fair share from the efforts to avoid dangerous climate change. The country has unique emission profile as its electricity generation is based on renewable source generation at currently, with hydro power providing dominant part of it. Unfortunately, this hydro power capacity is vulnerable to climate change impacts. The unique electricity mix of Albania is positive in the sense that electricity system is on a level of decarbonization what other countries aim for only on the long term, but it also means that there is limited opportunity for further policies and measures in this sector to reduce emissions. Maintaining the low greenhouse gas emission content of the electricity generation and decoupling growth from increase of greenhouse gas emissions in other sectors are the primary drivers of the country regarding mitigation contribution as its Intended Nationally Determined Contribution (INDC). Having high uncertainty of data regarding non-CO₂ greenhouse gases results that Albania is to provide its INDC regarding CO₂. If data quality of non-CO₂ greenhouse gases improves, Albania intends to expand its INDC to other greenhouse gases as well.

Albania has presented the INDC following decision 1/CP.19 and decision 1/CP.20 of the UNFCCC, which invited Parties to communicate the UNFCCC Secretariat their INDCs, with the aim to achieve the ultimate objective of the UNFCCC as set out in Article 2 of the Convention.

The INDC of Albania is a baseline scenario target: it commits to reduce CO₂ emissions compared to the baseline scenario in the period of 2016 and 2030 by 11.5 %. This reduction means 708 kT carbon-dioxide emission reduction in 2030.

The emission trajectory of Albania allows to have a smooth trend of achieving 2 tons of GHG emissions per capita by 2050, which can be taken as a target for global contraction and convergence of greenhouse gas emissions. The following table provides additional information regarding the INDC in order to facilitate clarity, transparency and understanding.

Table 1: Information regarding the INDC of Albania

Mitigation contribution of GHG emissions	
Type	Baseline scenario target: a reduction in GHG emissions relative projected future emissions
Gases covered	Carbon Dioxide (CO ₂)
Target year	2030
Baseline	Business-As-Usual scenario of emissions projections based on economic growth in the absence of climate change policies, starting from 2016
Sectors covered	The INDC covers the following sectors of the greenhouse gas inventory: <ul style="list-style-type: none"> • Energy • Industrial processes
Planning process	Planning process of the INDC included the review of available data and modelling work applicable to greenhouse gas reduction pathway as well as consultations with government stakeholders as well as with the public. The scenarios for the INDC were developed taking into consideration draft of the 3rd National Communication of Albania and all available scenario development work related to greenhouse gas emissions. Within the preparation process of the INDC it became clear that significant data uncertainty exists regarding the emissions of greenhouse gases other than CO ₂ and in sectors outside of sectors covered by the INDC. Improvements were made on existing modelling work and the scenarios presented are result of this work.
Participation in	Albania intends to sell carbon credits during the period until 2030 to contribute to

international market mechanism	cost-effective implementation of the low emission development pathway and its sustainable development. Albania foresees that for the utilization of international market mechanism is conditional on having effective accounting rules developed under the UNFCCC to ensure the environmental integrity of the mechanisms.
Fairness, equity, ambition and Means of Implementation	
Fairness, equity and ambition	Albania is a developing country, highly vulnerable to the effects of the climate change. National emissions of the greenhouse gases represent only 0,017 % of global emissions and the net per capita GHG emissions Albania was 2.76 tCO _{2e} which is less than a quarter of emissions of high-income countries. Albania will consider the ultimate objective of the UNFCCC in its future development and committed to decouple greenhouse gas emissions from its economic growth and embarks on a low emission development pathway. The INDC submitted by Albania is fair and ambitious because it aims to secure limited increase of its greenhouse gas emissions while it the country pursues a strong economic development pathway. Moreover, the pathway allows on long term for the convergence of Albania's per capita emissions to the 2 ton/capita level.
Means of implementation	The results of the preparation of the INDC will be reflected in the Third National Communication of Albania and also will form the basis of the Environmental and Climate Change strategy which is in preparation. Development of the strategic directions for energy and transport sectors will take into consideration the INDC. Coordination of activities in relation to the strategy is foreseen to be coordinated by the Ministry of Environment which is the chair of the inter-ministerial body on Climate Change. Albania also transposes and implements parts of the EU legislation, including legislation on climate change and builds capacity for its implementation which supports its ability to reduce greenhouse gas emissions. Albania is a contracting party of the Energy Community Treaty which aims to extend the EU internal energy market to South East Europe and beyond on the basis of a legally binding framework. The overall objective of the Energy Community Treaty is to create a stable regulatory and market framework which also includes legislation aiming to reduce greenhouse gas emissions.
Key Assumptions	
Metric Applied	The metric used for the GHG emissions is the Global Warming Potential on a 100-year timescale in accordance with the IPCC's 2nd Assessment Report
Inventory methodology	IPCC 2006 Guidelines
Approach to accounting for agriculture, forestry and other land uses	Greenhouse gas emissions and removals from agriculture, forestry and other land uses are currently not included in the accounting. Emissions and removals from these sectors can be included in the INDC at a later stage when technical conditions allow for that.

Source: *Intended Nationally Determined Contribution (INDC) of the Republic of Albania following decision 1/CP.19 and decision 1/CP.20 of the United Nations Framework Convention on Climate Change (UNFCCC)*

Having relatively high uncertainty regarding emission data in the LULUCF sector and non-CO₂ greenhouses gas emissions and removals Albania reserves its right to review its INDC until 2020 upon the availability of more accurate data and improved technical conditions regarding land use, land use change and forestry as well as non-CO₂ greenhouse gases and include it in its nationally determined contribution.

If the agreement or related COP decisions are amended before their entry into force in such a way that they include rules or provisions that in effect alters the assumptions under which this INDC has been developed, Albania reserves the right to revisit the INDC.

2.1.5.2. Gender mainstreaming

The importance of gender equality in the European Union enlargement process has been emphasized in various EU documents, while the European Commission's Country Reports have repeatedly recognized a number of challenges that Western Balkan countries face in achieving gender equality. The gender (in)equality picture portrayed by the EC comes increasingly close to the illustration of the greatest gender equality issues as defined by the Civil Society Organizations (CSOs) in Albania: gender-based violence, political participation and decision-making, lack of gender mainstreaming, gender stereotyping and discrimination in the labor market.

The UN Women's Country Gender Equality Brief (CGEB) provides a snapshot of gender equality and the situation of women in Albania, particularly against the gender-related indicators across the Sustainable Development Goals (SDGs). This information is essential for understanding how gender and other forms of discrimination - which already existed before the COVID-19 induced crisis - intersect, negatively impacting on women's status and gender equality, and undermining efforts to support socio-economic development in Albania today. Economic and health shocks in the context of existing gender inequalities tend to trigger rapid deterioration in women's well-being. Therefore, it specifically highlights the need for prioritizing women's and girls' needs in the entirety of policy responses, and for a deliberate re-allocation of resources across all sectors that match these needs.

Overall, Albania has a solid normative framework in place to promote, enforce and monitor equality and nondiscrimination based on sex. Current gaps in administrative sex-disaggregated statistics and gender data are likely to reinforce existing inequalities and the vicious cycle between lack of data and no remedial action. Efforts need to be stepped up to ensure effective, inclusive and affordable health care, and access to adequate information and services on sexual and reproductive health, particularly for adolescent girls and boys, and for women and men from vulnerable, rural, and lower-income populations.

Gendered educational outcomes significantly contribute to gender disparities in the labor market and the gender wage gap. Major gendered patterns are apparent in higher education, which is characterized by significant horizontal segregation. In vocational education, the vast majority of graduates (roughly 82%) are boys. Underlying reasons are the common mentality regarding so-called "male professions", the social climate in vocational schools, the type of curricula offered, and girls' employment perspectives upon graduation. In tertiary education, the majority of students (60%) are girls, compared to 40% boys.

Violence against women/gender-based violence remains widespread, affects more than 50% of women in Albania, and challenges the integrity of all women and girls. Official statistics on the number of reported cases of domestic violence show a slight decrease over the past three years, indicating that Violence against Women (VaW), Gender-Based Violence (GBV) and Domestic Violence (DV) are seriously underreported.

Access to justice remains an area where women face significant barriers in claiming their social, economic and human rights. A significant share of the population says that the justice system does not protect their rights, and this notion is more pronounced among women (68.8%) than men (31.2%)

The difficulties in balancing private and professional life have been particularly recognized as a reason contributing to the high level of female inactivity in the labor market, but also as an impediment for women in climbing the career ladder. Women still face numerous obstacles to participation in politics and decision-making. Despite the fact that Albania has introduced female quota for their parliaments,

partisan politics has remained a male-dominated field. While women's formal representation has increased, men hold the vast majority of political and economic positions of power.

Gender gaps in economic opportunities include low labor force participation, high levels of informality, gender segregation, and low access to productive inputs. Occupational stereotypes limit women's choices, with women working predominantly in sectors such as health and social work, education, manufacturing, and agriculture, which are characterized by lower salaries.

Data/information on the gender-related aspects of natural resource management, environmental pollution, and the impacts of climate change remains highly limited in Albania, which reveals a clear omission/gap in awareness, discourse and policy. No information exists on the extent to which gender equality goals have been mainstreamed into the national legal and policy framework on environment and climate change. Similarly, previous floods, the 2019 earthquake, and the 2020 COVID-19-related lockdown have shown that adequate measures in support of women and the most vulnerable citizens still need to be integrated into Albania's risk reduction and disaster preparedness plans.

Adequate financing of gender equality and women's rights are at the core of a smart, effective and forward-looking development and recovery strategy. Among the 38 budget programs under the medium-term budgeting program (MTBP) 2020-2022, half address gender inequality issues in sectors such as health, social protection, education, justice, business, and agriculture.

In their efforts to achieve equality, all independent bodies are public institutions with a mandate to deal with gender (in)equality. Nevertheless, the institutions overall are under-resourced and characterized as weak and inefficient in ensuring gender equality and protection of rights. On the other hand, the CSOs have been the main driver for development of national gender policies enhancing and promoting gender equality through various activities and programs. The mutual relations of CSOs with the institutions have always been complex with a fluctuating level of impact on policymaking of the former.

Whereas national authorities are still largely characterized by poor monitoring and evaluation practices and capacities, CSOs have stepped in and provided monitoring and reporting on specific indicators and gender equality policy documents.

2.2. Recent developments in Albania

2.2.1. Initiatives in Albania on RE sector

The projects/initiatives listed below have been implemented in the framework of the Interreg IPA CBC 2014-2020 program and have been completed in December 2020, except the BLUE DEAL project, which is on-going and Alterenergy project that has been implemented during 2011-2015.

- **BLUE DEAL** is a European project co-financed by the European Regional Development Fund and the Instrument for Pre-Accession Assistance Fund, for the capitalization of Blue Energy (BE). The project aims to increase transnational activity of innovative clusters and networks of the BE sector, develop links and synergies between SME`s, public authorities, knowledge institutions and civil society and establish transnational and regional Blue Deal Alliances.

Albania, main actor of the second testing lab of the Blue Deal project. For two days and in a virtual way, the partners of the BLUE DEAL project have carried out their second Testing Lab focused on the possibilities of development and implementation of different blue energy technologies in the Port of Durrës, Albania.

BLUE DEAL labs are designed to have two components: A Blue Energy planning session to develop the possible solutions for the exploitation of marine energies in the study area and an open innovation session thought to involve SMEs and other companies, with a problem-solving approach that brings together challenges and proposals for the development of these technologies.

In that sense, during the event Albania's wealth in renewable energy sources with hydropower as the main source was highlighted; also, is observed great potential for electricity generation by Offshore Wind and by wave energy harvesting.

- **Buildings' refurbishment in Dropulli Municipality.** Currently, there are presented the buildings targeted for refurbishment, which will be subject to energy audits performed by certified experts under the authority of the Project Consultant and his team of engineers, architects, structural designers, etc. In line with national and international standards, the audits will consist of measurements of the building envelope and surfaces (floors, wall areas, windows, roofs, etc.), estimation of the current U-values, retrieving the detailed and correct energy bills of the last three years (2018–2020), analyzing the building conditions (building physics, technical systems), and financial analyses taking into account the renovation of the building envelope, technical systems, as well as the building management.

Moreover, there are specified the EE measures for the heating systems (for rooms and warm water production) to achieve the energetic objectives. It is also considered the application of solar lighting energy to improve EE and to reduce power and fuel consumption, as far as this is economically feasible.

- **TARGET Project, Promotion and Implementation Energy Efficiency and RES in Public Buildings in Gjirokastra.** The overall objective of the project for Energy Efficiency in Greece and Albania is to achieve strong cross-border cooperation and undertake joint well-prepared interventions towards reduction of energy consumption in public buildings at both target areas of this program. This objective is further supported by three (3) main goals:

- a. exploit the potential for energy savings and energy efficiency improvements in the construction sector, with public sector buildings being an example for mobilizing the entire economy,
- b. stimulate cross-border knowledge exchange and awareness regarding energy efficiency in public buildings, and
- c. promote the joint involvement of various stakeholders in the sustainable energy planning and implementation towards a smart decarbonized building stock.

The project, also uses the smart Information and Communication Technology (ICT) for the creation of innovative interactive digital TARGET that demonstrate sustainable energy applications, which will raise awareness among students that are using or visiting the buildings (schools) where these investments will be implemented.

- **LED Project** - *Leading the way to improve Energy Efficiency in public schools and propagate the use of renewable energy sources.* The overall objective of LED Project is to improve end-users' behavior towards higher energy efficiency, which will ultimately result in the reduction of energy consumption in public buildings. Project activities will improve energy efficiency in public buildings, will promote the use of RES and raise social awareness on energy saving issues.

One of the main challenges in the cross-border area is the lack of progress in the field of Renewable Energy Sources (RES) and energy-saving in public buildings. LED Project addresses this challenge, focusing on a specific group of public buildings: schools. Through children and the educational system, the adult population may be effectively sensitized which in turn will ensure the long-term impact of the Project.

The Project will be accompanied by the elaboration of a Cross-Border Plan to achieve common strategy between Greece and Albania (policy alignment) regarding energy efficiency and the use of RES, as well as by the creation of the LED Model towards this end, by proposing 3 specific kind of interventions (a) technological equipment for energy efficiency;(b) use of RES and (c) smart ICT technology advancements.

Piloting the model will take place in three public schools, two in South Albania (Korce & Dropull) and one in Western Macedonia. Equally important, in order to meet the objectives of the Project, is the establishment of the Experiential Laboratories in the aforementioned schools, exclusively powered by solar energy, where students will be educated by experiencing the benefits of the LED Model in practice, thus raising energy awareness.

- **Cross border cooperation for energy efficiency using solar energy.** The project addresses one of the major global challenges that humanity is facing, but most importantly takes on what is described as a threat for the Cross-Border area: the *“Potential severe impacts of climate change on the natural and manmade environment”*. The project aspires to showcase how a well-developed integrated energy intervention can achieve environmental targets, while at the same time boost economic growth and lead to a fair low-carbon economic development.

The project was developed by the Municipalities of Preveza (Greece) and Finiq (Albania) and the University of Ioannina – Special Account for Research Funds – Department of Early Childhood Education, with the support of the Department of Computer Sciences and Engineering. Each partner brought its expertise to develop this integrated project that takes into account the local strengths and weaknesses of the Cross-Border area.

The overall objective of the Project is to reduce energy consumption through the RES utilization and more energy efficient lifestyles, thus promoting a sustainable regional development.

Within the project, 2 pilot projects will be implemented regarding the installation of photovoltaics cells in the wastewater treatment plant of Louros, Preveza, and energy efficiency investments in the Municipality of Finiq, as well as an energy efficiency awareness platform for the general public.

- **Alterenergy** (Energy sustainability for Adriatic small communities) was the first strategic project funded within the cross-border Cooperation Program IPA-Adriatic 2007-2013, which relied on 12.5 Million Euro total budget; it was launched in September 2011 and it lasted until August 2015 (4 years duration). The initiative relied on a partnership of 18 organizations, regions, ministries and energy agencies belonging to all the countries of the Adriatic area: Italy (7 Adriatic Regions), Albania, Bosnia and Herzegovina, Croatia, Greece, Montenegro, Serbia and Slovenia.

2.2.2. Other initiatives in Albania (EE sector, Cross-border)

- **“Solar in Kutë”** campaign, an initiative of partner organizations EcoAlbania, EuroNatur and Riverwatch, has brought to the attention of the general public the history of Kutë community in protecting the Vjosa River and its capacity to produce solar energy on the buildings’ roofs without the need to destroy the Vjosa river. As the first practice or model of “energy communities or energy cooperatives” in Albania, ‘Solar in Kutë’ project will create community owned energy that will not just protect the integrity of the Vjosa river, but also create additional income for Kutë villagers.

The main objective of the pilot project is to bring a clean and sustainable energy source (solar energy) to the Kutë village and improve access to renewable energy, by creating the first solar village in Albania. The project is expected to raise awareness for rural community renewable energy solutions, push further solar and sustainable energy projects and promote the use of solar energy. The untapped potential of Albania’s solar energy, can be seen as a great possibility for future investments in renewable energy solutions.

This project emphasizes the importance of modern techniques like rooftop PV panels, in preserving the environment and that electricity could be produced by other renewable energy technologies like solar.

- **Initiative to raise awareness of businesses in the city of Korça on energy investments and green construction**, financially supported by the European Union and managed by EDEN Center. It analyzes in detail the energy consumption in a building, which is used as a refrigerator for storing the fruits of the area.

Every business in the Korça region can implement energy efficiency measures, in order to reduce the monthly energy bill. Meanwhile, for the first time, a report has been drafted that provides concrete data on how the value of investing in thermal insulation or solar panels translates into reduced energy bills.

After processing the building data, which are mainly related to the surface, architectural content or refrigeration equipment used by this business, it was concluded that with an investment of 270,000 ALL, the reduction of the electricity bill is 15%, meanwhile that the return on investment is achieved in a relatively short period of 6.5 years. Meanwhile, the experts who drafted the report also considered the possibility of installing solar panels, as a right that can now be used by any

business in the country. This is because, since June 2019, the Ministry of Infrastructure and Energy has approved the instruction, which paves the way for the self-production of solar energy.

- **Energy Audit Report at Kindergarten No. 43, Tirana.** In Albania, the concept of energy audit is a new concept. Experts who work in local institutions such as municipalities lack the concept of energy audit and its management. These experts face great difficulties in the energy management of buildings that are under the municipality's jurisdiction such as kindergartens, schools, nurseries, street lighting, municipal buildings, etc.

Based on this issue, the Institute for Environmental and Territorial Management, with the financial support of the Swedish Embassy and in cooperation with the Regional Environmental Center (Senior Program) made possible the identification and full implementation of energy audit at Kindergarten no. 23 in Tirana. This effort aims to build a guide on auditing. The guide will be provided to municipal experts through workshops, informing them on theoretical and practical aspects of the audit process and its importance.

- **Developing a community relying on smart energy**, in the frame of Interreg IPA CBC Italy–Albania–Montenegro Programme. The common challenge of the proposal and the Programme is the adoption of European standards in the RES, RUE and ES systems for the public and private sectors. Local expertise will be established by incorporating the trainers' consciousness with the task of smart energy implementation based on European standards. The kick off meeting was organized in 21 December 2020 by University "Ismail Qemali" Vlore (UV). UV is leader in this project in partnership with Unimediteran University from Montenegro and CNA Lecce Italy. The first workshop was organized on 26 February 2021, with participation of energy sector professionals and academics. Smart appliances and introducing a new community culture about smart energy was the main aim of this workshop.
- **Public Authorities Supporting low carbon Growth in European maritime border regions–PASSAGE**". This cross-border action plan has been jointly designed by Province of Lecce (Italy), Region of Ionian Islands and InnoPolis (Greece), and Regional Council of Vlora (Albania), partners of PASSAGE project, and many stakeholders involved on each side of the Straits of Otranto and Corfu.

PASSAGE project is aiming to develop a low-carbon transition at the scale of 6 European straits and 5 maritime border regions. The first phase of the project (April 2016-March 2018) was focused on the diagnosis and the identification of levers for action. The second phase of the project (April 2018-March 2020) was dedicated to the implementation of this action plan.

Action 3 of this project provides that citizens and communities on both sides of the Straits of Otranto and Corfu need to produce clean and affordable energy. Energy Communities can promote social and solidarity-based economy and innovation in the energy sector, tackling energy poverty, promoting energy sustainability and innovation, production, storage, self-consumption, distribution and supply of energy as well as improving local acceptance of RES and energy efficiency in end-use at local and regional level. Within this scope, the local communities need to be sensitized and raise their awareness regarding energy efficiency, climate change and low carbon economy. The actions to be implemented are the following:

- Energy Communities reference website for Otranto & Corfu straits - Knowledge reference website
- Awareness raising on energy communities - Communication plan, Promotion via Social media campaigns & electronic communication, Roadshows targeting local key stakeholders

2.3. Stakeholder mapping for the development of citizen energy in Albania

While laws and institutional frameworks as well as the associated implementation tools vary from one power system to another, a successful energy community process depends on active stakeholder engagement and the flow of information between stakeholders and decision makers.

The authority to plan for and approve the power sector investment decisions rests with the decision makers. However, stakeholder involvement is also critical to the process. Although community stakeholders do not make legally binding decisions, they have important interests in the power system and will ultimately be affected by those decisions.

Effectively involving stakeholders in power sector planning activities drives the best possible outcome. Power sector planning decisions are complex. They cannot be solved by a single government agency, institution, or interest group. Even if they could be, failing to involve all affected parties in project planning will surely lead to a less successful project. By engaging various stakeholders, any power-sector project will benefit from greater communication, collaboration, and knowledge sharing.

Stakeholders can have a direct effect on the successful outcome of power-sector projects when proactively engaged via transparent and regular communications. Stakeholders have experience, advice, concerns, and valuable input that should be considered. Addressing any stakeholder concerns early in the process can help to avoid obstacles and save valuable time and money.

Maintaining strong relationships with stakeholders can help gain favor for projects, safeguard potential investments, and lay the groundwork for future projects. Stakeholder engagement can also help build local technical capacity – further contributing to long-term success.

As previously mentioned, the concept of energy community is new in Albania, and, as such, unearthing the dynamics of establishing such a community and making it sustainable, requires a detailed stakeholder analysis of all relevant and major actors.

This section aims to provide a stakeholder analysis of actors in the energy sector in Albania as a whole (with specific focus on renewable and sustainable energy), using a *Political, Economic, Social, Technological, Legal and Environmental* (PESTLE) analysis methodology.

2.3.1. Approach

The PESTLE analysis is a framework or tool typically used in business and management to analyze the environment they are operating in or are planning to launch new operations in. PESTLE analysis can also be used to monitor the macro-environmental or external factors that play a role in impacting on that environment.

The *political analysis* looks at the extent and impacts of state power on the economy. For example, certain environmental policies may enforce penalties for corporations unable to comply. *Economic factors* encompass direct impacts on economic capacity, be it of an organization, industry sector/market, or nation-state. *Social factors* examine the social context of these institutions including, but not limited to, population analytics, demographics and cultural trends. *Technological factors* are related to technological advancement, including research and development (R&D), niche technologies and automation. *Legal factors* take into account laws and policies, including consumer protection laws, safety standards, and labor laws. *Environmental factors* are all those critical factors that are conditioned or impacted on by environmental issues, geographical location, global changes in climate, weather, etc.

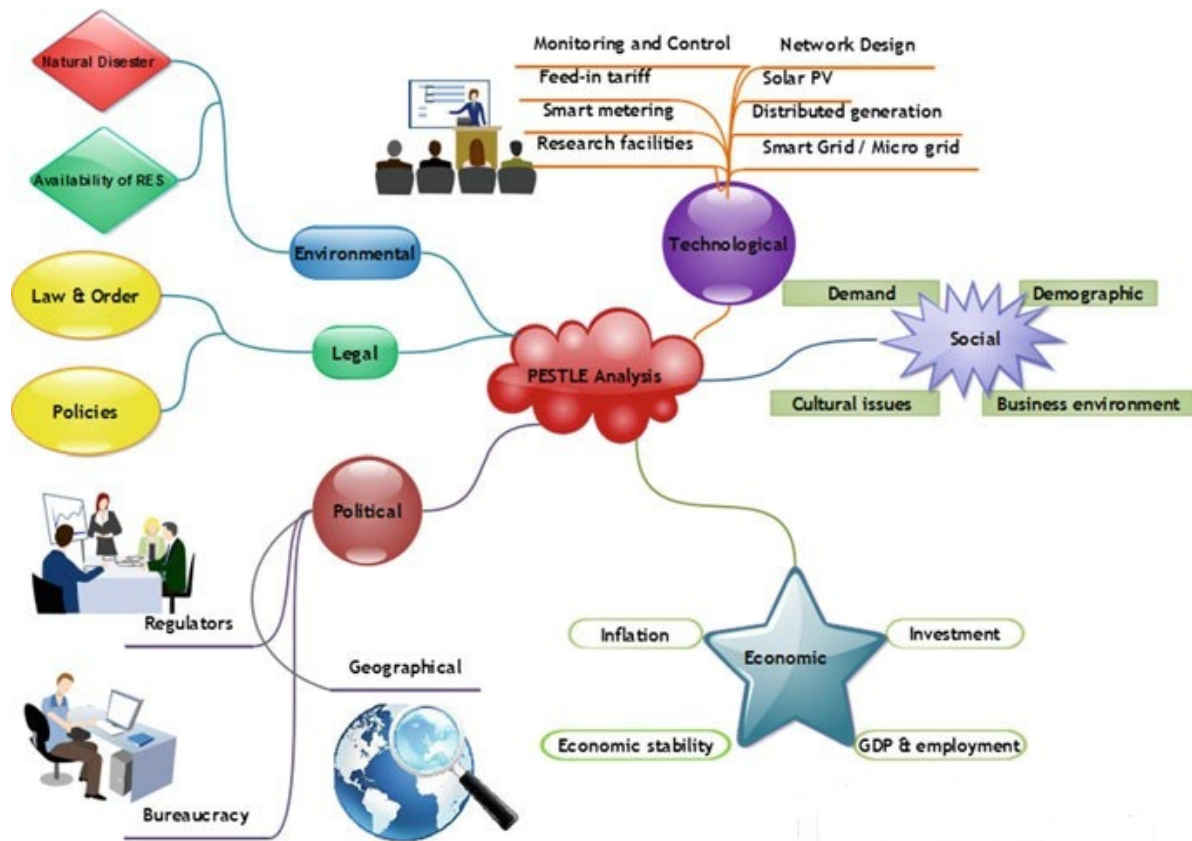


Figure 3: PESTLE analysis for implementing renewable energy

Source: F. R. Islam. *Possibilities and Challenges of Implementing Renewable Energy in the Light of PESTLE & SWOT Analyses for Island Countries*

2.3.2. Stakeholders Identification

Stakeholders are referred to as *individuals, groups or institutions that have interests or concerns in the state of affairs within an organization, and typically can affect or be impacted on by the organization's activities, targets or policies.*

This process identifies relevant stakeholders and the right balance of different stakeholders to include. This is ideally done at the early stages of the project to ensure stakeholders are engaged throughout the process. It is important to identify all stakeholders that may affect or be affected by the project.

The following questions are asked to identify stakeholders:

1. Who may benefit from the project?
2. Who may contribute to the project?
3. Who may be impacted by the project?

The stakeholders can be structured in three important categories:

- **Key stakeholders** – are those who can significantly influence or are important to the success of a project or a program (according to the major policy objectives and to the purpose of the respective program);
- **Primary stakeholders** – composed by individuals, groups of individuals or institutions who are affected either positively (beneficiaries) or negatively by a project or a program who has impact on them; in most projects primary stakeholders will be categorized according to project objectives and social analysis.

- **Secondary stakeholders** – are different intermediary entities in the process of delivering the activities comprising the project or program, who can or cannot take part in the decision-making process and who can be influenced positively or negatively also.

The main Stakeholders identified in the Albanian Energy Sector can be structured as follows:

a. Key Stakeholders:

- The Albanian public authorities (Council of Ministers (CoM), Ministry of Infrastructure & Energy (MIE), Ministry of Finance and Economy (MoFE), Ministry of Health and Social Protection (MoHSP), Ministry of Tourism and Environment (MoTE), Energy Regulatory Entity (ERE));
- Public institutions at central levels (Agency of Energy Efficiency (AEE), National Agency of Natural Resources (NANR), National Environment Agency (NEA), National Territorial Planning Agency (NTPA), Territorial Development Agency (TDA));
- Public institutions at regional/local level (municipalities – energy efficiency departments, where present);
- The national companies for energy production, transmission and network (Albanian Power Corporation (KESH), Transmission System Operator (OST), Electric Energy Distribution Operator (OSHEE));
- International Financial Institutions (i.e.: World Bank (WB), International Monetary Fund (IMF), European Bank for Reconstruction and Development (EBRD), European Investment Bank (EIB), etc.);

b. Primary Stakeholders:

- The shareholders of the companies privatized with strategic investors and portfolio investors (resources extraction companies for coal, oil and natural gas, producers, distribution companies, supply companies);
- Energy consumers (businesses, SMEs, etc.), private or with state capital, legal persons;
- Academic and research institutions and consulting companies that provide the knowhow and technology support
- The energy consumers, individuals/communities, local residents and business owners, being in majority captive consumers.

c. Secondary Stakeholders:

- Potential investors interested to enter or to extend the activity on the Albanian energy market;
- The private energy suppliers (others than KESH);
- Investment projects developers in the energy sector;
- Power generation equipment suppliers;
- The design and research institutes in the energy sector;
- Banks that finance projects in energy sector;
- Consultancy firms;
- The employers, employees and professional associations in the sector;
- Environment, wildlife, social, and other interest groups;
- Media;
- Civil Society Organizations (CSOs).

There must be considered that energy is a strategic sector and, for this reason, may be more visible than other sectors, this sector being subject to direct political interferences. The political environment has a considerable influence over the national energy system reform.

2.3.3. Stakeholders Engagement

Successful stakeholder engagement requires the active participation of relevant government agencies, institutions, civil society groups, and others. Successful stakeholder engagement includes the following steps.

✓ **Step 1. Stakeholder identification**

As described above, the identification of sector stakeholders is the first step for setting up a clear picture “who is who”. Within this design and listing process it is important to check out as much as possible data and information as well as to be consulted from various sources. The legal, regulatory and strategic documents have such information. Checking reports and web sites on implemented projects is another source.

Apart from the main actors, it will be required more effort to define small initiatives and the source of data at local and community level. In addition, although the positive support of stakeholders need to be the majority, there are also potential stakeholders who can have opposition in such initiatives. They must be defined and registered as well.

✓ **Step 2. Stakeholder recruitment**

This step will consist of recruiting an appropriately sized group of stakeholders. While developing strong relationships with all stakeholders would be ideal, effective stakeholder management will prioritize those who may have the greatest influence on a project. This includes those who may have adverse opinions about the project as they may have the most significant on the impact on the outcome.

As regards the communication tools, often a formal invitation (in the form of a letter or other communication) for stakeholders is required in this step. The invitation should clearly describe the purpose of the project, the desired outcomes of the project, and the stakeholders’ role.

✓ **Step 3. Stakeholder engagement**

Stakeholders may be engaged throughout the project to:

- Gather and share relevant information and data
- Consult on key questions
- Provide feedback on potential obstacles
- Offer insight on context-appropriate approaches
- Disseminate findings

When engaging stakeholders, it is vital to maintain open and transparent communication for cultivating a sense of inclusion and addressing any new concerns as they arise. Addressing stakeholder input may require revisions to the project plan. In turn, this may require flexibility from those involved, but ultimately, it will improve project outcomes.

Also, conducting workshops and hosting group calls are often effective approaches to engage various stakeholders and inform project decisions.

✓ **Step 4. Stakeholder retention**

It is important to build on relationships to sustain engagement throughout the project and after its completion. The continued engagement of stakeholders will help to develop long-term appreciation for the project and lay the foundation for successful future related projects.

2.3.4. PESTLE Analysis

PESTLE analysis has often been used to unravel issues and discourse that are mainly qualitative in nature, and as such difficult or rather unsuitable to be resolved quantitatively. In particular, it can be used to analyze and break down various problems more holistically. By using PESTLE analysis, new strategic policies can be developed to replace and renew policies that are no longer effective or efficient.

2.3.4.1. Political

Political factors play a significant role in determining the factors that can impact energy community groups establishment and operation in the market. The key to achieve success in a dynamic development industry is to diversify the systematic risks of political environment. In this frame, should be analyzed the following factors before entering or investing in an energy community process:

- Political stability and importance of energy sector in Albania's economy.
- Level of corruption - especially levels of regulation in Basic Materials sector.
- Bureaucracy and interference by government.
- Legal framework for contract enforcement.
- Intellectual property protection.
- Trade regulations & tariffs related to Basic Materials.
- Favored trading partners.
- Pricing regulations – Are there any pricing regulatory mechanism for Basic Materials
- Taxation - tax rates and incentives
- Work regulations.
- Mandatory employee benefits.
- Safety regulations in the Basic Materials sector.
- Product labeling and other requirements.

2.3.4.2. Economic

The Macro environment factors such as – inflation rate, savings rate, interest rate, foreign exchange rate and economic cycle determine the aggregate demand and aggregate investment. While micro environment factors such as competition norms impact the competitive advantage of the operation, the EC groups can use national and/or regional/local economic factors such as growth rate, inflation, consumer spending, etc. to forecast the growth trajectory of not only the sector, but also that of the EC scheme itself. Economic factors to be considered are:

- Type of economic system – what type of economic system there is and how stable it is.
- Government intervention in the market and related Basic Materials.
- Exchange rates & stability of country's currency.
- Infrastructure quality in the sector.
- Skill/education level of human resources.
- Labor costs and productivity.
- Business cycle stage (e.g., prosperity, recession, recovery)
- Economic growth rate
- Unemployment rate
- Inflation rate

- Interest rates

In addition, there needs to be a joint commitment between the government and business actors, and support from the national financial sector in order to build capital-intensive, technology-intensive and low-risk infrastructures for EC groups. This can be done through support in the form of fiscal incentives, investment guarantees, regulation assurances, and subsidies, as well as special attention to 'isolated' communities.

2.3.4.3. Social

Social cultural structure as well as shared beliefs and attitudes of the community play an important role for the establishment and faster growth of EC groups. The factors to be taken into consideration include:

- Energy demand
- Demographics and skill level of the community.
- Family and community structure
- Class structure, hierarchy and power structure in the society.
- Community's education level as well as education standard.
- Gender legislative responses
- Culture (gender roles, social conventions etc.)
- Attitudes (health, environmental consciousness, etc.)

Family structure and the energy demand could be vital for accepting and rejecting of a particular form of organization and/or technology by the society. While considering the situation in Albania the most common structure is based on shared residential buildings in the cities or neighborhoods in the villages sharing communal values of lifestyle and responsibilities. The extended structure of family ensures the demand for each and every one.

Gender legislation and equity in work force can bring a success in the implementation of the energy community concept.

Moreover, these efforts promote green jobs, which are environmentally sound and friendly jobs. More precisely, green jobs will help reduce the consumption of energy and raw materials, catalyze the decarbonization process of the economy, protect and improve the ecosystem and biodiversity and minimize the production of waste and pollution. In addition, the International Labor Organization (ILO) has declared that a job can be categorized as a green job if the job is adequate, productive, and contains the opportunity to receive ample wages, social protection and social security for workers and their families, as well as the right to conduct social dialogue.

2.3.4.4. Technological

The development of energy communities requires reliable and cost-effective technology. For this reason, there needs to be a form of cooperation with related parties in order to adequately develop this sector. With rapid advances in energy technology, there needs to be an improvement in the determination of relevant energy prices in accordance with economic conditions so that the process can be affordable not only for the first investment, but also for covering the operation and maintenance costs.

Technology analysis involves understanding the following impacts:

- Recent technological developments in the sector.
- Technology's impact on product offering.

- Technology's impact on cost structure.
- Technology's impact on value chain structure.

The application of new technologies especially smart grids and microgrids are new to the concept, however few countries already adopted them with the technologies they use within the energy community schemes. Implementing the scheme, including self-use and/or connection to the grid needs further training on feed in tariff system, smart network design, distributed generation, smart metering, monitoring and control of the grid which indicate a new path way of capacity building, research and investments in the energy sector. On the other hand, maintenance and monitoring of these technologies of the existing network is also an issue for the continuous development in energy sector.

2.3.4.5. Legal

The Law no. 7/2017 on Renewable Energy Sources is a new legal basis to Feed-in-Tariff (FIT) support for 15-years fixed price of Small Hydro-Power Plants (SHPP) under 2MW. A high interest was showed by domestic investors. Apart of 171 concession contracts for 2,105MW, 71 contracts were issued during 2017-2018, for 78 SHPP with total power 98MW. This brought a considerable stock of High Early Cash Value (HECV) and, in total, 2,203 MW of contracted generation capacities were provided.

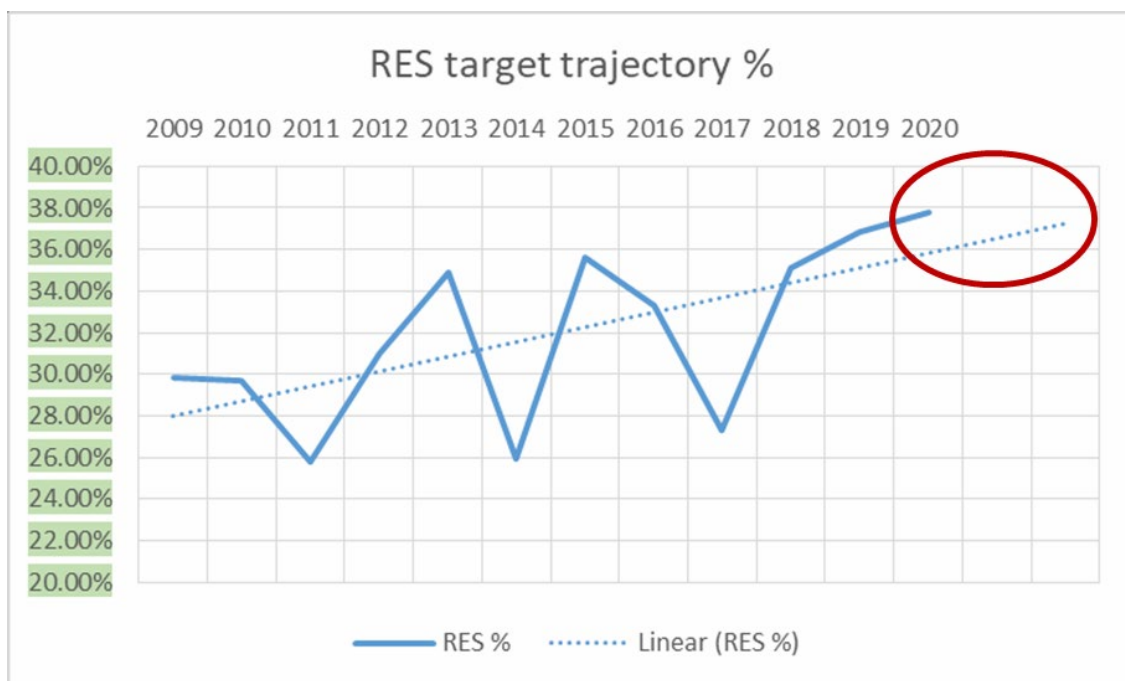


Figure 4: RES Target Trajectory

Source: MIE - Albania (2019). Tirana International Energy Charter Forum

New RES policy – new law 7/2017

RES policy directions and necessary regulatory update

- New RES law:
 - Promote the RES investments both domestic and foreign.
 - Reduce GHG, protect the environment in compliance with INDC ratified in UNFCCC;
 - Promote the RES-E intervention on APEX market – REO establishment
 - Accommodate RES-E in the TSO/DSO network - Regional integration;
 - Accommodate Small and Medium HPP contracted so far and manage FIT
 - The FIT policy toward CfD support scheme and easy auction procedures
 - Increase the diversification of RES – promote medium and large PV (120 to 500 MWp)

- PV deployment from 2017 (from 1MWp/2015 to 300 MWp on 2020)

RES policy directions and necessary regulatory framework update

- Early 2018 NREAP is finalized by MIE with DCM 27/2018
 - NREAP 2015-2020 is revised earlier of 2018 in order to meet the Target 38%
 - The Strategy 2018-2030 sets the new target 45%
 - The Strategy 2018-2030 follows the INDC target on GHG -11.5%
- New policy on RES deployment to promote investments on energy
 - Revise the application procedures on more direct auctions and hybrid auctions
 - Scan the SHPP development to reduce the risk on meeting the target of 2020
 - RRA – Renewable Readiness Assessment to be developed by IRENA end of 2019
 - Revise the NREAP 2018-2020 through RES diversification investment and type
 - PV self-consumption deployment very soon

New RES law - institutions

Agency responsible for RES

- Duties and Responsibilities under MEI
 - Creating, recording and updating the registry of power producers;
 - Registering the energy balance of all RES energy producers;
 - Drafting, submission and Monitoring the NREAP
 - Calculates and submits to the Ministry and ERE by the 1st of June of each year an evaluation of the share of RES
- Renewable Energy Operator - REO
 - Responsible for the billing and the collection from RES-E Supplier, of the payments for all categories of priority producers
 - Responsible for signing and managing CfD
 - REO has to ensure that detailed records regarding all measures involving the granting of aid are maintained
 - REO publishes each year details of calculations and payments under the Contract for Difference

New RES law - Support mechanism

- Council of Ministers is authorized to adopt measures to promote the use of RES upon proposal of MEI – the strategy
- FIT promotion for Installations up to installed capacity of 2 MW PV and 3MW Wind per generation unit
- Long contract for Renewable Power Producers issuing a Power Purchase Agreement (PPA) commissioned up to 2020
- FIT promotion for Installations up to and including an installed capacity more than 2 MW will get support under Contracts for Difference (CfD) - auction scheme

New RES law - Contracts for Difference (CfD)

- Support is based on a variable premium for prefixed price (the strike price) and market price for electricity - reference price
- The strike price has to be calculated in auction in a transparent way
- The reference price is based on APEX day ahead market price
- To avoid overcompensation RES by CfD Counterparty when the reference price exceeds the strike price
- Final support under a contract for difference (CfD) shall be determined via a competitive, non-discriminatory bidding process (auction)
- CfD's will have a duration of 15 years

- CfD Counterpart is the respective grid operator to which the installation is connected.

New RES law – Access to the Grid

- Access to the grids
 - RES-E have a priority on the access to the grid.
 - The TSO and the DSO guarantee access on their grid in accordance with the law no. 43/2015 “On Power sector”.
 - ERE will adopt appropriate grid and market-related operational measures in order to minimise the interruptions of electricity produced from renewable energy sources.
- Connection to the grids
 - TSO and DSO take the appropriate steps to develop the T&D grid infrastructure, to accommodate the RES-E.

New RES Law – Net metering

- Article 15 - Net metering schemes
 - A SME or a family consumer can install up to 500kW for the production of RES-E for their own needs and can inject the surplus energy produced into the distribution grid.
 - The consumers based on the net RES-E scheme, shall install on their own expenses a bidirectional meter.
 - The net balance and the billing are made on a monthly basis for each measuring unit.
 - The ministry shall approve a facilitated procedure of issuing authorizations for connecting small renewable energy projects to the grid.

New RES Law – certificates

Article 16 - Guarantee of origin

- Upon request, ERE issue a guarantee of origin for each RES-E.
 - Standard 1 MWh and it shall specify:
 - The energy source,
 - the start and the end dates of the production;
 - The name, location, type and capacity of the installation where the energy was produced;
 - Whether and to what extent the producer has benefited from investment support and from other national support schemes;
 - Date of commissioning of the installation and when became operational;
 - The date, country of issuance of the guarantee and a unique identification number;
- The guarantee of origin can be transferred.
- ERE shall put in place an electronic register of guarantees of origin.
- ERE shall monitor the issuance, transfer and cancellation of guarantees of origin.
- Guarantees of origin shall only be issued if the producer provides all relevant information
- No support shall be granted to a producer when that producer receives a guarantee of origin for the same production of energy from renewable sources.

2.3.4.6. Environmental

Before undertaking the concrete steps for establishing and, after that operating the EC groups, it should be carefully evaluated the environmental standards that are required to operate in this sector. Some of the environmental factors to be considered beforehand are:

- Weather
- Climate change
- Laws regulating environment pollution (air, water, noise, waste, discharges, etc.)
- Recycling
- Waste management

- Attitudes toward “green” or ecological products
- Special protected areas and endangered species
- Attitudes toward and support for renewable energy

The need for the mitigation against climate change can make some developers restrict environmental concerns to emissions. Although renewable energy technologies have potential to reduce emissions, their implementation can have local environmental impacts. For example, effluent from biogas digesters; particulates from biomass combustion; noise and interference with communication systems from wind turbines; and landscape changes can cause negative effects on the local environment. Therefore, consideration should be given to full environmental impact assessment and appropriate environmental management systems should be designed for the potential impacts.

Furthermore, although some donors place emphasis on carbon emission savings when funding energy technologies, government and/or local institutions should be able to weight appropriately the criteria for identifying an energy technology based on local definition of sustainability and sustainable livelihoods of communities: sustainability is founded upon the concept of sustainable development, defined as *“development that meets the needs of current generations without compromising the ability of future generations to meet their own needs”*; whilst sustainable livelihoods is defined as *“a livelihood comprises the capabilities, assets (including both material and social resources) and activities required for a means of living. A livelihood is sustainable when it can cope with and recover from stresses and shocks; maintain or enhance its capabilities and assets, while not undermining the natural resource base”*.

From the two definitions there is a risk of one placing more emphasis on the meaning of *“without compromising the ability of future generations to meet their own needs”* and the meaning of *“while not undermining the natural resource base”* respectively without weighting appropriately the scope and contextual definition of *“meeting current needs”* and *“enhancement of people’s capabilities and assets”* considering the leapfrog of energy infrastructure required for poor communities.

2.4. PESTLE overview into Albanian environment

Based on the PESTLE analysis, we can see in a more holistic way how certain aspects of PESTLE dynamically impact on each other. For example, one of the issues pertinent to the legal aspect is the lack of an overarching national law or regulation that will serve as a dedicated legal umbrella for all subsidiary regulations on establishment and operation of energy community groups. At present, the National Strategy on Energy and the Energy Law of 2017 is still too broadly defined and lacks the specific level of elucidation necessary for a truly comprehensive policy on EC groups.

While the focus in Albania is the economic aspect the renewable energy sources and energy efficiency, it can also be perceived as an early checkpoint into more advanced and technical discussion. The renewable energy development does not only encompass project economics, but also *“technical constraints, supply chain capacity, social effects, namely to amenity and aesthetics, and environmental impacts”*.

The supply chain management that specifically serves to accommodate the energy sector (currently focused on RES) must also be holistic in nature. Bearing a similarity to the multifaceted PESTLE analysis, a promising candidate model is Sustainable Supply Chain Management (SSCM), which not only views supply chains in the context of the environment, but also expands their scope to encompass social and ethical issues. PESTLE analysis thus cements the groundwork for a national SSCM framework, as such a framework must necessarily take into account the various stakeholders involved in the entire sector.

Reflecting back on the national planning process on renewable energy, it is vital to implement the previous PESTLE analysis on a comprehensive stakeholder analysis of EC interest groups and actors. An analysis of stakeholders that are involved in the development of EC groups in Albania reflects the implications of implemented policies, as attempts to increase the role of ECs. This means that existing conditions become points of reference in the formulation of new policies for developing the EC framework.

It should be noted that identifying the relevant stakeholders related to EC groups scheme – which inevitably ties in with other actors of the energy sector – is a crucial prerequisite for any serious recommendation for future national policy. In addition, through PESTLE analysis, it is possible to better highlight the cross-cutting and overlapping sectoral interests within the whole energy sector.

For example, the RES and EE is required not only to advance towards a low-carbon economy in the face of dwindling fossil fuel reserves, but also to generate green jobs (the social context) and safeguard a sustainable environment for future generations. These points of concern necessarily encompass specific subsectors and stakeholders; promoting green jobs in renewable energy development is related to the national labor conditions and relevant stakeholders, which in turn then stems back to the underemphasized financial value of renewable energy sources in comparison to current fossil fuel standards. Through PESTLE analysis, a better understanding of the interrelationship of these ostensibly different aspects are juxtaposed and highlighted through stakeholders. In this PESTLE analysis, various stakeholders who contribute to the development of the energy sector have been identified and their interconnectedness is shown in Table 2 below.

Table 2: Stakeholders of the Energy Sector in Albania

Stakeholders	Political	Economic	Social	Technology	Legal	Environment
Council of Ministers	+	+	+		+	+
Ministry of Infrastructure & Energy	+	+			+	+
Ministry of Finance and Economy	+	+	+		+	+
Ministry of Health and Social Protection	+		+		+	+
Ministry of Tourism and Environment	+	+			+	+
Energy Regulatory Entity	+					+
Agency of Energy Efficiency	+		+	+		+
National Agency of Natural Resources				+		+
National Environment Agency						+
National Territorial Planning Agency			+			+
Territorial Development Agency			+			+
Albanian Power Corporation		+		+		+
Transmission System Operator		+		+		+
Electric Energy Distribution Operator		+		+		+
Big companies operating in the sector		+	+	+		+
Municipalities	+	+	+		+	+
International Political/Financial Institutions	+	+	+	+	+	+
Academic & Research institutions	+			+		+
Consumers (businesses - SMEs, legal persons)		+	+	+		+
NGOs direct/indirect related with energy sector	+		+		+	+
Consumers (individuals, communities, residents)		+	+	+		+

Secondary stakeholders (listed in Section 4.3.2. above)		+	+	+		+
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Source: Stakeholder Mapping and Analysis of the Renewable Energy Industry in Indonesia (2019) and self-elaboration

As mentioned above, the PESTLE analysis is an attempt to identify and correlate existing overlapping and cross-sectoral stakeholder interests in the energy sector. Existing legal and policy framework is still in its early stages and subject to significant upgrades, given that the developments in the energy sector are still new and mostly within limited geographical locations. The lack of specific policies and regulations related to EC has exposed the stakeholders to various risks—the greatest ones being economic and technological. The ability of the policy makers to identify these risks and mitigate them is indeed the key to success.

In the future, it is hoped that the government can formulate a breakthrough policy to improve the energy sector (including also the EC scheme), such as by giving ease to ventures in the RES, EE and EC, so as to enable the effective and efficient supply chain management.

2.4.1. Social cohesion

The participation of citizens and communities as partners in energy projects are transforming the energy system across the EU. Energy community initiatives are offering new opportunities for citizens to get actively involved in energy matters.

Energy community refers to collective energy actions that foster citizens' participation across the energy system. It has received increased attention in recent years, developing a wide range of practices to manage energy community projects.

Energy community reflects a growing desire to find alternative ways of organizing and governing energy systems (Van Der Schoor et al., 2016). It is a new form of social movement that allows for more participative and democratic energy processes. Until recently, energy community lacked a clear status in EU and, obviously, national legislation frameworks, taking different forms of legal arrangements, where applicable.

In a broader geographical context, energy community initiatives are gradually taking on new activities and energy services from renewables generation to investments in electro-mobility services. They can take diverse legal forms with the most common type being renewables cooperatives.

2.4.2. Drivers for the development of energy communities

The drivers shaping the emergence and success of energy communities include socio- economic, energy policy, individual project related factors and actors' characteristics (Ruggiero et al., 2019). The heterogeneity of energy community shows clear differences in terms of members' individual motivations and level of engagement (Bauwens, 2016).

Below are described the two main categories of drivers and their influence on participation: *socio-cultural & economic factors* and *energy policy factors*.

2.4.2.1. Socio-cultural and economic context

The first category of factors refers to the social, cultural, economic and political setting within which energy community operates.

The geographical location of community-based energy projects implies that economic differences play a role in their development. In general, the experience in EU demonstrates that countries with higher levels of incomes have a higher concentration of energy community initiatives. This means the level of citizen welfare can play a role in providing the purchasing power and sufficient capital to cover the investments.

In addition to differences in economic status, another argument which may impair participation in countries like Albania, is the perceived negative connotations associated with cooperatives and trust in centrally-planned economies. This is in contrast with developed countries which have a strong tradition of social enterprises and community ownership. However, the cultural differences in developing countries may not necessarily be caused by distrust in social activity overall, but rather in the national and local political institutions.

The variety of initiatives shows however that there is an interdependency of economic benefits and wider social and moral goals that are tied to community engagement. Research shows that a mix between social capital, civic minded behavior, environmental concerns and interpersonal trust are important factors that motivate members to join energy cooperatives (Bauwens, 2016). This interdependency of social and financial interests can strongly influence the size, type and design of successful energy community projects

2.4.2.2. Energy policies

The origin of energy community is generally associated to the environmentalist movements driven by anti-nuclear sentiments and the oil shocks of the 1960s and 1970s. This certainly reflects an early commitment to defy corporate control of the energy system. However, the rapid expansion of energy community projects after the 1990s and recent waves of development shows a clear correlation to policy support schemes (Hewitt et al., 2019).

Policy tools promoting renewables such as feed-in-tariffs (FiTs), tax incentives and grants are considered critical for the rise of prosumers and community ownership schemes. Renewable support schemes in EU have been particularly effective for mobilizing citizens and communities in countries with a strong tradition of local citizen ownership. The introduction of FiTs in the 1990s in countries with stable policies supporting renewables such as Germany, Denmark or the UK coincided with a surge in citizens and community investors. These schemes enable small-scale producers and communities to receive money for producing electricity from renewables. By contrast, cuts in feed-in-tariffs can lead to decreased support and shrinking numbers of energy cooperatives (Wierling et al., 2018).

In addition to governmental support for renewables, energy prices can also play a role. A high electricity price prompts a rise in energy cooperatives as a way to lower the costs of renewable energy. This may bring as a consequence, that, in the future, energy cooperatives may take on the role of suppliers providing cheaper electricity

Policy measures allocating preferential treatment for local ownership can also support citizens-led projects.

2.4.3. Engagement activities

Energy communities can perform both traditional activities and engage in new business models. Usually, smaller scale citizen-led initiatives are mostly involved in renewable generation activities. The

research on international experience show that energy communities might engage in some or all of the following activities:

- **Generation:** energy community projects collectively using or owning generation assets (mostly solar, wind, hydro) where members do not self-consume the energy produced but feed it into the network and sell it to a supplier (CEER, 2019).
- **Supply:** the sale (and resale) of electricity and gas to customers (electricity, wood pellets, biogas and others). Large communities can have a large number of retail customers in their vicinity, and may also engage in aggregation activities combining customer loads and flexibility or generate electricity for sale, purchase or auction in electricity markets (European Parliament & Council of the European Union, 2019).
- **Consumption and sharing:** the energy produced by the energy community is used and shared inside the community. This includes both consumption (individual and collective self-consumption) and local sharing of energy amongst members that is produced by the generating installations within a community.
- **Distribution:** ownership and/or management of community-run distribution networks, such as local electricity grids or small-scale district heating and (bio)gas networks; often cooperatives can do both energy generation and distribution, but the network infrastructure is central to their business (Yildiz et al., 2015).
- **Energy services:** energy efficiency or energy savings (e.g., renovation of buildings, energy auditing, consumption monitoring, heating and air quality assessments); flexibility, energy storage and smart grid integration; energy monitoring and energy management for network operations; financial services.
- **Electro-mobility:** car sharing, car-pooling and/or charging stations operation and management, or provision of e-cards for members and cooperatives.
- **Other activities:** consultation services to develop community ownership initiatives or to establish local cooperatives, information and awareness raising campaigns, or fuel poverty measures.

2.4.4. Customer empowerment and social innovation

The transition towards climate-neutrality cannot be achieved through technology and markets alone (European Commission, 2018). The energy transition involves a social transformation in which civil society and citizens will play a crucial role too. One distinctive social innovation feature of energy community is the ability to combine the mutual and the public interest. Another is its approach to ‘commonify’ decentralized renewables where people co-operate to regenerate a common good (Hammerstein, 2018).

2.4.4.1. Social implications

Energy communities can reinforce strong social norms and support citizens’ participation in the energy system. According to EU legislation, their primary purpose is to create social innovation: they engage in economic activities other than for profit making (REScoop.EU, 2019). Energy community can be considered as a type of grassroots or niche innovation that can experience learning curves within the socio-technical landscape. Cross-cutting features of such initiatives include a commitment to place and interest, and community involvement in both processes and outcomes.

Communities are further defined into ‘communities of place’ understood as projects run by local people that bring collective benefits to the local community; and ‘communities of interest’ determined not by space but by some common bond (e.g., interest in green energy). Ideally, an energy community should include a combination of high local participation and control, and a high degree of benefit sharing.

In general, the governance of energy cooperatives is led by a set of well-established governing principles. The International Cooperative Alliance established the values of self-help, self-responsibility, democracy, equality, equity and solidarity as founding principles¹⁰. A cooperative subscribes a commitment to equality, fairness and social responsibility. These principles do not apply to the same extent to all types of energy communities.

From a socio-technical understanding, energy communities can bring the following benefits:

- **Local value:** Energy communities can help to implement local sustainability projects that can achieve energy independency, reduce carbon emissions and fuel poverty, as well as contribute to the local economy. They can generate local jobs and avoid the outflow of financial resources from the region (Kunze and Becker, 2014).
- **Energy citizenship and democracy:** Citizens have democratic control over energy investments by becoming co-owners of renewables installations, usually through the principle of one member one vote. Participation in renewables ownership and decision-making can either be direct, in which case members approve decisions in assembly meetings and decide how the surplus is distributed; or indirect participation through a board of directors.
- **Generating financial returns for the community:** Community assets (wind turbines, solar panels) are used to generate profits locally, within the community. Members have local control over financial resources and profit sharing. Surpluses can be reinvested in community benefit funds and other activities. Co-investments can also help create local jobs and generate stable return for investors.
- **Education and mobilization of citizens:** Empowering citizens towards joint action for combating climate change alongside municipalities and local authorities.
- **Social cohesion:** creating a community feeling, trust.

The socio-economic objectives should drive the push towards community-driven energy initiatives. These are expected to bring a host of benefits for citizens and the local community across economic, behavioral change, environmental, social cohesion and acceptance.

Energy communities can also advance energy efficiency at the household level and alleviate energy poverty by reducing consumption and supply tariffs.

2.4.4.2. Energy justice

Energy justice is a relevant concept in the context of energy community. As grassroots energy innovations, a key question is whether energy communities can bring the desired sociotechnical changes in the energy landscape in a morally, and socially just way.

Two frameworks can be used to capture energy justice in the context of energy communities: distributional justice and procedural justice (Goedkoop and Devine-Wright, 2016).

The distributional justice is reflected in the 'outcomes' dimension of a project: how are the benefits and risks spatially and socially distributed between the different actors. For example, in a community ownership scheme, citizens can have full ownership and control over decision-making as opposed to a company-led project. In the latter, a commercial partner may offer only limited community benefits, such as a fixed payment that may even spark negative reactions. The community project will distribute the benefits more widely among residents.

¹⁰ See the International Cooperative Alliance's values and principles of the cooperative movement <https://www.ica.coop/en/cooperatives/cooperative-identity> The International Cooperative Alliance the global steward of the Statement on the Cooperative Identity.

The procedural justice investigates the fairness of decision-making and the mechanism through which decisions are taken. For community ownership, a relevant issue is the degree of openness and transparency in the development and ownership processes. For many cooperatives that has a statute of a 'social enterprise', it is important that citizens have their say in the conduct of renewables projects, and these energies create positive spin-offs for the community. Citizens can either become consumers or members of the cooperative which allows them to participate in the decision-making processes (Jenkins, 2019). Other relevant issues pertaining to procedural justice are: distribution of voting rights, accountability of members, intensity, frequency and methodology of community engagement and methodology of information provision.

2.4.5. Impact on the energy system

Energy communities can play a key role in facilitating the decentralization of the energy system and the local operation of renewable energy. Energy communities can also facilitate the local optimization of power flows and the reduction in energy losses. But their long-term success will depend on their ability to operate energy networks in a cost-efficient way ensuring benefits for all customers and the whole energy system

2.4.5.1. Impact on distribution networks

Based on the EU legal framework (Electricity Market Directive) citizen energy communities are granted the right to own, establish, purchase or lease grid infrastructure. Citizen energy communities can be engaged in network operations either under the general regime (public grid) or as closed distribution system operators. Once an energy community is granted the status of a Distribution System Operator (DSO), it is subject to the same rights and obligations as a DSO.

The ownership and management of electricity networks may be of interest to community members that want to consume local energy from their own generation assets. Three main types of energy communities could be considered that may facilitate electricity transfers: energy communities within housing companies, energy communities crossing property boundaries, and distributed energy communities (Pahkala, Uimonen, and Väre, 2018). The first two retains the local element whereas the latter is not bound to a geographical proximity.

- **Energy community within a housing company:** parties living or operating in the same property, such as stakeholders of housing companies sharing mutual benefits of self- consumption on their property. According to the EU definitions, an energy community within a housing company is rather an example of jointly acting renewable self-consumption that can be considered as a separate activity as part of an energy community (Frieden et al., 2019).
- **Energy community crossing property boundaries:** customers wanting to access renewable energy produced from a neighbor's property located within the immediate vicinity of their own real-estate property.
- **Distributed energy communities:** customers wanting to access production units located elsewhere than within their own property or in its immediate vicinity using the existing distribution or transmission network (Pahkala, Uimonen, and Väre, 2018).

The Table below shows that while energy communities can bring benefits, they may also pose certain challenges for the energy system. They can also act as micro-grids operators of community networks offering flexibility services for a more efficient network operation. However, a key challenge is how to ensure the cost-efficiency of energy communities beyond locally-derived benefits (CEER, 2019).

Table 3: Energy communities with and without public grids

Type	With public grid (on-grid)	Without public grid (off-grid)
Energy community within a housing company	No network charges for the energy that is generated and consumed within the property if it does not cross the access point to the distribution network.	Property (e.g., housing company) disconnected from the grid. Own responsibility for security and quality of supply.
Energy community crossing property boundaries	Mutual electricity line across property boundaries behind the connection point. Payment of network charges and tariffs according to general principles.	Private microgrid acting as a parallel network to the distribution system. Issue of costs and proportionality of regulation in terms of respecting consumers' rights and obligations.
Distributed energy communities	Payment of network charges and tariffs according to the general principles.	For virtual electricity sharing, customers will still rely on the public grid. Parallel networks over longer distances are not cost-efficient. Community-owned networks on islands or remote areas are possible.

Source: Pahkala, Uimonen, and Väre, 2018

From a consumer perspective, energy communities are also expected to deliver high levels of security and quality of supply to its members. For instance, a community operating grids may be required to meet customer requirements for operational activities in the areas of metering, data protection, interoperability and other services benefitting customers in the energy system (CEER, 2019).

2.4.5.2. Impact on system costs

When participating in an energy community, members may benefit from financial gains in relation to energy costs. These can include a reduction in their energy bill as the available renewable energy is cheaper than the retail tariff and can be injected into the grid through feed-in-tariffs. Other benefits may include lower network tariffs due to aggregation effects (Abada, Ehrenmann, and Lambin, 2017). The decentralised energy production and consumption close to the source reduces energy losses, and combined with local energy storage can increase power quality. Furthermore, the participation in a local energy community helps people gain a better understanding and increased awareness of renewable energy sources and energy savings, while working together on the topic has a positive impact on social cohesion and the resilience of the local community (Proka, Hisschemoller, and Loorbach, 2020). ¹¹A community may also ensure better local supply security in case of power disturbances elsewhere in the grid.

The ability of energy communities to share gains amongst their members is key for their long-term sustainability. Some research shows that the viability of a community may be jeopardized when simple sharing rules (such as per capita, pro-rata of consumption or peak demand) fail to fairly distribute benefits to all participants. In this case, some members may find it more beneficial to opt out and create another community of their own following inappropriate remuneration. One reason is the heterogeneity of households (students, families of different occupations or retired people) that have different consumption profiles.

¹¹ Proka, Antonia, Matthijs Hisschemöller, and Derk Loorbach. "When top-down meets bottom-up: Is there a collaborative business model for local energy storage?." *Energy Research & Social Science* 69 (2020): 101606. <https://www.sciencedirect.com/science/article/pii/S221462962030181X>

Network costs are distributed equally amongst system users as the same type of grid warrants the same cost allocation. Therefore, the network operator will try to compensate the resulting loss of revenue by increasing the tariff to the remaining customers in the system who might not own a renewables installation (Brown and Lund, 2013). This regressive effect creates a social discrepancy between members of the community and non-members – the latter including those individuals that cannot afford to invest in renewables but indirectly supporting the former group by contributing to renewables support schemes (Yildiz et al., 2019). A redesign of network tariffs can be considered to avoid negative impacts on the overall cost base.

2.4.6. The Mobilization Model

Neglected political issues that exacerbate power disparities serve as an impetus for social movements to arise. Thus, people can be motivated to mobilize and thereby impact the current decision-making regime. These movements are a product of the current socio-political structures, but tend to take on a life of their own as the movements test boundaries, and are shaped by the ensuing response and interactions from the incumbent actors (Tilly C. 1978).

The mobilization model depicted below is largely based on a structuralist ontology, and not on a socio-technical perspective. Nevertheless, the mobilization model shines light on several dimensions, including materiality, structures and individual versus collective interests that are of relevance when analyzing the mobilization and upscaling of the so-called Collective Action Initiatives (CAIs) in the energy sector.

The mobilization model describes the behavior of a single contender through some overall dimensions. The model has both internal dimensions (Interests, Organization, Resources, and Mobilization), as well as external dimensions (Opportunities and Threats). These internal and external domains are interlinked; as the dimensions of mobilization align, the CAI gains more momentum and a greater degree of agency, and thus is able to exert more influence on external structures to gain control over their energy system and moreover reap the social benefits of doing so.

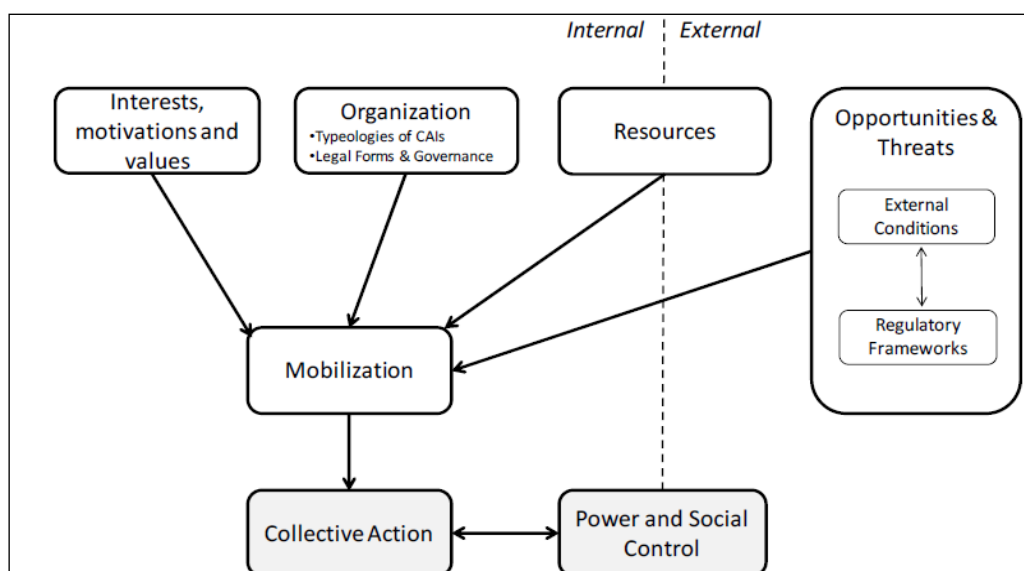


Figure 5: The Mobilization Model, inspired by Tilly C.

Source: Collective Action and Social Innovation in the Energy Sector: A Mobilization Model Perspective

Charles Tilly created a general mobilization model for all forms of collective actions. The model presented above is simplified in order to apply it to CAIs in the energy sector. Whereas Tilly describes

dimensions of repression and facilitation, these are divided here into the two components of external conditions and the regulatory framework, and placed under the opportunities and threats in the external domain. Resources are an important factor in energy CAIs and this dimension straddles both internal and external domains. An energy collective action seeks only control over its local energy system with the goal of attaining social benefits that come with this action (e.g., stability, cohesion, identity, etc.). Internal power to the CAI influences its external power, and vice versa.

2.4.7. Conclusions

Driving Research and Innovation

- Although energy communities can bring much-needed innovation potential, their contribution to the energy transition is not yet fully understood, even across EU. More research is needed to clarify and quantify their potential at local, regional and/or the national levels, and analyze their economic, environmental and social effects. This should also investigate the barriers preventing people and communities from participating in energy projects.
- EU funding programs already support energy community action helping energy customers to engage in the generation and management of sustainable energy. This is an opportunity that should be used in a multi-purpose dimension: strengthen capacity building, replicate successful practices, cooperate with other countries on shared initiatives, etc.

Fostering supportive energy policy frameworks

- The EU Legal Framework now recognizes and offers an enabling legislative framework for citizen and renewable energy communities. Its transposition into national legislation will be essential for the successful development of energy communities.
- In order to allow energy community projects to compete on an equal footing with other market participants, the procedures for participation in market-based support schemes such as auctions and tenders can be simplified to include, for example, criteria for local community benefits.

Empowering customers and boosting social innovation

- Engaging citizens through collective energy actions can reinforce positive social norms and support the energy transition. Energy community can foster citizens' participation and control over decision-making in renewable energy. Its social innovation potential also resides in the ability to integrate consumers independently of their income and access to capital, ensuring that the benefits of decentralization are also shared with those that cannot participate.
- In parallel, innovative social policy and revisited regulatory structures are needed to address the potentially regressive effects that could arise when some societal groups might be impaired by an inability to invest in renewables projects while having to pay the socialized costs of policy support and grid fees. Ensuring that as many people as possible can participate in energy community can release the creative forces of social innovation and sustainable lifestyles across different social groups.

Taking an energy system approach

- Energy communities can bring a host of benefits to the energy systems. They can support system operations by providing flexibility services locally and alleviating the need for traditional network upgrades. Customers may also benefit from lower energy prices and access to private capital from renewables investments through citizen participation.
- Energy communities will largely remain connected to the energy system, even though stand-alone systems may apply for example on islands or in remote areas. Their integration into the energy system must be done in a cost-efficient way, accounting for real savings in the energy system as a whole and delivering value to all customers.

Contribution to renewable energy expansion

- Energy communities aim to help citizens and local authorities invest in renewables and energy efficiency. The participation of citizens in renewables projects may also overcome social acceptance at the local level. Community-owned projects may allow citizens to finance investments that bring benefits locally - such as harnessing local renewable resources, increasing employment and reducing fuel poverty in the region.
- The low carbon energy transition requires that we design a more cooperative and secure energy system that gets citizens and communities involved in moving towards sustainability. By making individuals and communities realize their potential roles as 'prosumers', and more broadly as 'energy citizens', they can become a driving force of the low carbon energy transition.
- More socially-oriented enterprises will be able to enter the market to prioritize and facilitate development of local decentralized smart energy networks. These changes can help ensure that the energy transition results in a truly secure, competitive and sustainable energy system for the country and at a broader geographical scale.

2.5. Tools for citizen engagement

If we really want the CEC process to succeed, we need to mobilize local actors including citizens, communities and local authorities and engage them in tomorrow's energy system. The potential for people to actively engage in the community energy actions is significant. By 2050, at least half of EU citizens could be producing their own renewable electricity either individually by putting solar PV panels on top of their home or by joining an energy community and doing things in a collective way¹².

2.5.1. Challenges

Gaining the interest and engagement of citizens is key to success for energy community projects. To do so, several *social and behavioral* obstacles need to be tackled.

First of all, it is challenging to get citizens engaged in *issues they don't know anything about*. This happens in particular when implementing new technologies such as energy community or renewable energy production. Moreover, citizens' age and background and therefore their (technical) knowledge varies immensely. As a result, it is challenging to find a common vocabulary when trying to make the topics understandable for a broad audience. This becomes even harder when different languages are spoken within a community.

Another important point of attention is the *difference between communities*. For example, depending on a community's vulnerability, priorities are different and the approach to engage them should be tailored. Even within a single community, there could be financially vulnerable target groups requiring additional attention in order to get them engaged. This difference between communities also makes it hard to always utilize local knowledge to the same extent.

Challenges can also be found in *technological* aspects, such as data collection. Since engagement is not something that can be measured directly, alternative ways of monitoring have to be used. This could result in imperfect or inaccurate data quality, or even misinterpretation of data.

From a *governance* perspective, the relationship between decision makers and residents/citizens can be challenging. For example, the strategic thinking of politicians - locked in election circles of approximately four years - doesn't help to increase the level of citizen engagement. *Engagement is the result of a continuous and sometimes long-term process of creating trust and convincing people*. It therefore benefits more from long than short-term strategic thinking.

One commonly encountered governance challenge, is the lack of some structure or a single representing person/body when dealing with *multi-family buildings (the so-called building administrator)*, meaning the project should approach every tenant individually. In any case, it is a general challenge in multi-family buildings to obtain sufficient tenant agreement in order to be able to roll-out a project.

All too often, the relevance of looking at the entire picture by taking into account citizens' activities and interests outside the project and the importance of spending sufficient time identifying the right ways to approach all citizens are forgotten. People are diverse and so are target groups. It is therefore key to tailor the approach specifically for each target group. On the other hand, one should take care not to have too many redundant participation processes. *The project should be inclusive and accessible, but at the same time clear at any moment*.

¹² https://www.cedelft.eu/publicatie/the_potential_of_energy_citizens_in_the_european_union/1845

2.5.2. Recommended tools

Stakeholder forums

Engaging stakeholders often starts with organizing meetings, forums. The forums can be organized thematically. Primarily, it is important to get an understanding of the level of implication and knowledge citizens have about the community energy citizen and what barriers they face when they engage in energy related matters in their communities. Moreover, we should get their perceptions on how they would like to take part and make their effort in this process. Therefore, as a first topic, the aims, objectives, main milestones and required outcomes are defined.

The role of the stakeholders at this initiation stage is to express whether they support the initiation and what kind of obstacles they envisage during implementation. These comments, remarks and questions have to be recorded and steps have to be taken in order to be prepared for these possible obstacles and opposite interests.

The next forum topic could be collecting and disclosing data. Explaining why these data are important and how they will be used could increase willingness to provide and disclose information. This is the place and time when a true dialogue can start, as the process arrived at a certain point, but the “picture” has just started to be drawn, more data are needed, some existing information need to be clarified or discussed, etc.

During the process, at certain points, it makes sense to organize forums on specific topics, to specific groups of stakeholders, the so-called *focus groups*. Such can be an expert forum, discussing particular topics, themes and questions in a structured way. It is also a good idea to organize a meeting for CSOs. They often prove to be valuable partners, possessing constructive views and ideas. Also, they have their own channels and forums to advertise the project and the stakeholder engagement process.

Questionnaires, surveys

This method requires less organization and enables access to large samples of individuals. However, questions to be asked must carefully be considered. Questions can target different fields, ranging from general public knowledge about resource efficiency, through attitudes to taking actions, to such specific issues as what kind of developments and investments they would like to see in the municipality/neighborhood.

Some questionnaires can be grouped around specific topics and targeted to different groups of stakeholders (citizen, private sector, local authorities, CSOs), while others can be intended to collect general opinions.

For the general public, local residents, a shorter questionnaire should be prepared. Experience shows that the longer it takes to fill out a form, the fewer questionnaires arrive back. These questionnaires should usually target general knowledge, attitude towards the subject, and willingness to make actions.

Several methods should be applied parallel to each other, in order to gain a sufficient amount of filled questionnaires. Placing boxes at public places of the municipality (city hall, public service office, community center, central cafe, etc.) is a good way of collecting. Public events can also be used for publicizing, where a separate information stall, posters and boxes for collecting written contributions can help the process. Street surveys also augment the number of questionnaires. Online questionnaires can be attractive because of the easier handling and submission.

The drawback of questionnaires is that they provide little opportunity for dialogue, resulting in possible misinterpretations.

Workshops

Another important tool for citizen engagement, especially at early stages, is the conduction of a series of workshops with the identified citizen/community groups. The workshops will include visualization and ideation exercises through which participants will be engaged in expressing their concerns, ideas and visions for the future energy groups. Moreover, citizens and other stakeholders will come together to discuss the current situation. Upon the progress of the CEC project, can be organized technical workshops. Obviously, a series of workshops where citizens and other stakeholders will be engaged in setting up the community energy group with specific tasks.

Written contributions

In many stages of the work this method can be applied. When a draft or part of the process is ready, it can be distributed among stakeholders, asking for their written contributions. Sufficient time should be provided for them to be able to consider it carefully.

Personal interviews

This method can be applied at specific stages or steps which are of high priority, or require a specialized expertise. Locals engaged in that stage/step can be approached personally for interviews about related issues, problems and local specialties.

2.5.3. Ways for engagement facilitation

In order to engage citizens more effectively, attention should be paid to *visualization* to make the process understandable, *personalization* to make it tangible and *storytelling* to make it human. Citizens should be asked how they want to engage and incentivized to get buy in and participation.

Appropriate tools (as described above) should be used to facilitate the engagement process.

Once the process starts, the first thing to do is to *proof citizens the relevance of the solution* you want to implement and inform them about the outcomes that the process will deliver. For example, when planning a collective EE of an apartment building, the tenants should be convinced by the improvement in quality of life and comfort resulting from the process. This could be done through showing measurement data or testimonials of tenants who has experienced this process before. If the engagement process starts early enough within the overall project scope, citizen could be involved in process design through a *co-creation* approach. This results in recognition, empowerment and understanding of the process.

When addressing a *heterogeneous group of stakeholders*, first make sure to understand the cultural difference, and then try to engage with as many stakeholders as possible. A representative could be assigned for each group.

Along the process, plan regular meetings and give presentations to provide *feedback* to citizens. Qualifies people could be answering questions and solving problems. The closer the contact, the better. For example, avoid huge numbers of participants in dissemination activities, since people will be more comfortable to ask questions in smaller groups. Central information sharing spots (physical or virtual) and visibility in the streets help to maintain support for the project (see above – Questionnaires, surveys).

At any moment, be prepared to change the initial idea, *be flexible* and allow citizens to take the lead. A circular methodology, with regular feedback loops could help in this.

2.5.4. Problems to tackle

During the process of stakeholder engagement might be encountered some problems, which are worth to be prepared for.

Lack of time and capacity of authorities

One difficulty is when local public employees are overloaded. Municipalities have to handle countless tasks, many of them required by law, thus it should come as no surprise if they find low interest in the process. Therefore, it is of utmost interest to create a positive political background, a political will around the topic. The best way of this is a formal decision by the mayor or the city council. After this it is easier to allocate time, resources and capacity, and win the key actors within the municipality (energy expert, environmental expert, architect, etc.) to the process. They are the ones who can add most to the plan with data, expertise, experience and working hours. Although it is not part of the engagement process, but it has to be emphasized here that capacity has to be allocated to the implementation stage as well.

Opposite interests

There might be opposite interests regarding aims and certain activities of the process. Actually, this is a very good reason to conduct stakeholder involvement: if those, who are likely to have opposite interests, are engaged at an early stage in the process, it helps to get these problems, these supposed or existing opposite interests, soon on to the surface, which then can be assessed and tackled. Convincing arguments for financial anxiety include those which emphasize that the amount of investment will soon be remunerated if the planned measures and results will be applied. Environmental and social gain has to be accentuated as well.

Communication problems

Slow and erratic internal communication, or even the lack of it, can be a problem. It is difficult to reach people, information gets stuck within a certain person/group, or the system is too bureaucratic. This can be remedied by using more channels of communication; however, it is a fact that in this case more energy and time is required from the person-in-charge for stakeholder engagement.

Low rate of participation, small attendance

This can be avoided by efficient promotion, where the social and local media can be of good use. Personal contacts are invaluable, major societal actors should be addressed through their own individual interests, each group in a different, specialized way. The person-in-charge for stakeholder engagement can have a great role in this, motivating the different interest spheres. Further catalysts can be local CSOs, who can be good allies of this person. At each and every document, invitation, meeting and event it has to be presented and underlined why that particular topic is important for the public, or for the specific interest groups, how their work and everyday life is affected by that matter. It is always worth to indicate what results their participation has yielded so far, how their remarks, comments and recommendations have been taken into account, used and built in the progress of the process. If it is needed, anonymity has to be guaranteed.

2.6. Recommendations how national / local authorities can support CECs in Albania

The new European Union’s (EU) “Clean Energy for all Europeans” package, agreed upon by the European Parliament in March 2019, seeks to strengthen the rights of citizens to produce, sell, store and consume renewable energy with ease and support, and without discrimination (European Commission, 2019). This development could mark the beginning of a more supportive platform for citizen-led energy initiatives across the EU. It may play a role in encouraging more citizens to actively participate as stakeholders in addressing the current energy challenges. These challenges, commonly referred to as the energy “trilemma”, are to: i) lower carbon emissions, ii) safeguard a secure energy supply and iii) ensure affordable energy prices.

For citizens and communities to benefit from such initiatives, Local Authorities - as the closest body of government to citizens - play an important role in translating new opportunities, as well as supporting the projects and initiatives which are conceptualized and/or already exist. Arguably, ensuring that more citizens and local communities will benefit from the energy projects should be a priority for any Local Authority concerned with the wellbeing and future development of the geographic communities over which they govern.

2.6.1. Barriers to energy community

The path to a successful energy community project is not always an easy one. Many barriers and challenges are risen along the way. A first step forward is for authorities (both in central and local level) to identify these barriers and assess their effect over the local energy community.

The experience in EU shows that energy community is unequally developed in Europe. For projects to succeed, good laws and rules need to support such initiatives. Projects flourish in countries where it’s easier to set them up; while in countries with regulatory uncertainty, it takes very dedicated activists to push forward. Adding to difficulties, national laws often change. Since 2018, energy community is recognized in EU law, as part of the legislative package governing the EU’s energy system for this next crucial decade. This could be game-changing for anyone who wants to get involved in energy community.

Below is a list of barriers that can result in projects failing. Breaking the barriers down and developing ideas to overcome them step by step can make them less daunting. It’s also likely that these barriers have been faced before by other energy community initiatives. Seeking advice and mentorship from others is always key to success.

Table 4: Barriers to energy community

Field	Potential barriers
<i>Societal, cultural, political and/or organizational</i>	<ul style="list-style-type: none"> • Lack of historic experience with similar cooperatives and civic activism • Low trust in the cooperative model as a viable alternative • Lack of political support from local representatives • No experience with setting up CECs/cooperatives • Organizational challenges – pre-planning stage barriers
<i>Legal, administrative, bureaucratic</i>	<ul style="list-style-type: none"> • Complicated legal framework, high levels of bureaucracy to acquire relevant documentation (licenses, permits, etc.) • Lack of national <i>energy community strategy</i>; lack of national <i>targets for energy community projects</i>, which

	<p>then are broken down in Local Energy Action Plans by local authorities</p> <ul style="list-style-type: none"> • Bureaucratic barriers to grid connection (complicated application procedures, uncertainty of approval, costs, time consuming) • Not allowed to operate micro-grids - producing, own-use, selling within community, selling to third-parties – as compared to only: sell it to the grid and buy it back (often with low financial returns to the community – profits are again made by companies outside the community, which defeats the idea to keep revenue within the community) • Lack of supportive local authorities and/or energy agencies • Generally, no support schemes for Renewable Energy Sources (RES) projects
Technical	<ul style="list-style-type: none"> • Technical challenges – lack of expert knowledge to design, plan, procure, implement, commission a project • Lack of expert knowledge for operation and maintenance • Size of energy project
Financial	<ul style="list-style-type: none"> • Financial challenges in the initial stages of project development; access to finance, grants, etc. • Fair and secure payments for energy generated (insufficient Feed-in-tariffs (FIT), FIT only for wind, but not for Solar PV, no standardized PPAs, third-party-offtake not possible) • Insufficient incentives for renewable heat projects: replacing fossil fuel heating with biomass boilers or solar thermal, heat pumps • Complicated tax rules, no tax exemptions • Generally, no tax incentives for RES projects, lack of guarantees
Challenges in established/mature groups/cooperatives	<ul style="list-style-type: none"> • Expansion of power generation, of number of members – how shall older and new membership shares be valued? • Re-investment into existing installations

Source: Self elaboration. 2021

It is important to mention that local authorities can have a transformative effect in enabling new business models in the energy sector, changing the way the energy system is governed by encouraging a more direct participation of local communities.

The following sub-section provides a set of recommendations on how the authorities can support the energy community initiatives.

2.6.2. Recommendations

- The energy sector to date has been led by deep-set relationships between traditional energy incumbents and governments, leaving little room for citizen participation (at all levels – policy,

production, distribution etc.). It is proposed that **the energy community projects need to be more inclusive of a wider set of people** if it is to gain any traction. This can be achieved through firstly understanding the ethics and importance of participation (energy justice and democracy), and practically, through engagement with existing citizen led-projects and engaging with citizen-led activist movements.

- Local Authorities need to **recognize that answers often lie within their communities**, and that citizens are already participating in some energy projects, in niche ways. A concerted effort to engage with existing projects is fundamentally important.
- Authorities can **support citizen-led initiatives that already exist and encourage more uptake** through:
 - Procurement of locally generated renewable energy from community/cooperative energy projects.
 - Implementing a collaborative approach to delivering the energy by offering resources, officials' time, guidance and a more united relationship between communities and Local Authorities.
 - Where community capacity and Local Authority capacity is low, cooperate on joint-ventures.
- Local Authorities can **raise projects' visibility and recognition** through raising awareness amongst their own members of staff and between departments of the benefits of citizen participation in the energy community projects. Local Authorities can also use their established relationship with local and national media, to highlight the initiatives that occur within their region. Normalizing such projects and identifying citizen-led initiatives as key players in the energy transition could lead to their replication.
- A focus on **justice can be a central guiding philosophy for the energy community** (being mindful of justice in both local and global terms) and can contribute towards a scheme which is inclusive and fair. Citizen participation approaches should therefore **seek out the under-represented** – and be inclusive of age, gender, race, minorities and geography.
- **Community or citizen ownership of energy initiatives** developed by Local Authorities means citizens are better able to engage with energy systems. Ownership can involve: financial stakes in energy community initiatives/projects and re-municipalization movements and the co-design (and a sense of co-ownership) of energy visions and projects through deliberative processes.
- For an active and engaged citizenship, an active and engaged Local Authority is also needed. **All members of staff within Local Authorities need to be literate around the challenges that the energy community scheme will entail**, and the need for the scheme application to be just through adopting a collaborative approach.
- There is need for much more **cross-departmental collaboration** within Local Authorities, including an understanding of energy transition matters going beyond being an 'environmental' issue alone.
- **Engaging with the many forms of participation** - including citizen activism, protest and campaigns which reflect the concerns of citizens - is key to nurturing the relationship between local authorities and the public, fostering trust between both parties and encouraging a more deliberative relationship between both.
- **Local Authorities need to be more approachable** – adopting an open-door policy and allowing citizens to be able to engage with developments much more easily. This can be done through

actively seeking out existing initiatives and movements and inviting more citizens to shape policies.

- **Adopt participative governance strategies that allow for the input of citizens** into all-city and/or all-region vision strategies.
- Local Authorities have a specific role to play in ensuring that their citizens' views and hopes are fed into the **national, regional and local plans**, specifically related to energy and climate. Failing this, there is a role to play in raising awareness of these plans, ensuring that citizens can engage with them and contribute to achieving, and surpassing the goals set out for each nation state.
- **Ideas developed through creative processes could lead to a wider participative audience.** Not all citizens will be eager to be part of a local energy strategy if delivered in a traditional, structural way - but they may be if paired with a wider vision of social development, mobility, local wealth and health, culture and art.
- Further **in-depth analysis and longitudinal research** is needed to test the participatory advancements of local governments in the energy community scheme.

2.7. Regulatory and Financial Schemes and Framework for CECs / cooperatives

Public support is essential for energy projects in order to reach the EU's and national's renewable energy and GHG reduction targets, and to meeting future climate and energy objectives. Energy community projects across Europe operate in very different legal contexts. In many EU countries, existing legislation does not provide sufficient support for, and in some cases actively impedes, community ownership. By contrast, some countries have specific regulations enabling citizen ownership of, and involvement in renewable energy projects.

In the Albanian context, it is aimed to provide a wide-base information in terms of legislation, regulation and policy for energy community projects, and to develop recommendations for regulatory framework and financial schemes.

2.7.1. Legal structures for energy communities

Various governance models enable citizens' participation in energy projects. Depending on the legal form chosen, they can differ in terms of governance structure, decision-making and liabilities (Table below). For instance, they can be fully owned by the community or developed in cooperation with public or commercial actors (shared ownership) (Yildiz et al., 2015). Further, community-managed projects can take diverse forms, ranging from large cooperatives to off-grid island systems.

Table 5: Possible legal structures for energy communities

Legal structure	Description
Energy cooperatives	This is the most common and fast-growing form of energy communities. This type of ownership primarily benefits its members. It is popular in countries where renewables and energy community are relatively advanced.
Limited partnerships	A partnership may allow individuals to distribute responsibilities and generate profits by participating in energy community. Governance is usually based on the value of each partner's share, meaning they do not always provide for a one member - one vote.
Community trusts and foundations	Their objective is to generate social value and local development rather than benefits for individual members. Profits are used for the community as a whole, even when citizens do not have the means to invest in projects (for-the-public-good companies).
Housing associations	Non-profit associations that can offer benefits to tenants in social housing, although they may not be directly involved in decision-making. These forms are ideal for addressing energy poverty.
Non-profit customer-owned enterprises	Legal structures used by communities that deal with the management of independent grid networks. Ideal for community district heating networks common in countries like Denmark.
Public-private partnerships	Local authorities can decide to enter into agreements with citizen groups and businesses in order to ensure energy provision and other benefits for a community.
Public utility company	Public utility companies are run by municipalities, who invest in and manage the utility on behalf of taxpayers and citizens. These forms are less common, but are particularly suited for rural or isolated areas.

Source: Roberts, Bodman, and Rybski, 2014; Hanna, 2017; REN21, 2016

The majority of citizen-led initiatives are cooperatives. Cooperatives are a type of social and economic enterprise that enables citizens to collectively own and manage energy projects. Local residents or from the neighboring area can invest in renewable generation by buying shares to finance a project (Walker, 2008). In some cases, citizens can also consume and share energy.

In a cooperative, the distribution of profits is limited and surpluses are reinvested to support its members and/or the community. The allocation of revenues from the projects is regulated by the

statutes of the cooperative, which relate to its main purpose. Sometimes they can be distributed amongst the members through capped dividends. Other initiatives may provide energy benefits in the form of lower energy prices. Cooperatives are based on democratic governance - i.e., decisions made on a 'one member – one vote' principle.

2.7.2. Financial schemes and regulatory framework

As mentioned, several times during this research study, the CEC concept is new in Albania, and consequently the following discussion of financial schemes and regulatory framework is done on the basis of presenting a series of ideas and recommendations on the position and role to be played by each of the stakeholders in this process.

The recommendations presented below are important to support the growth of energy community. The '**core**' recommendations in particular are fundamental preconditions for supporting energy community and require immediate action.

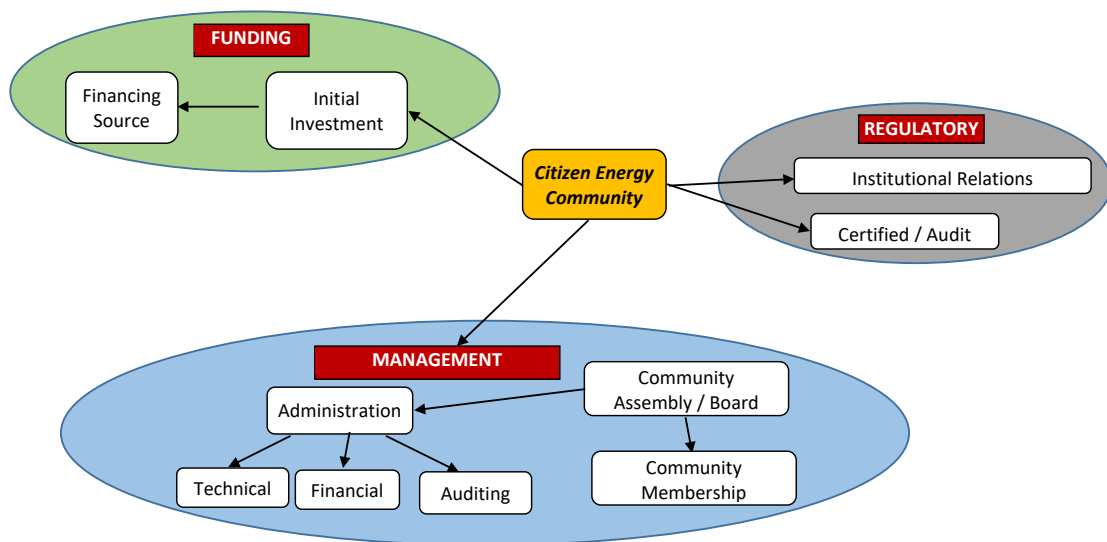


Figure 6: Start up Scheme for CECs

Source: Self elaboration, 2021

2.7.3. Framework scheme for CECs

CEC schemes will need to be designed for a long term sustainability stability. Below there are summarized important framework needs to be taken into account.

- ✚ National legislation and policy should not define 'energy community' restrictively. It should promote a wide range of models for citizen ownership and participation in the production and/or use of sustainable energy.
- ✚ Legal frameworks should ensure at least partial community 'ownership' of, and effective 'participation' in, commercial energy projects, either by statute or best industry practice.
- ✚ Energy community projects should not be subject to competitive bidding processes in order to receive operating support; instead, they should be eligible to receive feed-in tariffs.
- ✚ National legislation should incentivize energy community projects based on 'self-sufficiency' (e.g. direct marketing and production for self-consumption), for instance through investment and tax relief, or reduced charges on energy consumption.
- ✚ Authorities (at all levels) should provide financial support (e.g., grant-to-loan, guarantee, or cheap credit opportunities) for preliminary investigations and works on energy community projects.

- ✚ Local authorities, with support from national authorities if appropriate, should use planning powers to require integration of renewables and energy efficiency measures into public, new and renovated buildings, streamline requirements for energy community projects into a one-stop-shop approach, and provide guidance to assist navigation of regulations.
- ✚ ‘Community leadership’ should be eligible as a material consideration for planning decisions relating to energy projects.
- ✚ Laws should provide equitable grid access for energy community projects; reinforcement costs should fall on the grid operator as part of a continuing duty to ensure integration of renewables and ensure security of supply.
- ✚ National legislation should not impose overly-restrictive requirements on energy community projects wishing to become owners/operators of network grid infrastructure or fully licensed suppliers of green energy.

Specific Recommendations on Financial Support Schemes

➤ ***Supporting energy community projects to produce and export energy***

- The national support schemes should allow smaller energy community projects to be eligible to receive fixed-price feed-in tariffs (FiTs). At the very least, energy community projects should not be subject to competitive bidding processes in order to receive operating support. If competitive bidding schemes exist, such as tendering or auctions, they must contain regulatory safeguards to ensure that larger developers and energy market incumbents do not benefit at the expense of energy community projects, resulting in them being crowded out of the energy market.
- In order to maintain long-term sustainability and social justice, FiT schemes should be adaptable over time, and equitably apportioned among all energy consumers in line with the polluter pays principle.
- If moving away from direct subsidies for energy community installations, national legislation should promote alternative incentives including realized savings on energy bills or other taxes (e.g., net metering schemes), or by incentivizing self-sufficient energy community projects that directly market their energy to nearby customers. Such measures can help promote grid stability, greater energy awareness, and reduced costs and energy consumption.

➤ ***Support for investment in energy community***

- Socially responsible investment and smaller amounts of investments in energy community from households should be supported through preferential tax rules, for example through income tax exemptions or reductions. National and local authorities should also provide special tax relief for construction of energy community installations.
- Authorities should establish grant-to-loan schemes to support energy community projects in preliminary investigations and works (e.g., feasibility studies, obtaining planning permission). In particular, national rules and procedures should allow structural or other funds to be used to establish such support mechanisms. National and/or local authorities should also use public financial institutions to provide community projects with special loan guarantees, or cheap credit opportunities. Such assistance helps to leverage and unlock other private investment in renewable energy, and provide additional investor certainty.

➤ ***Integrating energy community into spatial planning frameworks***

- National level planning documents should provide a strong basis for promoting energy community at regional and local levels. Where regional or local spatial planning frameworks are established, these should prioritize support for energy community projects above other types of energy development.
- At the municipal level, energy community should be integrated into local regulatory frameworks, for instance through requirements to integrate renewable production capacity

in new and renovated buildings. In addition, local authorities should make it as easy as possible for individuals and community groups to assess the viability of renewable energy development, for example through the creation of solar maps.

➤ ***Simplified permitting procedures for individual energy community projects***

- Permitting requirements for energy projects should be based on a sliding scale according to size. This should include simplified procedures for smaller energy community projects and minimal requirements for micro-installations, either through pre-approval or simple notification for specified classes of installations. Where additional requirements exist, they should be streamlined through a one-stop-shop approach.
- Rules for assessing and responding to impacts from energy community installations (e.g. noise, visual, shadow flicker, impacts to protected areas) should be set out as clearly as possible, and consistently applied. This can help improve public confidence and legitimacy in the planning process, and promote investor certainty. Such rules should also be supported by clear guidance and support services from local authorities to assist ordinary citizens in navigating legal requirements.
- 'Community leadership' should be eligible as a material consideration for the planning approval process for energy community projects. This can help to demonstrate that the project has backing from the local community, increasing the legitimacy of such projects.

➤ ***Citizen engagement***

- In designing spatial planning frameworks for energy community development, guidance should be provided at the appropriate level regarding minimum participation measures required by law and ways to exceed these to ensure transparency, and to encourage participation from all sectors of society. This can enhance legitimacy, ensure democratic accountability, and provide additional certainty for individual projects later on.
- For the planning of individual projects, local or regional authorities should develop measures (supported by guidance and recommendations) that go beyond minimum legal requirements on public participation and access to information. Such processes should ensure a deliberative process with all relevant stakeholders, rather than just consultation. Where possible, local authorities should consider how to include disenfranchised groups who do not usually participate in the planning process (e.g., the elderly, ethnic minority groups).

3. POTENTIAL BUSINESS MODEL(S) FOR CECS

This section briefly describes some of the best practices of citizen energy communities at regional and EU level.

3.1. Existing European pilots, business models and technologies

DRIN Fojnica (Bosnia and Herzegovina)

Fojnica is a small city (12.400 inhabitants in 2013) in central Bosnia and Herzegovina known for its numerous archeological findings, historical monuments and natural resources (especially for biomass, geothermal and hydro energy). Most of local people are active in agriculture, tourism and wood industry.



DRIN is acronym for Institute for the care of mentally disabled persons in Fojnica. The Institute was established in 1955. It represents a center for social and health care, extended treatment and rehabilitation, training for the independent life of people with developmental disorders and persons with mental health problems. What makes DRIN unique is that it is the only institution of this type in Bosnia and Herzegovina that cares for the newborns. DRIN is home for almost 500 people with mentally disability and workplace for almost 250 employees. Treatments and rehabilitations are just part of daily routine in the DRIN. DRIN is actually a big family that faces everyday life challenges, as well as many other problems. One of the problems is certainly big electricity bills (over 125.000 EUR a year). A part of these costs is due to huge consumption of hot water.

The idea to invest money for solar hot water collectors that were installed on the roof of DRIN was created by REIC. Solar energy, unlike fossil fuels, is available to an unlimited extent and does not produce harmful emissions. By installing solar collectors, it is possible to save up to 60% of costs related to the preparation of hot water, which will also have a positive effect on the environment. In October 2018 REIC launched the first crowdfunding renewable energy campaign in the history of Bosnia and Herzegovina. This was also the first step towards an energy transition in a local community in Bosnia and Herzegovina.

This was the first ever citizen energy initiative in Bosnia and Herzegovina, which managed to raise funds in the amount of approx. 25.000 EUR. The solar power plant on the roof of the DRIN was put into operation in December 2019, when the first plant for renewable energy sources (financed within the citizen energy initiative) finally started operating.

In general, REIC was the first organization in Bosnia and Herzegovina to address the issue of involving citizens in the field of energy, through a concept called “citizen energy”. From the start of this initiative REIC promoted energy cooperatives as a way to involve citizens in the energy sector.

Križevački sunčani krovovi (Croatia)

Križevci is a small town in the northern part of Croatia with 21.700 inhabitants. The town is an important railway center, known for its wine and vineyards. Križevci has a long history of the wood industry.

The first solar power plant in Croatia financed entirely by citizens was installed in 2018. This PV power plant "Križevački sunčani krovovi" is located on the roof rooftop of the municipality's Development Center and Technology Park's administrative building with direct consumption on site. The initiative was the joint project led by the City of Križevci and ZEZ (Green Energy Cooperative), one of the first energy cooperatives in Croatia. ZEZ and the City of Križevci led the campaign for citizen energy during 2018. They had three presentations in 20 days. At the first public presentation of the campaign, they had only 7 participants. But there were 70 participants at the last one. The financing of the power plant started with a fundraising campaign, which included 53 investors with an average investment of 500 EUR. The campaign managed to collect the total amount of money needed in only 10 days.



Since the interest was huge, the PV power plant (30kW) was installed immediately. It was financed entirely by citizens of Križevci and all other people who wanted to invest. The project will save around 55 tons of CO2 each year, since the production is planned for around 50.000 kWh per year. With the new solar system, the City Library will be able to save money and secure the return on investment for the citizens-investors. The City of Križevci grants a 10- year energy saving annual fee to the citizens.

This was the first project of group investment according to the model of micro loans in Croatia. The City of Križevci provided administrative and financial support in the preparation phase. It also grants a 10-year energy saving annual fee to the citizens. The power plant itself costs 30,000 EUR and the City of Križevac was able to finance the installation itself. But that was not the purpose. They wanted to animate and encourage their citizens to participate in projects related to energy transition. And they succeeded for sure.

Energy Cooperative "Cooperative of solar power plants of Slovenia - ZSES" (Slovenia)

Slovenia is one the first countries in SEE that is moving (step by step) toward an energy transition based on renewable energy. This country has well prepared institutional policy programs. Cooperative of solar power plants will be used as an example that could be copied and implemented also in other countries.



Ptuj is the oldest city in Slovenia. It is located in the northeastern part of the country on the river Drava and has 18.000 inhabitants. The energy transition in Slovenia started in 2014 when the cooperative was founded. The Energy Cooperative ZSES in Ptuj was established by the owners of 13 solar power plants at the founding general assembly. Until 2020, the Energy Cooperative gathered 169 solar photovoltaic power plants from all over Slovenia.



The institutional part of the energy transition is very clear in Slovenia. Each power plant represents one member of the Cooperative. All members (whether natural or legal) have the same status. The Energy Cooperative sells energy from the grid on the stock exchange and generates revenue of EUR 100.000 per year. Solar panels (total installed capacity 9 MW as of 2018) are installed on the roofs of kindergartens, schools, production halls and residential buildings.

After 7-8 years, the power plants become the property of the facilities on of the person/legal entity of the facility on which roofs the plants are installed. The Energy Cooperative install solar power plants according to the Net metering principle - these are solar power plants for self-sufficiency (1), solar power plants for own use which operate according to the PX3 scheme (2), and solar power plants which are intended exclusively for the sale of electricity (3).

The Energy Cooperative has a variety of activities: design of solar power plants, production and sale of electricity, service and cleaning of power plants, electricity metering/lending, and brokerage on the stock exchange. The novelty of the Energy Cooperative is a crowdfunding campaign (mass financing of solar power plants) through which the solar panels will be installed on the rooftops of kindergartens, schools, larger office buildings and everywhere else where interest will be shown.

Güssing Renewable Energy (Austria)

Güssing is small border town in eastern part of Austria, just a few kilometers away from the Hungarian surrounding hills. After the First World War, this was one of the least developed parts of the country. There was a very high level of unemployment and emigration due to underdeveloped agriculture, industry and poor transport infrastructure. Due to a lack of connections to the railway and traffic network, energy costs were extremely high. But there was a large forest resource.

The town was surrounded by 25 km² of forest. Some local residents, realizing that wood in the forest was not being used, started to run a district heating station for several households. The number of similar small district heating systems has increased over time. The surrounding 18 municipalities were also connected to this heating system. In 1996, the heating system was expanded to the whole Güssing. The local authorities and people decided to organize themselves in an energy cooperative and produce their own energy. This year (1996) was the start of energy transition in Güssing, which become a model community for renewable energy and a strategy of decentralized local energy production with available RES in the area.



Güssing built a research institute focusing on thermal and biological gasification and production of second-generation fuels in 2008. That same year a solar manufacturer started producing PV modules in Güssing, producing 850 MW of modules a year while employing 140 people. The cooperative also

installed a PV solar power plant on the roof of the first district heating facility (built in 1996) in 2012. The town currently has 60 new companies (1.500 new jobs) and annual revenues of 14 million EUR due to energy sales and growth of the renewable energy sector.

The cooperative has been producing "clean" energy from sunlight since 1996, wood chips and agricultural waste. It produces a large amount of energy per day that nature cannot absorb in 500,000 days. The small border town has become a net energy producer— generating more energy from renewables than it uses. Altogether, there are more than 30 power plants using renewable energy technologies within 10 km of the town. Güssing is also the first community in the European Union to cut carbon emissions by more than 90%. And other areas are following Güssing model. More than 15 regions in Austria become energy independent (in electricity, heating, and/or transport sector) in last ten years.

SEV - Südtiroler Energieverband (Italy)

South Tyrol is the northernmost province of Italy since is located on the border with Austria and Switzerland. The province has a total population of 531.000 inhabitants (2019.) and the capital is Bolzano. This province is known for its rich history, numerous castles and churches built by Habsburg rulers, Alps peaks above 3.000 m, picturesque valleys, snowy winters and plenty of mountain streams.

The province is entirely located in the Alps mountain system, whose streams and forests have been an important resource for decades for the production of renewable energy and sustainably produced heat. The use of renewable energy began at the end of the 19th century with the installation of the first power plant (1897). Over a period of 100 years, ownership of renewable energy (RES) facilities has changed from energy companies, through state-owned concessions to their own energy provider. The energy transition in this part of Italy started in 1998 when the province established its own energy provider and became one of the key players at the South Tyrol electricity market. Local people, medium- sized enterprises and cooperatives of South Tyrol realized that as homeowner they can produce electricity, keep environment clean and become an active market player in the energy sector. All hydroelectric power stations in South Tyrol are currently under "local" ownership.



Ownership in amount the of 54,45% belongs to the Province of South Tyrol with 21% belonging to the cities in the province (Bolzano and Merano), while 3,55% belongs to the cooperative of South Tyrolean cities. SEV energy cooperative currently has 304 members, including 120 hydropower plants, 45 heating plants and 149 photovoltaic installations (Yearly heat production: 890.000.000 kWh). Energy cooperatives work on the production cost principle. The members are the owners – profits are passed on through cheaper prices to the final consumer. This is also a reason that 20 of the 56 distributors active in South Tyrol are organised as cooperatives. 18% of local power plants with a rated capacity of between 220 kW and 3 megawatts are run by cooperatives. The vision of the SEV cooperative is to develop South Tyrol as a "climate region" (both on behalf of its members and of local consumers).

Eno Energy Co-operative (Finland)

Eno energy co-operative is a community-based enterprise located in Eno. It was established in 1999 by 12 local forest owners. Currently the co-operative is owned by 55 local forest owners and the aim is to produce inexpensive district heat for the local community with local energy wood. Members provide about 20-30% of energy wood and the rest is acquired from different suppliers nearby, e.g. from the fallings of Joensuu city's forests.



The raw materials used are small diameter trees by manual felling (15%), by multi-tree processing (70%) and logging residues (15%) from clear cut areas. Local approach is central in the operations of Eno energy co-operative, not only in terms of its members but also in terms of energy wood procurement and other related services. In addition to affordable price of heat (municipality building and private customers have saved without taxes about 4.1 M € during 15 years compared to light fuel oil), there are many local benefits such as, local forest owners receive income from selling energy wood, energy wood harvesting entrepreneurs get work, thinning of too dense young forest improves growth and quality of remaining trees, net carbon dioxide emissions are reduced because imported oil is replaced by renewable forest chips (5 million kg annually) and local networks are created.

In addition, the actions employ between 7-10 man/year. Currently the co-operative owns three heating plants and about 11 km long district heat distribution network.

Solar Photovoltaic Communal Farm Scheme (Malta)

In the Rabat region of Malta, the roof of the Tal-Fiddien Reservoir has been converted into a solar photovoltaic farm that invites investments from citizens who may not be able to invest in solar PV in their own properties as they lack a suitable surface (such as in a ground floor apartment).



The installation contains 4,000 PV panels totaling 999 kWp (kilowatt peak – the electricity production of a PV system when at maximum capacity). Residents can purchase between 1-3 kWp at a price of EUR 1,500 per kWp and in return they benefit from a feed-in tariff of 15 cents per kWh generated for the first six years, and 10.5 cents for the remainder of the twenty-year lease.

The scheme was established by the Maltese Energy and Water Agency to boost renewable energy generation on the island. Despite an initially slow start, the scheme has been very successful, with all 999 kWp purchased within nine months of the launch, by around 400 households.

3.2. New ideas and identification of the state of the art on business models of the CEC in Albania

A key activity in the start of any new business is the development of a sustainable business model. The essence of a business model is in defining the manner by which the enterprise delivers value to customers, entices customers to pay for value and converts those payments to profit. Consideration may be given to bespoke business models based on a technology bundle or services provided, as in the case of a community-based network operator. Preferably, a business model for the purposes of sustainable community engagement should be technology agnostic. Additionally, to separate the business of community engagement from a hobby, there needs to be true benefits identified.

Before analyzing the theoretical and practical issues related to CEC business model, this chapter provides information on two topics, specifically related to Albania, and which we believe will provide a good ground on the development of CEC projects in the near future. These topics are: a) Community Fund provided by Tirana Municipality, and b) Social Enterprises in Albania.

Also, a brief insight is provided related to energy transition and citizen engagement complexity, and the interconnected issues between both concepts and actions involved.

3.2.1. Tirana Municipality - Community Fund

The Municipal Council of Tirana Municipality has approved Decision no. 14, dated 20.02.2017 "On the approval and implementation of the program "Community Fund", drafted according to the operational guide for the implementation of the program "Community Fund"

General Information

The "Community Fund" program aims to promote effective cooperation among citizens to improve the infrastructure of residential blocks and preserve shared owned premises. Through a fund scheme made available by Tirana Municipality, residents of different neighborhoods (co-owners of housing facilities) of the capital can be organized together under the leadership of Administrators to obtain co-financing for infrastructure projects which address a specific problem in their community. Through this program, they aim to achieve a series of objectives which are not only related to the improvement of shared facilities but also aim to change the mentality of cooperation between citizens and public institutions.

This program is a very good opportunity to turn the citizen into an essential part of the decision-making process against personal and community needs. The program also contributes to citizen's awareness by giving him more responsibility in managing funds and maintaining shared facilities.

Program's Aim

Promoting cooperation between the citizens and Tirana Municipality by creating an effective co-financing scheme in order to improve the facilities co-owned by the communities.

Program's Specific Objectives

- Financial support to communities in need and who desire to improve their shared facilities.
- Improving the infrastructure and urban spaces of the capital.
- Promoting involvement and active participation in issues related to the well-functioning of co-living in the community.
- Promoting positive cooperation between communities and local authorities.
- Supporting citizens' community initiatives in order to promote and cultivate the mentality of cooperation.

- Civic education for the protection of shared areas and the good use of their finances.
- Accelerating the procedures for hiring and registering Administrators/Administration Companies.

Eligible applicants

Administrators/Administration Companies on behalf of the Assemblies and in cooperation with headship members, apply in writing to the municipality with an Application Form and submit the relevant documents to the offices of the respective Administrative Unit. The applicant administrator or the administration company must be a natural or legal person, included in the book of administrators, kept by the Municipality, in order to exercise activities in the field of building administration, or according to the provisions of Law no. 10112 “On the administration of co-ownership in residential buildings”.

Co-financing criterion

One of the criteria for allocating the fund is the co-financing criterion. Co-financing must be at least 50% of the total fund (total fund = Tirana Municipality fund + fund collected by co-owners).

Types of projects eligible for co-financing

1. Maintenance of facades: This includes painting and plastering of facades, etc.
2. Works for the elimination of architectural barriers and adaptation of buildings for people with disabilities.
3. **Projects on energy conservation/efficiency or with positive environmental impact: This includes thermal insulation of facades, installation of solar panels, etc.**
4. Maintenance of rooftops: This includes waterproofing and thermal insulation of rooftops, etc.
5. Maintenance of squares (public and/or co-ownership spaces in function of residential blocks, playgrounds and existing sports fields). These include: rehabilitation of squares (sidewalk tiles, repair of asphalt or various layers), planting grass/shrubs/decorative trees, installation of benches/rest areas, painting of parking lots and signage within the residential block, repair of existing public lighting, etc.

Implementation Cycle

The process of application, selection and implementation of approved projects is done through a transparent and competitive procedure, with steps defined in the standard application documents and in continuous cooperation between the parties (see Figure 7 below).

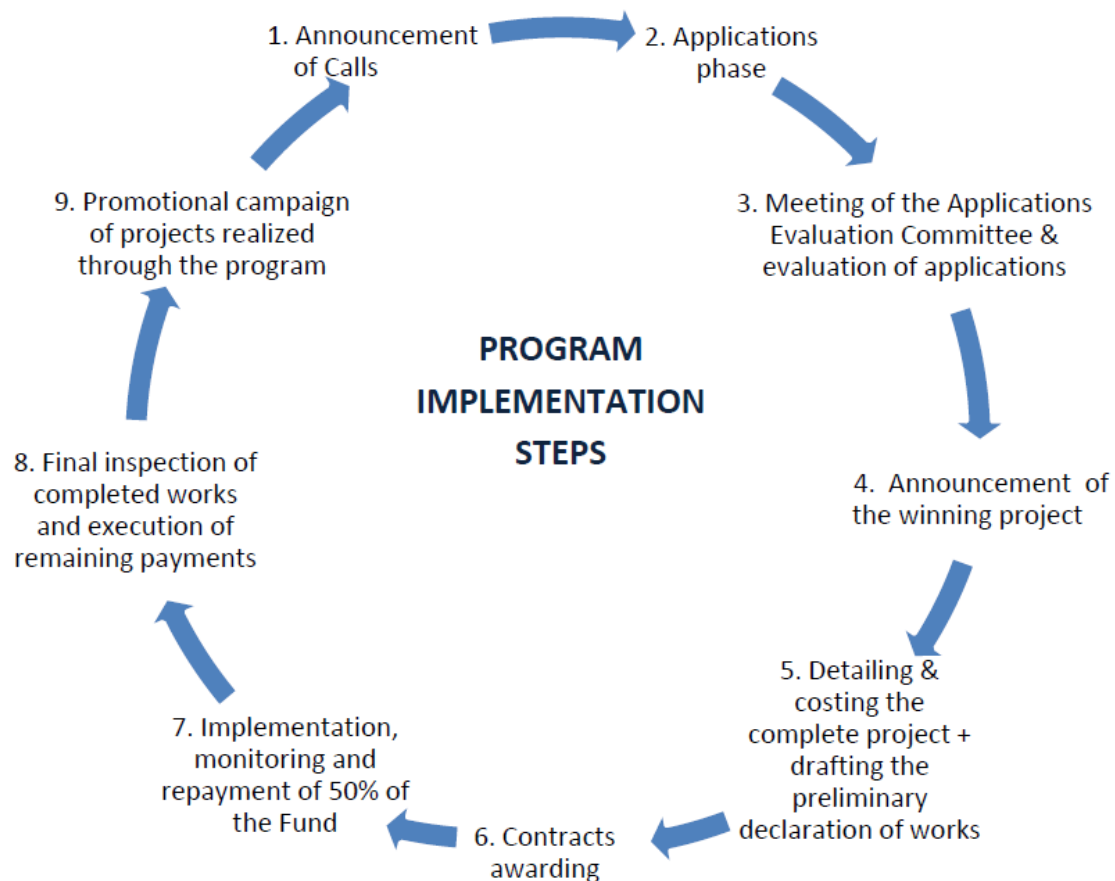


Figure 7: Implementation cycle of the program “Community Fund”
 (Source: Tirana Municipality)

3.2.2. Social enterprises in Albania

What are social enterprises?

Social enterprises are non-profit organizations, which aim at the protection and social inclusion of vulnerable groups, through:

- Employment of the individual for sufficient living resources in accordance with human dignity.
- Employment opportunities for people whose age, health and marital status do not allow them to be active in the labor market.
- Diverse provision of good quality goods and services, opportunities for individuals with special needs aiming at gender equality.
- Economic and social integration of groups in need, promoting accountability, solidarity and social cohesion in the community.

The purpose of these social enterprises is to employ people who are disadvantaged in the labor market. Categories such as economic assistance, people with disabilities, orphans, women victims of violence and trafficking, etc.

In terms of social legal form, it is envisaged to be a non-profit organization but the structure of the enterprise is decision-making and executive. Volunteer employees are also part of these enterprises.

Areas of activity of social enterprises:

- ✓ Social services
- ✓ Employment mediation

- ✓ Youth employment
- ✓ Health services
- ✓ Education services
- ✓ Environmental protection
- ✓ Promotion of tourism, culture and cultural heritage
- ✓ Sports activities, entertainment and socialization

Social enterprise status and criteria for acquiring it:

➤ *Economic criteria*

- The social enterprise must continuously exercise an activity in the field of production of goods and / or provision of services.
- At least 20% of income after the second year of activity, and at least 30% of income after the third year of activity.
- In its activity, the social enterprise, in addition to the contribution of volunteers, must necessarily include at least 3 paid employees.
- The income realized from the economic activity and the social enterprise serve the continuous expansion of their activity.

➤ *Social criteria*

Social enterprise aims to promote social objectives in a well-defined field of activity. Employ employees from disadvantaged groups, at least 30% of the staff.

At least 30% of employees employed in the social enterprise must belong to the category of socially and economically disadvantaged groups, provided for in the law on social enterprises.

(After obtaining the status of social enterprise, according to the provisions of the legislation in force, it is mandatory, the use of the name "Social Enterprise" is placed next to the name of the organization.)

The legal regulation for the subjects "Social enterprises" is realized through the law No. 65/2016 "On social enterprises in the Republic of Albania." This act marks a step forward in the modernization of social protection, promotion of gender equality and in general improving the economic and social situation in the country.)

According to the instruction no. 602, dated 1.8.2018 of the Minister of Health and Social Protection, the procedure for obtaining the status is initiated by the non-profit organization itself through a request addressed to the ministry responsible for social affairs. The request must be in written form and must also contain a brief description of the activity of the organization and a statement of the reasons how the organization meets the economic and social criteria set out in the law on social enterprises.

The instruction stipulates that when a social enterprise carries out activities for which a license is required, the provision of a license, according to the legal provisions governing licensing, must be provided before applying for the status.

In addition to the application for status, interested entities must submit a certificate issued, no later than three months before the date of application, by the NGO Registration Office to the Tirana Judicial District Court, a copy of the statute and the act of establishment and a decision of the highest decision-making body of the non-profit organization to express the purpose of the organization for obtaining the status of social enterprise.

Also, the entity interested in obtaining the status of social enterprise must submit other documents proving the fulfillment of economic and social criteria, a copy of the license, if applicable, and a copy of the previous year's financial statements if the organization has been operating for more than a year. Meanwhile, if the submitted documentation is incomplete or when deemed reasonable, the relevant structures may request additional documentation in addition to that submitted by the applicant.

Verification

The instruction stipulates that if deemed necessary, during the application evaluation procedure, the relevant structures at the ministry responsible for social affairs may conduct an evaluation visit to the premises where the organization operates.

In any case, the applicants are notified of the decision to recognize or reject the status, within 30 calendar days from the date of submission of the application. In case of fulfillment of the legal criteria, the recognition of the status is done by order of the minister. In case of refusal of the status, the notification must also contain the reasons for the refusal. In case of recognition of the status, the non-profit organization is obliged to use the name "Social Enterprise" next to the name of the organization".

Social enterprise status is lost if:

- The social enterprise, on its own initiative, addresses a motivated request to the ministry responsible for social affairs.
- Significant and / or repeated irregularities are noticed in the activity of the social enterprise.
- Status is acquired through fraud, intimidation, bribery, conflict of interest, forgery or any other act, which constitutes a criminal offense.
- The social enterprise has ceased operations for a period longer than 6 months or has been dissolved.
- Social enterprises exercise their activity with financial means that they can provide from the following sources:

Private donations

- Public subsidies, related to their social support and employment missions
- Revenues realized from the sale of goods and service tariffs
- Other revenues, recognized by the legislation in force.

The concept of social enterprise is still unclear in Albania. Although the state has specific social enterprise legislation, as of 2016, it recognizes only NGOs as the only legal entity that can benefit from the status of a social enterprise. Also, the law bypasses the integration of work with the provision of social services; social enterprises should provide a well-defined list of social services provided to marginalized groups and at the same time ensure the employment of a significant number of people from marginalized groups.

Based on the Law No.8788/2001 "On Non-Profit Organizations" and amendments in 2007, 2013 and the Law No. 8789/2001 "On Registration of Non-Profit Organizations", an Albanian NGO can operate as an association, center or foundation.

NGOs can undertake economic activity without establishing a separate entity, as the organization is declared as one of the sources of income. Moreover, the non-economic activity of NGOs should prevail over the rest of its activities: each economic activity should not exceed 20% of its annual income to be exempt from tax.

The social purpose of an NGO is detailed in the mission and statute, which is clearly explained in all formal documents. The initial goal should be to address a specific social problem that takes into account the untreated needs of a population group. NGOs are legally obliged to ensure that the needs of the marginalized group are represented as specified in the statute. Income generated from economic activity must be used to meet the needs provided in the statute.

3.2.2.1. Albanian Legal Framework for Social Enterprises

The first steps for drafting a legal framework on social entrepreneurship in Albania started in 2010 at the initiative of the Ministry of Labor, Social Affairs and Equal Opportunities (now the Ministry of Health and Social Welfare). In 2016, the Albanian government approved Law 65/2016 “On Social Enterprises in the Republic of Albania”. From 2010 to 2016 there were continuous efforts of the sector to block the initial draft law, which contained some problems. On the other hand, the draft-law did not even find the consent of the Ministry of Finances due to the reduced VAT it proposed for social enterprises. Even during the presentation of the new draft law in 2016, a group of civil society organizations gave a series of recommendations, out of which, the only that was partially considered was the qualification for granting the status of social enterprise, not only to “non-profit organizations with membership”, but to all non-profit organizations. Thus, the law was approved by the Parliament from the very beginning without the consent and being opposed by the social enterprises in the country.

Table 6 provides an overview of the legal framework for social enterprises in Albania

Table 6: Legal framework for social enterprises in Albania

Legal act	Short description
Law No. 65/2016 "On social enterprises in the Republic of Albania"	This law aims to regulate the activity of social enterprises, with the aim protection and social inclusion of vulnerable groups
DCM No. 716, date 1.12.2017 "On the determination of the procedures for conducting the activity of the social enterprise"	The DCM provides that the Ministry responsible for social protection, through the inspectorate responsible for social affairs, exercises controls, in order to ensure compliance with the legislation on social enterprises by implementing entities.
DCM No. 16, date 12.1.2018 "On the approval of the list of activities exercising social enterprises"	According to this DCM, the activity of social enterprises includes the field of social, health, cultural and educational services, tourism promotion and environmental protection, as well as employment mediation and qualification activities.
DCM No. 789/2018 "On the creation of a fund in support of social enterprises and forms of support through subsidies for social enterprises"	This DCM aims to establish the Social Enterprise Support Fund, which aims to support the entity that has been recognized as social enterprise status.
DCM No. 56, date 31.1.2018 "On the definition of concrete categories of unfavorable groups"	This decision provides for the categorization and support of unfavorable persons and groups through employment and facilitating their access to the labor market.
Order No. 636, date 3.9.2018 "On the approval of the type regulation of the functioning of social enterprises"	The regulation aims to define the rules for the internal functioning of Social Enterprises, the description of the general rules of work, the standards of ethics as well as the basic principles of financial administration and the manner of asset management in a social enterprise.
Instruction No. 602, date 1.8.2018 "On procedures and documentation needed for obtaining social enterprise status"	Provides a detailed list of procedures to follow and documents to be submitted
Instruction No. 2, date 4.1.2019 "On the establishment of the register of social enterprises"	Provides details on how to establish and maintain the register, what information is needed, etc.
Instruction No. 677, date 27.9.2018	Provides reporting requirements and reporting format

<p>“On the determination of the forms, deadlines and ways of periodic reporting, for the exercised activities and the categories of persons employed by social enterprises”</p>	
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Source: Self elaboration (list adopted from <https://partnersalbania.org/News/paketa-ligjore-mbi-ndermarrjet-sociale-ne-shqiperi/>)

3.2.3. Citizen engagement and energy transition complexity

Citizen engagement for energy communities is a concept that is well researched. Quite often this is done in the context of a smart city/community and the related technologies and infrastructures that citizens must deal with. However, as the concept of a smart community becomes mainstream, the assumption is that citizens naturally shift with the paradigms of new technologies, new regulations and infrastructures and have no further expectations beyond the products or services that these changes provide.

Sustained citizen engagement needs a business model, in the same way that new markets need business models, around which frameworks for stakeholder definition, revenue creation, value added propositions and required outcomes can be generated and shared as a common vision. The energy transition and the citizen engagement involve many interconnected issues, such as technical, economic, political, institutional, and behavioral issues.

The two complexities – energy transition complexity and citizen engagement complexity with a scale of 0-1 has been positioned on the radar chart as shown in Figure 8 below.

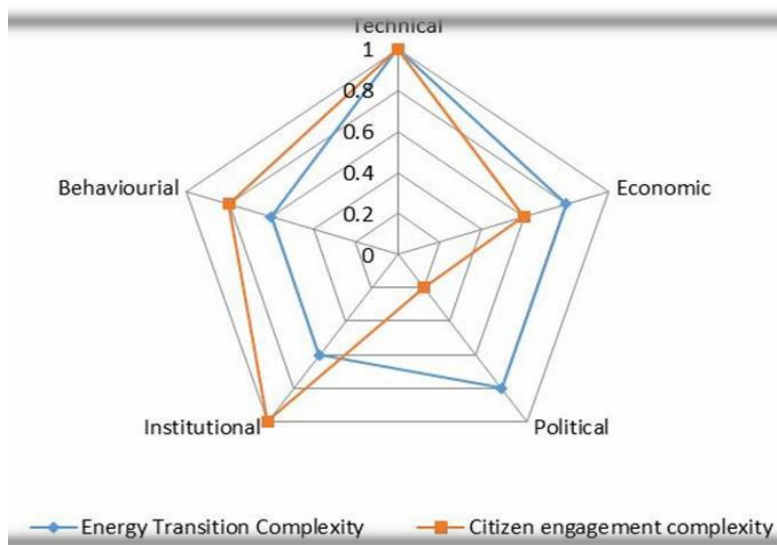


Figure 8: Complexity in energy transition and citizen engagement

Source: *Citizen Engagement as a Business Model for Smart Energy Communities*

It can be seen that technical understanding is a high-level issue and it is making both the attributes more complex. Lack of institutional arrangement is also identified as a primary issue in citizen engagement. Behavioral strategy is more important and complex at the citizen level rather than the thinking at the energy transition perspective.

3.2.4. Business model

This section presents an idea for developing a Business Model for citizen engagement to enhance and ensure sustained involvement by local citizens in community energy projects.

The Business Model Canvas (BMC), first developed by Osterwalder and Pigneur is a strategic management template for developing new business models. The template is a visual chart with elements describing the value proposition, customers and financing of a potential business. To ensure sustainability, especially in the fluid context of citizen engagement, the value proposition must be clearly stated and focused on the benefit to the stakeholders

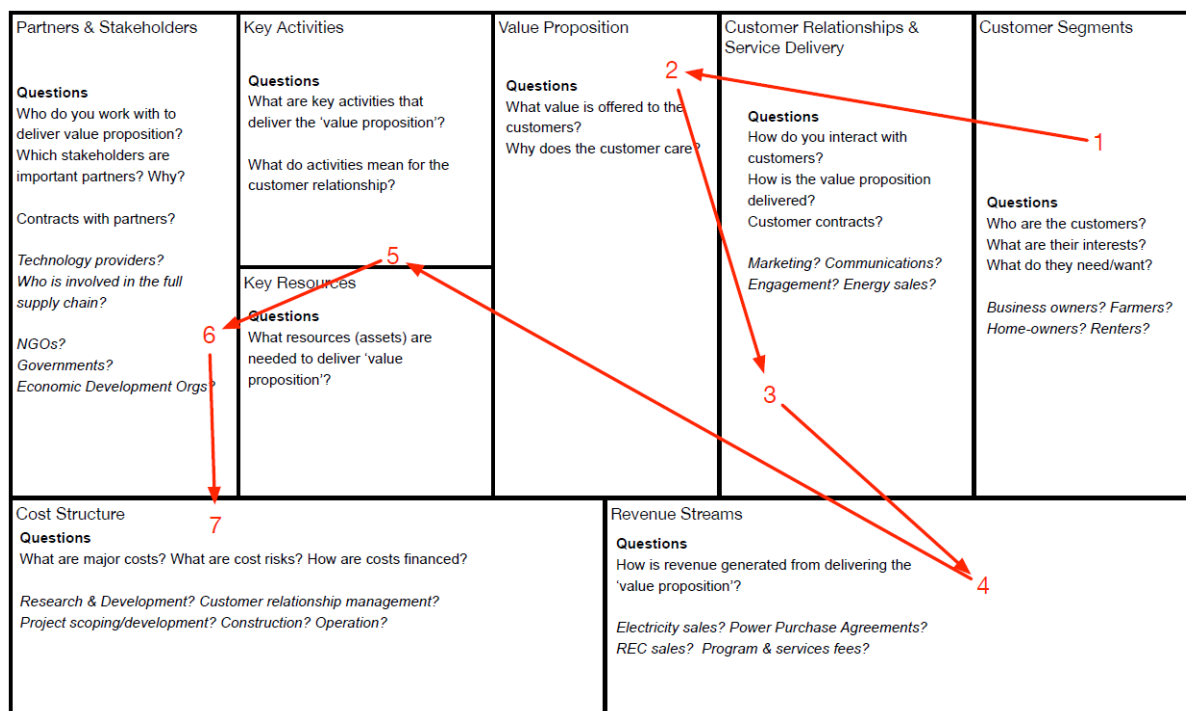


Figure 9: Business Model Canvas related to energy projects
 Source: Adopted from Osterwalder and Pigneur, 2010

Figure 9 above shows the interaction of the elements from the canvas. In our version of the BMC the main stakeholders include:

- Householders;
- Community Groups;
- Community Systems Developer;
- Technology Vendors
- Local Authorities; and
- Energy Agencies.

The main Value Propositions include:

- Energy Management Guidance and Advice including Technology Advice (for Householders);
- Citizen Interface and Communications (for Technology Vendors, Community Systems Developers, Local Authorities and Energy Agencies);
- Energy Consumption Data Collection and Analysis (for Community Systems Developers, Local Authorities and Energy Agencies);
- Business Model Development Guidance and Advice (for Community Groups, Community Systems Developers, Local Authorities and Energy Agencies); and
- Property Assessment and Advice based on Energy Efficiency and Building Energy Ratings (for Householders).

The sustainability of the business model depends on its ability to turn the *Value Propositions* into *Revenue Streams*. As shown in Figure 10 below, key strategic areas for potential revenue streams are threefold:

1. The Householders within the community;
2. The Energy Management Strategy of the community; and
3. The Continuous Engagement Opportunities defined and deployed collaboratively among the stakeholders.

The model is represented as a circle. This indicates the continuum on which each stakeholder and the broader community can mutually benefit from such a model. The lighter colored border pieces connect the product and service opportunities most relevant to that strategic area. However, the circular nature of the model allows those opportunities to be shared across strategic areas.

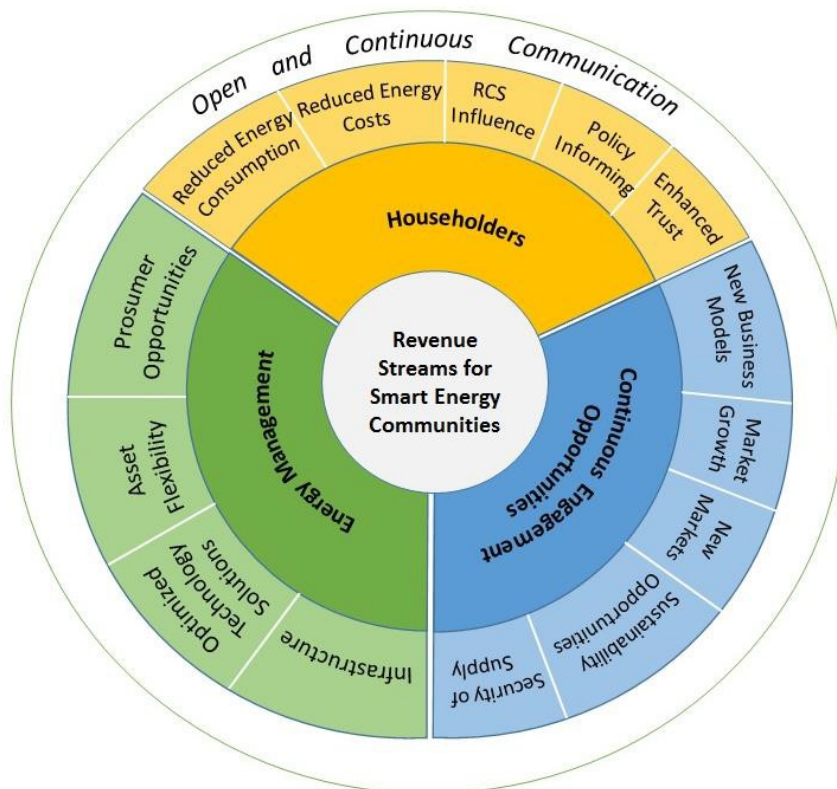


Figure 10: Business and Revenue Stream Model

Source: Citizen Engagement as a Business Model for Smart Energy Communities

The opportunities suggested in this model are not meant to be a comprehensive list. The key point, and the novelty, is that the three strategic areas encompass the key stakeholders in a smart energy community and the model provides a platform by which each stakeholder has an opportunity to co-create mutually beneficial outcomes.

3.3. CEC Evaluation Model and Recommendations in Albania

Energy communities and consumer (co-)ownership are essential cornerstones to the overall success of the Energy Transition. When consumers acquire ownership in CEC installations, they can become prosumers, generating a share of the energy they consume. This allows them to reduce their overall expenditure for energy and simultaneously acquire another source of income from the sale of excess production. Prosumership is expected to be increasingly embedded in energy communities that entail a broad variety of actors. From a technical point of view, these organizational shifts in energy generation, supply and management happen in the context of the growing complexity of energy systems; however, in this research study we are focused on Citizen Energy Communities form of organization.

Energy communities and energy clusters are mirror images, governance and technological, of the same concept, entailing flexibility, bi-directionality and interconnectivity options between prosumers and producers of energy and the market, allowing energy sharing of a portfolio of RES, that can enhance complementarity.

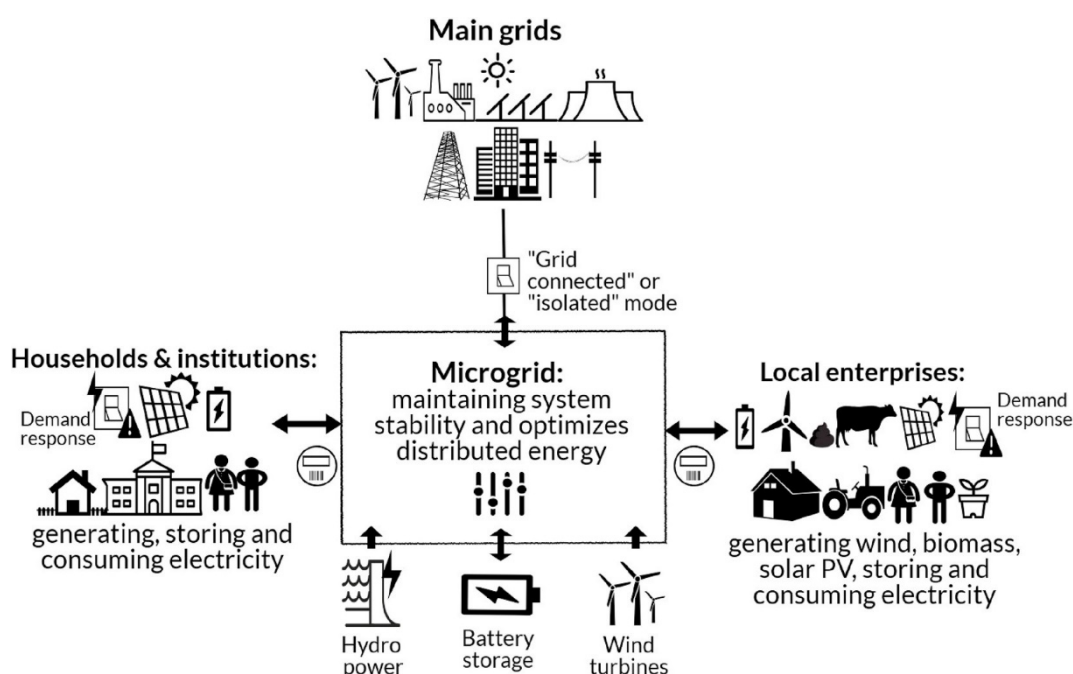


Figure 11: Elements of energy clusters

Source: Renewable energy communities under the 2019 European Clean Energy Package – Governance model for the energy clusters of the future

3.3.1. Evaluation Criteria

As regards the necessary legal, economic and technological conditions for CEC success, the following criteria will have to be evaluated (see also **Table**):

➤ **Energy cluster potential**

IEMD mention the concept of energy sharing in relation to CECs. This will allow energy communities to share energy amongst participating entities without brokerage of a third party even when using the public grid. This is crucial for the functioning of energy clusters. To fulfil this function, certain technical aspects in a project need to be met: interconnectivity and bi-directionality between installations or installations and the market; complementarity due to a variety of energy sources in the portfolio; and flexibility options (storage, demand response, etc.).

➤ **Heterogeneity of members**

CECs are in principle open to all entities. The IEMD thus supports heterogeneity of members, which follows from the purpose and guiding principle for energy communities “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”.

➤ **Governance and ownership**

IEMD puts forward a new governance model for energy communities. These provide an enhanced focus on environmental, economic or social community benefits rather than on profits, and limit the effective control of the energy community to their local members or shareholders as main beneficiaries. CECs, limit control by the size of the shareholders and their commercial activity, and excludes those for which energy constitutes the primary area of activity

Table 7: The criteria for energy communities under IEMD

Criteria	Citizen Energy Communities as defined in IEMD
Eligibility	in principle open to all types of entities
Primary Purpose	“environmental, economic or social community benefits for its shareholders/members or for local areas where it operates, rather than financial profits”
Membership	<u>voluntary</u> participation, open to all potential members based on non-discriminatory criteria
Ownership and control	<ul style="list-style-type: none"> • effectively controlled by shareholders or members of the project • limitation for firms included in shareholders controlling entity to those of small/micro size (not medium); • shareholders engaged in large scale commercial activity and for which energy constitutes primary area of activity excluded from control.

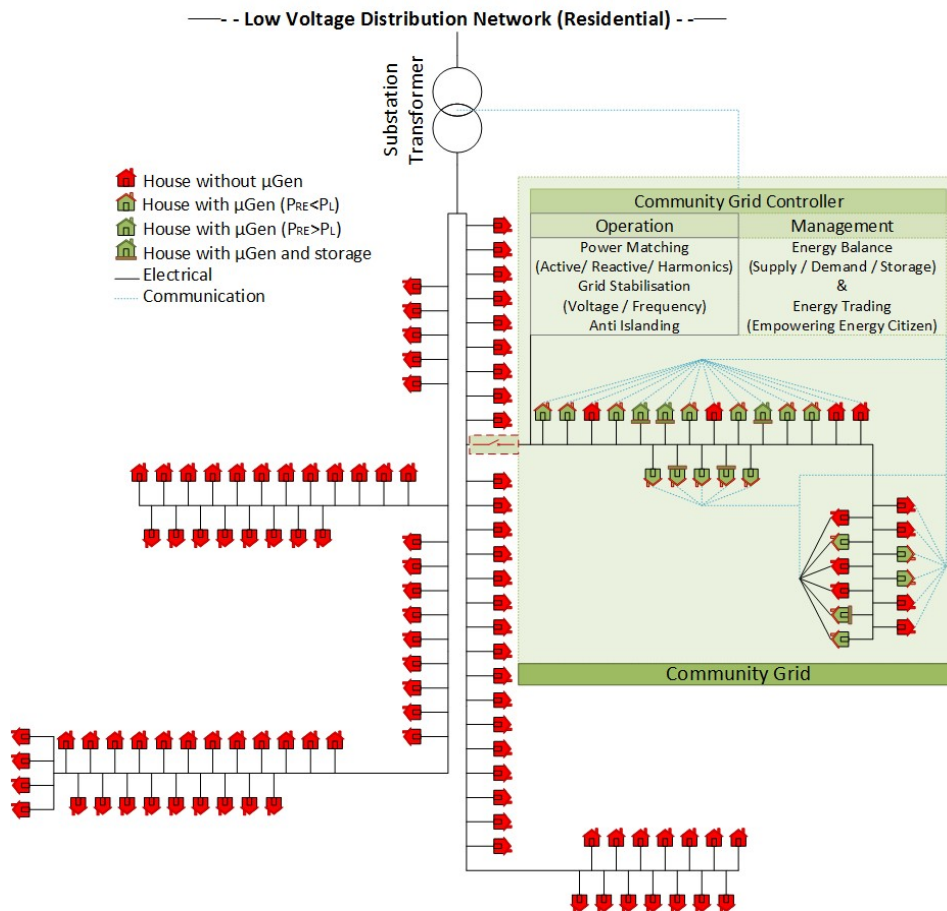
Source: Renewable energy communities under the 2019 European Clean Energy Package – Governance model for the energy clusters of the future

3.3.2. A typical model

A typical model of the smart energy community is the community grid, where one of the stakeholders is the community-network-operator. This might be the current DSO (Distribution System Operator) or it might be a new community-level model managed privately or within a community group. This new model for network management creates a new market. The spin-out business needs support from other stakeholders including local and national policy makers, technology providers, local authorities (city councils or energy agencies) and the community at large.

The householder benefits from this new model buying cheaper electricity from a trusted source, the community-network-operator provides the energy management services (as a business) and acts as a go-between the community residents and the national grid-level DSO. The Community can then roll-out sustainable activities including a residential energy management planning scheme, education on the latest technologies for residents, local workshops with regulators, activities in schools for green projects and in general growing a community-based set of best practices in which everyone has a say and everyone benefits.

A typical community grid network is shown in Figure 12 below.



Source: Citizen Engagement as a Business Model for Smart Energy Communities

The focus in this model is on organizing prosumer groups, including local communities, energy supply companies and cooperatives. This will allow consumers to trade short-term energy contracts locally within the DSO. The local authorities should cooperate with citizen groups in developing this citizen centric business model by organizing consumers to be engaged in this game and showing how actively consumers can control their own energy business.

3.3.2.1. Potential CECs in Albania

This section provides a more detailed analysis and breakdown of the communities' group of stakeholders, taking into account the subgroups as well as specific elements of energy use by each subgroup. As mentioned previously (Section 4.3.2), the individuals/communities, local residents and small business owners, are considered as Primary Stakeholders, being in majority captive consumers.

In terms of geographical coverage, these groups are envisioned to be structured and operational at a town/village or neighborhood level.

Moreover, for the purpose of this research study, there are identified three subgroups as following:

A. Public Buildings and Spaces

These include (but not limited to): schools, health centers, nursing homes, libraries, municipalities/administrative units' premises, parks/squares, etc. They can use the relevant spaces, such as rooftops, to produce RE, which in turn can be used for self-consumption (heating, lighting, etc.), but also as a product to be shared, by inputting to the grid

B. SMEs

These include mainly enterprises oriented towards processing of local community products. Such enterprises are water bottling factories, dairy farms, fish storage facilities operated by local Fishery Management Organization, local products (fruits and vegetables) processing, such as apples, oranges, grapes, carrots, peppers, etc. As in the previous subgroup, the produced RE will be used for self-consumption, while connection to the distribution grid, if will be the case, may require special legal arrangements.

This subgroup also constitutes a good example of a successful cooperation between private ventures and local communities.

C. Shared Residencies

These include multi-apartment buildings in the city or several houses at a neighborhood in the village. The space to be used for energy installations will be public or common property space. The energy production and usage installations that can be applied in this case include:

- Photovoltaic installations which can be used for: operating the water supply pumps, elevator, stairs cage lighting, etc.
- Heating installations.
- Public lighting installations.

Community Fund, implemented by Tirana Municipality, could be a good starting point in this regard.

3.4. Prospects and conclusions for energy cooperatives

Cooperatives that are established for the purpose of producing and distributing energy, mostly from renewable resources such as wind, solar power or biomass are called energy cooperatives. Energy cooperatives are one of the most common forms of local energy communities¹³. They can provide different services across the energy sector such as:

- self-production and consumption;
- RE production for sale on the grid;
- ownership or operation of storage facilities, micro-grids and other distribution infrastructure;
- provision of energy efficiency and other services;
- aggregate demand response and distributed generation of RE to provide flexibility services.

While energy cooperatives share most of the features of other forms of local energy communities, they are a unique ownership model from an economic and legal perspective. Unlike traditional businesses, cooperatives are owned by their members/users on a 'one member – one vote' principle and aim to maximize local benefits rather than the return on capital. Like other forms of local energy communities, energy cooperatives contribute to a more democratic energy system and local social and economic development by, for example, addressing energy poverty and creating employment in the community. Nevertheless, their success also depends on the regulatory framework that governs their operations and particularly their access to the energy system.

The EU-level policy instruments that have the biggest impact on local energy communities, including energy cooperatives, are the EU Renewable Energy Directive (RED, Directive 2009/28/EC) and the common rules for the internal energy market (IEM) in electricity (Directive 2009/72/EC). While the RED aims to promote renewable energy, including through the use of support schemes, the State aid guidelines (Communication 2014/C 200/01) may render some national support mechanisms incompatible with the internal market. In addition to EU policies, national legislation transposing or complementing EU legislation can further affect local energy communities.

3.4.1. Energy Cooperatives

Energy cooperatives, and RE cooperatives in particular, as mentioned above, are one of the most common forms of local energy ownership around the EU and they are gaining popularity. This section provides an overview of energy cooperatives, their socio-economic and some models across the EU.

3.4.1.1. Overview of energy cooperatives

While cooperatives have existed for a long time (e.g., in the agriculture sector) energy cooperatives are relatively new. Despite the fact that energy cooperatives are one of the most common forms of local energy ownership and they are gaining popularity, there is no common legal definition for energy cooperatives so far. There are various descriptions available:

¹³ The Proposal on common rules for the internal market in electricity recognizes the significant role of such initiatives and provides a definition also for a '**local energy community**': "*an association, a cooperative, a partnership, a non-profit organization or other legal entity which is effectively controlled by local shareholders or members, generally value rather than profit-driven, involved in distributed generation and in performing activities of a distribution system operator, supplier or aggregator at local level, including across borders*" – European Commission, 2016, Proposal for a *Directive of the European Parliament and of the Council on common rules for the internal market in electricity*, COM(2016) 864 final/2, p.52.

- REScoop defines a RE cooperative as ‘a business model where citizens jointly own and participate in projects for sustainable energy [including] both renewable energy (RES) and energy efficiency (EE)’¹⁴
- The EESC describes an energy cooperative as ‘a voluntary association with an unlimited number of members and legal personality [with] the objective [...] to meet the energy needs of its members’¹⁵
- The International Cooperative Alliance defines ‘A cooperative is an autonomous association of persons united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly owned and democratically-controlled enterprise’. This means that a cooperative is a form of business owned and run by and for their members. The core values are the principles of self-help, self-responsibility, democracy, equality, equity and solidarity’¹⁶

Like other cooperatives, energy cooperatives should follow some key internationally agreed cooperative principles:

- *They are open and voluntary* – cooperatives are voluntary organizations open to all persons able and willing to use their services and take on membership responsibilities.
- *They entail democratic ownership* – each member has a vote (‘one member-one vote’) and participate in setting the policies and decisions of the cooperative, some members are elected representatives.
- *They allow economic participation* – citizens can buy shares of the cooperative and get access to its products or services; members contribute equitably and democratically control the capital of the cooperative, they usually receive limited compensation and any surpluses are usually allocated to supporting the activities of the cooperative.
- *They are autonomous and independent* – cooperatives are not controlled by private companies or public authorities; if any agreements with other organisations are undertaken, they should guarantee the democratic control of the members over the cooperative.
- *They provide information and training* - cooperatives offer their members, representatives and employees education and training to ensure members can effectively contribute to the development of the cooperative, while offering information about the benefits of the cooperative to the general public.
- *They collaborate with other cooperatives* at local, regional, national and international levels.
- *They care for the local community* – cooperatives work for the sustainable development of their communities.

The cooperative has a lean and functional organizational structure, consisting of three bodies: The **General Assembly**, the **Executive Board** and the **Supervisory Board** (Figure 13). The Executive Board runs the cooperative under its own responsibility, while the Supervisory Board monitors these activities. The General Assembly is the supreme legal organ of the cooperative, which elects the Supervisory Board, decides on changes of the charter and other fundamental questions. The charter specifies whether the General Assembly or the Supervisory Board is responsible for the election of the Executive Board. Every cooperative has a charter as an internal constitution, which complements the statutory provisions and determines the structure, competences and objectives of the cooperative.

¹⁴ Creupelandt D. and Vansintjan, D. REScoop – Mobilizing European Citizens to Invest in Sustainable Energy, Deliverable 2.3 REScoop – Municipality Approach

¹⁵ European Economic and Social Committee, 2016, Prosumer Energy and Prosumer Power Cooperatives: opportunities and challenges in the EU countries, Opinion TEN/583.

¹⁶ International Cooperative Alliance, 2017

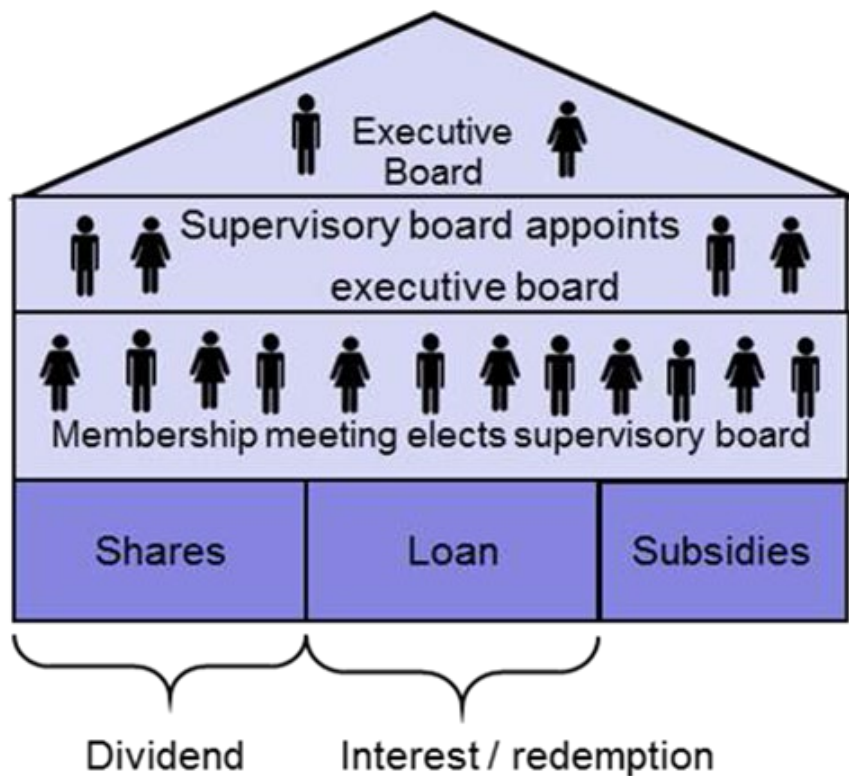


Figure 13: Organizational structure of a cooperative

Source: WECF, ZEZ. 2018. *Energy cooperatives - Comparative analysis in Eastern Partnership countries and Western Balkans*

3.4.1.2. Socio-economic impact of energy cooperatives

Energy cooperatives have several key socio-economic impacts, some of which are also shared with some of the other types of local energy ownership models. One of the most important impacts of energy cooperatives is their contribution to energy democracy and ‘energy citizenship’. While the former concept refers primarily to joint decision-making concerning energy (and climate) policies, the latter refers more broadly to ‘triggering a wider consciousness among citizens and communities of energy issues’ that in turn enables them to contribute more broadly to the energy transition. This means not only that citizens and energy communities will become active consumers or prosumers but also that they will gradually start participating in the operation of distribution grids, energy supply and energy service companies for example through energy cooperatives. Such a democratization of the energy system can ensure wider acceptance and uptake of RE projects and lead to lower energy prices, especially for energy poor consumers.

Energy cooperatives are a suitable model to plan, finance and implement renewable energy projects and offer many advantages:

1. Balance of interests: Enabling of different actors to get involved in the decision-making process on a local level and to combine economic, social and communal interests;
2. Acceptance: Increasing citizen’s acceptance for the implementation of renewable energy projects through active participation;
3. Regional added value: Strengthening of the local economy through citizen’s joint investment in projects that are realized with local companies and banks, craftsmen and projectors. In addition, municipalities profit from tax revenues and the unemployment rate decreases;
4. Social justice: Reducing social injustice, since also women and citizens with low incomes can actively participate in the energy transition as cooperative members.

5. Needs-based energy industry: Enabling the energy supply to be tailored to specific needs, which is based on the support of the members instead of a high return for shareholders;
6. Long-lasting commitment: Energy cooperatives are not an entirely capital-based participation of the citizens, but regional enterprises that have the potential to shape the regional energy supply in the long term and are part of a comprehensive 'community developing' policy. (DGRV Bundesgeschäftsstelle Energiegenossenschaften 2007).

Energy cooperatives can also contribute to the local economy. They can directly create jobs in the local market, e.g., for the management and maintenance of the RE installations, and contribute to decreasing the capital outflow resulting from fuel imports, which can indirectly generate jobs in other sectors. Energy cooperatives and community projects are also more likely to contract local companies or use local banks and reinvest their profits in the community¹⁷. Energy cooperatives aim to maximize local value and thus contribute to the social and economic welfare of local communities. More specifically, they can promote a 'circular' economy at the local level where RE profits are invested to promote other energy objectives such as building renovations and energy savings¹⁸.

The formation of energy cooperatives allows a de-monopolization and democratization of expert knowledge and the entrance of new actors – women, men, youth, etc. - into the energy sector and demonstrates an alternative to the existing fossil and wood energy industry. Becoming energy "prosumers" – meaning simultaneously producers and consumers - in a local context is a political process of learning and development with as broad and diverse representation as possible from all parts of society. The experience of women being responsible for heating and cooking in the households is explicitly considered and helps to tailor the renewable energy solutions in an appropriate way. The increased knowledge and experience about renewable energy raises the acceptance with the broader public, which is important for the transformational process to move towards a decarbonized economy and society.

From an economic perspective, cooperatives are a different ownership model compared to conventional business organizations. Contrary to corporations or other businesses, which are owned by investors, cooperatives are owned by members who are often also the end-users of their services and the net earnings are usually divided proportionally among the members according to the volume of transactions rather than their shareholding. Furthermore, maximizing the return on capital is usually not a key objective for cooperatives – there is cap to profit distribution even when part of the net income is allocated as a return on capital shares. Finally, cooperatives present a democratic governance structure where individuals have equal voting rights and no barriers to become members and join the cooperative. Thus, a cooperative business model has a different approach than a traditional utility (Figure 14).

¹⁷ Community Power, Friends of the Earth and REScoop, The Benefits of Community Ownership.

¹⁸ Creupelandt D. and Vansintjan, D. REScoop – Mobilizing European Citizens to Invest in Sustainable Energy, Deliverable 2.3 REScoop – Municipality Approach.

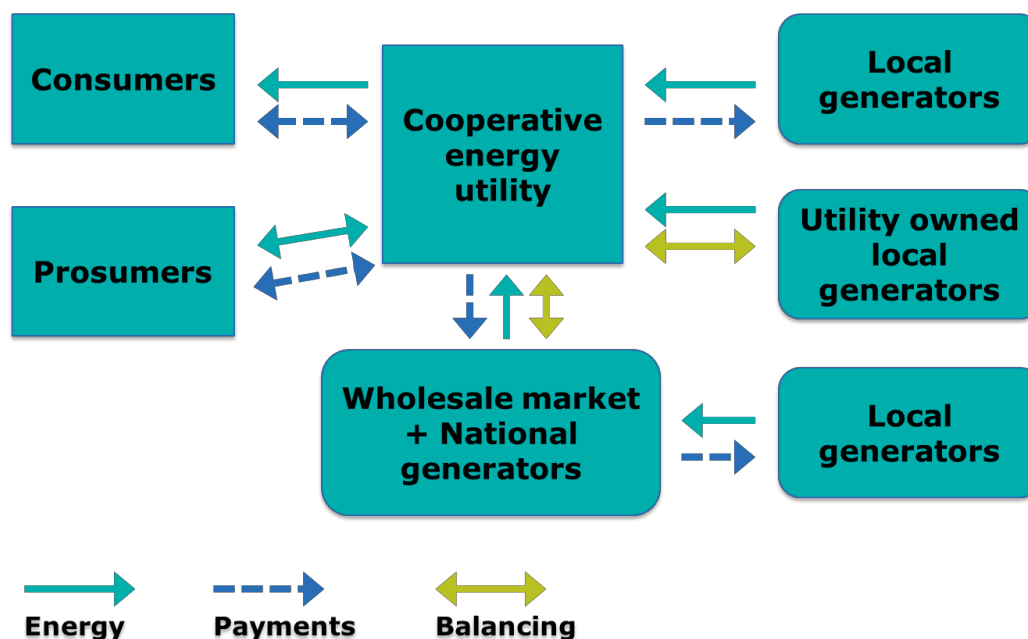


Figure 14: The cooperative energy business model

Source: Bryant, Straker, and Wrigley, 2018

Last but not least, energy cooperatives contribute to the achievement of climate, energy and environmental objectives. On the one hand, they can bring EU, national and regional policy goals closer to the citizens improving local acceptance for energy transition projects¹⁹. On the other hand, they can contribute to meeting national climate policy goals by contributing to the installation of RE capacity, energy savings and improvements of energy efficiency. For example, energy cooperatives support local authorities to meet their climate and energy objectives.

3.4.1.3. Tool for women’s empowerment and gender justice

Twenty years have passed since 1995’s World Beijing Conference on Women placed a focus on closing the gender gap, but deeply-rooted gender-based inequalities have continued beyond the 2015 target. Women are still under-represented as political and economic decision-makers; suffer from lack of access to decent, fair- waged, safe employment; and are more likely to work as informal and unpaid labor. Given this reality, the United Nations have agreed to prioritize gender equality and women’s empowerment by creating a stand-alone Sustainable Development Goal (SDG) - SDG 5 - to increase gender equality. Due to their core values cooperatives are an appropriate legal form to address many of the issues that negatively impact women.

Collectively members own their cooperative, and through democratic arrangements they participate in its governance. They run the cooperative as elected members of the management and supervisory board. Governance is key. Cooperatives are governed by their members who typically invest in the cooperative and have an ownership stake in it, as well as a voice in how the firm is run. Decisions are often made on a one-member, one-vote basis, so in many societies, cooperatives provide a much-needed example of democratic governance amid otherwise inequitable conditions. Thus, cooperatives offer an alternative to the shareholder model of business ownership. In many sectors they show very successful and continuous positive economic results while also considering social and environment impacts. In overall:

- Cooperatives have an increasingly positive impact on women and their inclusion in the labor force and formal economy.

¹⁹ Community Power, Friends of the Earth and REScoop, The Benefits of Community Ownership.

- Cooperatives can empower women by collaborating with civil society and gaining government recognition.
- Cooperatives can continue to develop policies that support women from within.
- Democratic processes require shared decision-making between women and men.
- Contribution towards gender equality by expanding women’s opportunities to participate in local economies.
- Strong links between women’s cooperative involvement and poverty reduction.

How Cooperatives Contribute to Gender Equality and Women's Economic Empowerment		
<i>Economic empowerment</i>	<i>Improved work conditions</i>	<i>Social empowerment</i>
Equal access to paid work	Fair and adequate earnings / equal pay for equal value of work	Learning opportunities such as technical skills improvement and management training
Transition opportunities to the formal economy through cooperation	Decent work in safe working conditions	Affordable and accessible goods and services
Access to business capital, financing, and market places	Collective bargaining power	Improved self-esteem and confidence
Access to opportunities to gain skills and knowledge for economic activity	Increased levels of participatory democracy in the workplace	
Economic development in rural areas		

Figure 15: How cooperatives contribute to gender equality

Source: COPAC 2015

Gender-just energy cooperatives could:

- Provide equal access to women throughout the energy value chain: technologies, jobs, funding, dividend.
- Reduce workload: save cost and time.
- Ensure control over energy production and consumption.
- Foster women’s empowerment and leadership.
- Engage for cooperative gender and energy policy.

The beneficiary and people-centered approach pays particular attention to small-scale and community-based actions, where women are under-represented. It can be an inclusive way to boost women’s empowerment and the renewable energy business. Within cooperatives women are members, managers, investors, producers, consumers and beneficiaries. They have a say in the sustainable energy production and they become entrepreneurs at community level with up-scaling potential. The world of work changes and a key prerequisite is that the turnaround is inclusive and sustainable. Gender-just energy cooperatives are a way to guarantee women and men an equal voice in the development of energy production, in particular renewable energy. It enables women to become economically active and thus empowered. It contributes to the implementation of the Agenda2030 by addressing the various SGDs (in particular No. 5, 7, 8, 10 and 13).

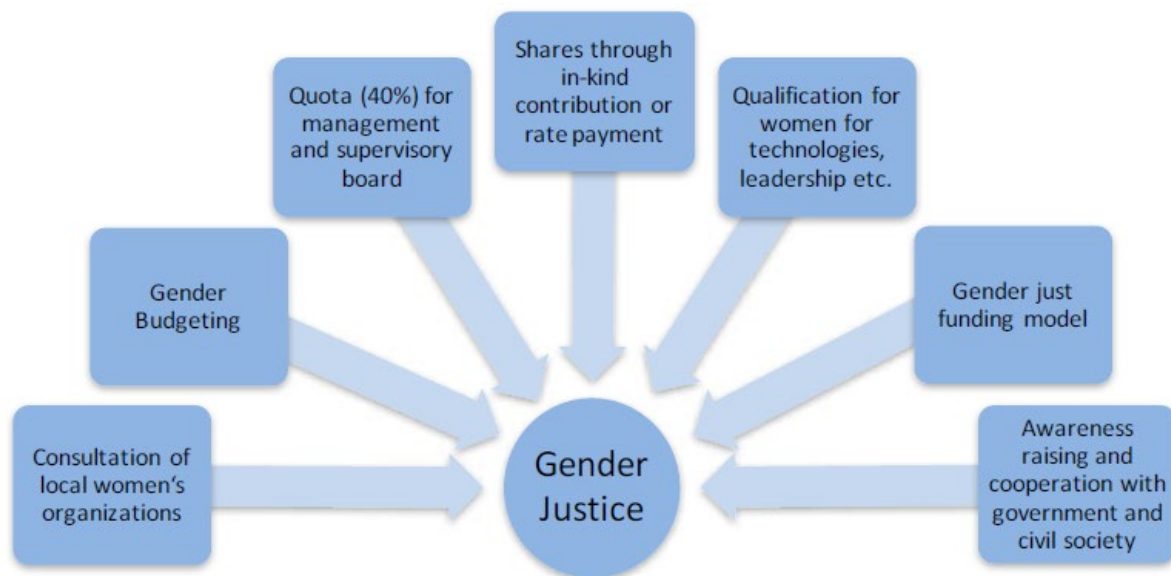


Figure 16: Applying gender strategies fosters equality for women and men

Source: WECF

3.4.2. Local energy ownership / cooperatives models across the EU

In several EU countries, an increasing share of RE is now produced by cooperatives. For instance, in Germany, there are more than 600 RE cooperatives and local groups, including some community owned projects that produce electricity. RE cooperatives also provide a new opportunity for local energy production and ownership, transforming the energy market and defining national schemes. Energy cooperatives and other forms of local community energy can also support energy efficiency projects (e.g., retrofitting or new developments)²⁰.

Below are provided examples of existing local ownership models in the energy sector in four EU countries: Denmark, Germany, Ireland and Greece.

3.4.2.1. Denmark experience

Denmark has a history of supporting the development of RES, and is considered one of the pioneering nations in regards to wind energy. Denmark has deployed different laws since the 1970s to promote the development of RES, with a clear focus on wind energy in particular. The measures taken in the 1970s and 1980s included tax exemptions for income from wind turbines, fixed feed-in-tariffs, guaranteed grid connection, purchase obligations and priority transmission for wind energy. Despite some volatile changes to the rules concerning the operation of RES in the late 1990s and early 2000s, the latest legal reform enacted with the Promotion of Renewable Energy Sources Act of 2009 ensures a larger fixed premium for wind energy, making RE cooperatives more attractive.

In addition to policies promoting RES development, Denmark also has a tradition of cooperative ownership, especially in the agricultural sector, and local energy activism (e.g., against nuclear power generation). Therefore, it is not surprising that Denmark has promoted local ownership of RES, particularly wind energy, by citizens, companies and cooperatives through targeted measures such as planning schemes and specific regulations. Even though Danish law prohibits cooperatives from owning wind turbines, other forms of ownership have occurred to facilitate local citizen participation.

²⁰ Smith, C. et al. 2016, Social Innovation and Community Energy best practices, methods and tools across Europe.

Communities tend to obtain common ownership through a legal partnership, which essentially operates in largely the same way as a cooperative. In these partnerships, individuals combine their funds to purchase turbines, with community wind projects financed completely through the sale of shares. Consequently, members of the partnership are protected against liability for debts beyond the resources of the partnership, which each member only liable for the amount they invested. This has helped overcome the risks of joint and several liability and helped encourage more citizen investments in local energy generation.

Most energy-related issues come under the ambit of the national government, which has continuously supported the development of community-owned energy projects. However, as previously mentioned, many government policies that previously helped to establish the wind industry (such as subsidies for set-up costs and previous feed-in-tariff laws) are no longer available. That being said, the remaining grid connection arrangement has ensured the ongoing success of community power in Denmark. This arrangement states that turbine owners are only required to pay for the connection to the closest technically feasible point of the grid. Consequently, energy utilities must finance any necessary expansion of the grid, rather than the owners of the specific turbine.

In Denmark, public participation is central to the wind power development scheme as local citizens have the option of purchasing wind power shares. According to the 2009 Promotion of Renewable Energy Sources Act *'any person who erects one or more wind turbines of at least 25m in height onshore, or offshore wind turbines established without a tendering procedure [...], shall, prior to commencement of erection, offer for sale at least 20 per cent of the ownership shares to the persons [...] living within a 4.5 km radius of the turbine.* Consequently, community energy generation in Denmark now occurs predominantly in partnership with energy utilities (co-owned community energy projects) rather than in fully private owned projects. This legislation has allowed communities to collectively invest in wind energy since the 1970s; as a result, by 2013, 70-80% of existing wind turbines were owned by communities, whilst the rate of RES generation owned by communities is now one of the highest in the world.

In conclusion, Denmark has a strong focus on renewable energy communities and a nurturing environment that allows it to be at the forefront of community energy generation in Europe. That being said, the majority of its policy relates solely to the establishment of wind power, with little mention of other forms of RE.

3.4.2.2. Germany experience

In Germany, like Denmark, there is strong and stable support for renewable energy, though it is more recent, with an official 'Energiewende', or 'energy transition' introduced in 2010. National policy aims to promote both wind and solar power. The transition includes ambitious targets and measures (e.g., feed-in tariffs) aimed to promote renewable energy, energy efficiency and greenhouse gas reductions. This is complemented by strong policy and widespread public support for community ownership of RE generation. Even though there is no explicit policy support for community energy, apart from regional political support in finding and providing spaces for RES installations (e.g., roofs for solar power installations), as of 2012 approximately half of the RE capacity is installed under some form of community ownership.

This surge in energy communities can be explained by several factors. Firstly, a combination of legal provisions and other developments have resulted in the remunicipalisation of the energy sector in some Laender. A large number of the concession contracts for managing electricity and gas distribution networks (the number of contracts is estimated at over 20,000) have been renewed in recent years, creating an opportunity for the remunicipalisation of these services and resulting in the

establishment of over 70 new municipal power utilities. This has helped the network remain highly fragmented throughout the country, preventing a monopolization of the energy network which has been seen in other countries, such as the 'Big Six' power companies in the UK.

Furthermore, local authorities in Germany benefit from a certain degree of autonomy and responsibility for local actions. Municipal autonomy and the '*right to regulate all local affairs on their own responsibility*' is enshrined in German law. As a result, municipalities have considerable executive powers (for example, they are responsible for implementing a large part of national and EU legislation). These powers are restricted by both the localization principle and subsidiarity clause, which limits any activity of the local authority to the geographical area under its administration, and only allows local authorities to run a public service if they can do so as efficiently as a third party. However, the creation of new municipal companies in Germany has been cited as being crucial to the success of its community energy projects.

Energy communities partnering with local authorities can also benefit from available financing at preferential rates; for example, local authorities have access to long-term, inexpensive financing from the German public bank KfW or low-cost capital from institutional investors that search for low-risk investments. Finally, the Fukushima accident in 2011 generated the political momentum necessary to push for the implementation of the Energiewende legislative package as a means of shifting away from nuclear power. The Energiewende package promoted decentralized renewable energy by confirming that public support will back decentralized renewable energy, combined heat and power (CHP) and energy efficiency projects.

The definition of 'energy community' in Germany is broad. In some Laender this includes energy efficiency improvements for households. The most common form of community energy in Germany is that of a limited partnership between electricity utilities/wind developers and communities, with a limited liability company as a general partner. Generally, the limited liability company is the wind developer or utility, whilst the limited partnership is made up of the local people wanting to invest in wind power. The profit from the project is distributed according to the number of shares a stakeholder has purchased.

Germany is also embracing new and innovative approaches to support its Energiewende package. To address challenges in balancing the power supply of an evolving energy system, Germany is exploring the concept of virtual power plants. In its 2015 White Paper, the Federal Ministry for Economic Affairs and Energy considers virtual power plants and virtual storage units as innovative concepts that may play a crucial role in the so-called 'electricity market 2.0'. Virtual power plants interconnect small, decentralized and usually privately-run RES power producers and storage facilities with utility companies, network operators and consumers. This allows small decentralized power producers to connect and sell their energy as one virtual power plant on the market. Operated by a central control unit, the virtual power plants coordinate power generation, storage and consumption in a certain place ensuring that a certain amount of electricity is fed into the grid at a certain time. For instance, the transmission network operators TenneT and sonnen use domestic storage systems and blockchain technology to stabilize the power grid in Germany. The cooperation of these companies in a virtual power plant allows RE to be stored in batteries in one place while the virtual power plant delivers energy from its available resources in other locations.

The success of community energy in Germany can be attributed to a number of factors including: a well-established environmental and alternative energy movement and a general tradition of forming cooperatives and other associations to achieve change at a local level; a high level of leadership and support from municipalities; and macro-level institutional factors such as the feed-in tariff system and the state-owned development bank, KfW. In addition, Germany is exploring innovative concepts such

as virtual power plants that can facilitate the access of decentralized community-based RES generators.

3.4.2.3. Ireland experience

Ireland is one of the most energy-intensive countries per capita in Europe creating economic and geopolitical risks for the country. To address these risks, the country has developed a series of policies and measures to promote renewable energy and energy efficiency with a focus, albeit small, on energy communities.

Currently, community-owned renewable energy in Ireland is a small, but rapidly growing industry. Compared to the likes of Germany and Denmark, there is currently a limited number of community energy projects in operation. This has been attributed to significant barriers which hinder the success of these groups and projects, and as a result community energy in Ireland represents a very small amount of overall energy generation and potential. For instance, the country currently lacks a national strategy for community energy. National energy policy does not adequately consider the potential of community energy, and provides no clear steer to support community energy projects, groups, partnerships. Additionally, no rules facilitate the creation of energy cooperatives to provide a legal entity to energy communities.

However, a change in momentum has been seen in recent years, with Ireland's National Energy White Paper (December 2015) and National Mitigation Plan (June 2017) emphasizing the role of citizens and communities in meeting energy targets for a low carbon future. Additionally, the Sustainable Energy Authority of Ireland (SEAI) advocates the Sustainable Energy Communities (SEC) Programme as one of the main pillars of for the climate action objectives.

Moreover, Energy Co-Operatives Ireland is working on the EU cooperative movement and supports RE cooperatives at every stage of their development by guiding them through the legal processes, advising them on their interaction with state agencies, introducing them to other cooperatives and helping them communicate their message locally and nationally.

As of 2018, 24 communities across Ireland are now part of the SEAI's Sustainable Energy Communities network, a rapidly expanding national movement towards a cleaner energy future. The communities have committed to developing long-term energy plans with the assistance of SEAI. The network has doubled in size in 2017, as momentum gathers in the move to more sustainable energy systems.

Therefore, although there has been a recent surge in community energy in Ireland compared to previous years, the general lack of uptake in comparison to other EU countries is apparent. There are several barriers which prevent communities from developing their own projects, including access to funding and advice at initial project development stages and access to the power grid. Currently connecting to the National Electricity Grid for a local energy community is considerably long and costly.

3.4.2.4. Greece experience

The structure of the support regime for renewable electricity in Greece is changing. In January 2018, a new law on energy communities was voted in the Greek Parliament, which defines the role of citizens in the energy sector, and gives wide scope for energy communities. The law encourages citizens, local authorities and private and public agencies to participate in the production, distribution and supply of energy; essentially, it gives electricity consumers a possibility to become electricity producers. The

main driver for reform is to bring Greece into compliance with the European Commission’s Guidelines on State aid for environmental protection and energy for the period 2014– 2020 (Guidelines).

According to press coverage, the changes enable energy communities to produce, sell or self-consume electricity and thermal energy produced by RES or CHP. The law enables local energy communities to set-up ownership structures and prohibits the charging of fees to renewable energy communities that do not align with real costs.

Overall, the objective of the law is to enable citizens, municipalities and regions to directly participate in energy projects, particularly renewable energy projects. It also aims to ensure community energy projects do happen in the community by laying down requirements for the member of the community to be linked to the place of its headquarters.

There are reports that suggest some municipalities are already taking steps towards establishing local energy communities. It has been reported that Larissa, Thessaloniki and some municipalities in Athens are already preparing to use virtual net-metering and to develop plans that would provide free solar energy to households suffering energy poverty. The new provisions for virtual power sharing investments may be particularly important, as they can enable consumption to occur in a different location to where the energy is produced.

This is critical in parts of Greece where residents live in multi-apartment buildings and lack the space for micro-generation installations.

Therefore, although still in its early stages, with the broad definition of energy community and the possibility of virtual metering, the new law has the possibility of completely revolutionizing the ability of energy communities to form and operate in Greece. However, as the law has only recently been adopted, it is not yet possible to evaluate its impact.

3.4.3. Lessons for energy cooperatives

Energy cooperatives are focused on providing local community benefits rather than generating profits for their members, which is almost impossible when competing with larger incumbent companies on the energy market. Like other local energy ownership models, the success of energy cooperatives is greatly dependent on political commitment to RES development, a clear legal framework at national level and access to financing.

Table 8: Strengths and weaknesses of the energy cooperative models

Local energy ownership model	Strengths	Weaknesses
Cooperative (community-owned social enterprise)	<ul style="list-style-type: none"> • Voluntary and democratic structure (typically one member = one vote) • Common economic, social and cultural goals can be met 	<ul style="list-style-type: none"> • Raising sufficient capital for investment can be a challenge • Lack of familiarity with RE and technical skills/ knowledge can be an issue

Source: Hanna, R. 2017, *Community Renewables Innovation Lab, Energy Transition Platform Policy Briefing*.

The illustrative examples of energy cooperatives presented above show a number of additional lessons that can be useful for cooperative initiatives in Albania:

- *Cooperation with local and regional authorities (LRAs)* – collaborating with public authorities can facilitate the access to finance needed for cooperative investments and secure wider acceptance and support for the cooperative projects.
- *Involvement of the local community* – when local citizens are involved and/or participate in the cooperative, they are not only more likely to support the activities of the cooperative, but they can also provide expertise and knowledge.
- *Starting small and keeping costs low* – before energy cooperatives invest in bigger projects, it might be a good idea to start with a smaller project or service that will keep the costs low and allow the cooperative to gain knowledge and expertise.
- *Exploring different funding options* – energy cooperatives should explore all available incentives for RES development together with options for public or private bank loans.
- *Exploring new opportunities* – energy cooperatives should not be afraid to explore new opportunities provided by technology development and emergence of new services.

3.4.4. Summary experience as lesson learned

Considering the obstacles local energy communities/cooperatives might face and the necessary conditions for their success, policy-makers at different governance levels need to ensure there is a stable legal and regulatory framework for in this regard and undertake more concrete actions to promote the development of local energy communities. The specific actions for different policy-makers are outlined below.

EU policy-makers have an important role in setting a level-playing field and minimum requirements for the promotion of local energy communities in the EU. Hence, they should:

- **Maintain a stable policy environment for promotion of renewable energy:** Maintaining a stable policy framework for the promotion of RE, especially concerning financial support independent of energy market prices, is crucial for ensuring non-traditional market actors such as local energy communities can participate in the energy system. While the design of the specific support mechanisms remains a national competency, the EU legislation should not limit the possibilities for Member States to continue supporting RE with both market-based and market-independent financial support measures.
- **Establish energy market rules that can support an energy transition in all aspects of the system:** The proposals for a new IEM Directive for electricity and a new RED are significant improvements to the current EU legislative framework. However, their provisions should be clarified further to ensure they cover the variety of services local energy communities provide, such as energy efficiency and energy savings, storage, management of local distribution networks, aggregation and flexibility services. Furthermore, the rules should allow simplified administrative procedures for small RE producers and local energy communities and possibilities for such actors to aggregate their production and supply energy as a larger unit, including through the use of novel approaches such as virtual power plants.
- **Ensure consistency and coherence between different policies:** It is paramount that the provisions in different EU legislative documents are coherent in their treatment and promotion of local energy communities and do not provide contradictory rules. Moreover, the relevant EU energy legislation should acknowledge the specific features and needs of local energy communities and allow for special treatment and support where relevant. This should be adequately reflected by the EU state aid guidelines.

National policy-makers are responsible not only for transposing and implementing EU legislation but also for defining specific national objectives and incentives for local energy communities. Hence, they should:

- **Acknowledge the role and specific needs of local energy communities in relevant national policies and legislation:** The countries should follow the steps taken at EU level for defining the roles of local energy communities and adopt similar definitions and provisions about their activities. National policy-makers might also define concrete objectives for community energy and its contribution to national energy goals. Nevertheless, national policy-makers should be careful not to propose definitions or objectives that are too restrictive and may exclude some types of individual producers and consumers and local energy communities.
- **Establish policies and rules that promote local energy communities and local collaboration:** To complement potential objectives for community energy, national policy-makers can also establish specific policies/rules for promotion of local energy communities. These rules can take different forms and target various aspects of the local energy ownership models such as their focus on local benefits, sustainability or environmental benefits.
- **Adopt simplified and proportionate regulatory and administrative procedures for local energy communities:** National policy-makers should offer simplified and proportionate administrative procedures for small RE projects (e.g., led by individual citizens) and local energy communities to ensure cumbersome procedures do not deter their activities. The provisions encouraging Member States to establish 'one-stop-shops' and time limits for the permitting procedures for RES projects proposed in the new RED are an important basis upon which Member State can build solutions tailored to their national context.
- **Ensure local energy communities have access to technical information, guidance and finance:** National policy-makers can set up dedicated finance support schemes for local energy communities, to especially help them during the planning and project set-up phases. Such mechanisms can be, for example, grant-to-loans, guarantees or cheap credit opportunities. Additionally, national policy-makers should facilitate the access of local energy communities to technical information and guidance about setting up, financing and operating community projects.

Local and regional authorities can complement the EU and national policies for promoting local energy communities and be important partners to local energy communities. Therefore, LRAs should:

- **Adopt local policies for the development of local energy communities:** LRAs can complement EU and national policies by adopting further local objectives for the contribution of local energy communities to local energy targets. Hence, LRAs should identify how local energy communities can best contribute to meeting local energy goals (and other objectives, such as social policy goals) and establish mechanisms that support their development, including advisory services or provision of financial support.
- **Explore the opportunities to partner with or establish local energy communities:** To strengthen the contribution of local energy communities to local policy goals LRAs can also partner with existing communities or establish new ones in cooperation with local citizens. LRAs and local energy communities are suitable partners, as LRAs can provide space for RE projects, administrative support and access to capital at preferential rates, while local energy communities can provide technical expertise and oversee the operation of the projects.

3.4.5. Summary Steps for Albanian CEC

At the end of this document, a timeline is being presented, which could serve to draft action plans in cooperation with all stakeholders identified in relation to the development of CEC in Albania.

1. First it would be good that from a practical point of view this document, presented in the combined form of baseline and approximation of experiences from EU countries, be **translated into Albanian**.
2. In the framework of the process initiated by Milieukontakt, to promote CEC through the meetings foreseen and those following this project, to work to create **the CEC NGO Forum in Albania**, which will be the basis of the working group to design the platform of alternative civil society policies.
3. The NGO_CEC Forum will first have to draft a **Policy Paper** as the official document for the positioning of the CEC establishment platform, which will make it possible to submit to decision makers requests for legal changes and action plans and CEC model business plans. In order to have the widest possible coverage of the actors operating in Albania, the Forum should create a **List of Contacts** of key persons, groups and institutions as well as of all NGOs and Businesses related to the alternative energy sector.
4. Part of the Policy Paper should be presented, among others, these directions of work for the future, taking into account the experience of a few years ago with the "Green Agenda":
 - a. **Inclusion of CEC as a practice term in the legal and regulatory spaces of the energy sector;**
 - b. **Creating business plans and funds for CEC start-ups;**
 - c. **drafting an Awareness and Media Interaction Platform**
 - d. **Establishment of the CEC Academy**
5. In parallel with the above steps, economic and financial support mechanisms related to technology dissemination and technical and financial support of CEC initiatives will have to be established. For this, the first step by the current project is the realization of **Summer Schools**, which are realized within the **CEC Academy**. The transfer of knowledge on CEC should be included in the **Curricula of the Technical Schools of the Albanian Education System**. Through this process, the necessary market of professionals and promoters will be created to make the CEC stabilized as independent social, technical and economic structures.
6. Of course the development time of the above steps and the complexity of the CEC sustainability is not something that can be achieved in a short time and therefore **the models set up** so far in different EU countries are the best example to speed up the time. , but without forgetting that the Albanian context has many **uncertainties and obstacles** from the past and especially regarding the institutional consolidation of the CEC (issues raised throughout this document and which will need to be further elaborated in practice).
7. In the action plan to be drafted and in the various business plan models, the **CEC context in urban and rural areas** should introduce such options as to enable the application of CEC principles and such practices which are not complexed by barriers (small core models) such as those of mansion management models in urban areas and those included in agri-food schemes in rural areas and generally community-funded social schemes that meet the needs of the community itself and the spaces public.
8. The necessary **outsourced expertise** will have to be found as close as possible to the community and as mentioned above for this training modules and special publications will have to be created in addition to the work that will be done by the CEC Academy.

In conclusion it should be said that the CEC consolidation process is long, but a good start would be the right basis to achieve this goal.

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