



ECRB Customers and Retail Markets Working Group

Regulatory framework on Prosumers in Contracting Parties

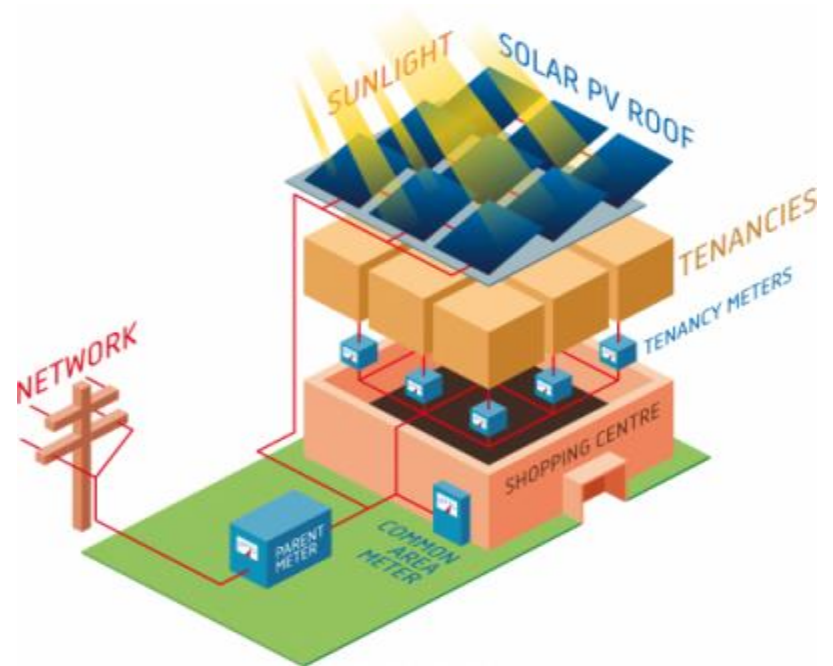
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The main purpose of the study was to assess legislative and regulatory framework related to small scale solar PV systems installed for generation of electricity (self consumption) also known as prosumers, mainly for households and small commercial customers

Residential customer



Small commercial customer



- Legal framework - definitions on:
- **Self consumption Generators**
- **Prosumers**
- Procedures that deals with prosumers
- Support schemes in Contracting Parties
- Capacity limitation of generators
- Voltage Level of connection
- Application procedure for prosumer status
- Information's on the benefit of changing status from regular consumer to producer

Legal definition

- Most of the CP have the definition established in primary and secondary legislation for **Self Consumption Generator** and for **prosumer**.
- **Self Consumption Generator**- Final customer that generates electricity from renewable energy sources and shall have a right to exchange electricity that it delivers to the system and takes from the distribution system.
- **Prosumer**-Is an electricity customer who is at same time and at the same site the owner of a Micro RES generating facility, connected to the grid and having right to self-consume the generated electricity as well as to deliver the excess of generated electricity to the supplier.
- In some of the CP introduces the definition of Autonomous Generators instead of prosumers or self- consumption generators.
- None of the CP has separate procedure that deals exclusively with prosumers- incorporated in other procedures.

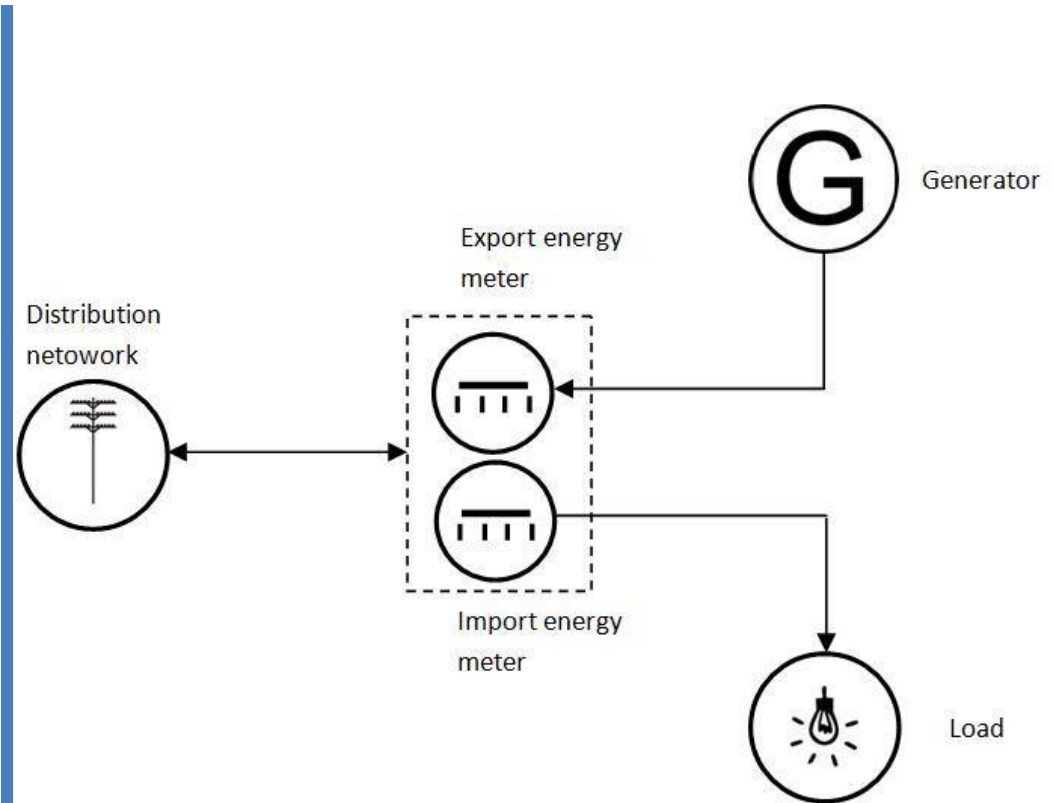
Self consumption - Support schemes

Net metering

Net billing

Net-metering is a simple arrangement that ensures consumers that who install a generator (usually photovoltaic (PV) systems) receive a one-for-one credit for any electricity their systems generate and export to the grid within a billing period. In this case, production and consumption are compensated over a longer period (up to one year). Under Net-metering, all kWh of the generator are equally valorized

Net-billing is an arrangement by which the consumer receives one-for-one monetary credits for every kWh of exported to the grid. Every kWh is valorized either at a single price or at a price which corresponds to the time of production. Credits are awarded over a determined time-frame, typically one year. It is equivalent to a net-metering scheme, but with monetary compensation instead of energy compensation



Prosumers - RES generating facilities

- Lower and Upper limit of capacity for RES generating facility allowed for household and small commercial consumer-Prosumers

| STATES | ALB | ARM | BIH | GEO | KOS | MNE | MKD | UKR |
|------------------|------------------|------------------|------------------|--------------------|-----|------------------|-----|-------------|
| Upper limit | 500 | 150 | 50 | 100 | 100 | 50 | 20 | 30 |
| House holds | DSO/ Capacity | DSO/C apacity | DSO/C apacity | DSO/Ca capacity | NA | DSO/C apacity | 4 | 30 |
| Small commercial | DSO/ Capacity | DSO/C apacity | DSO/C apacity | DSO/Ca capacity | NA | DSO/C apacity | 20 | Not defined |

Voltage Level of connection

| STATES | ALB | ARM | BIH | GEO | KOS | MD | MNE | MKD | SRB | UKR |
|----------------|-----|------------------|-----|-----|-----|----|-----|-----|-----|-----|
| Low voltage | x | x | x | x | x | x | x | x | x | x |
| Medium voltage | | X + High voltage | | x | | | | | | x |

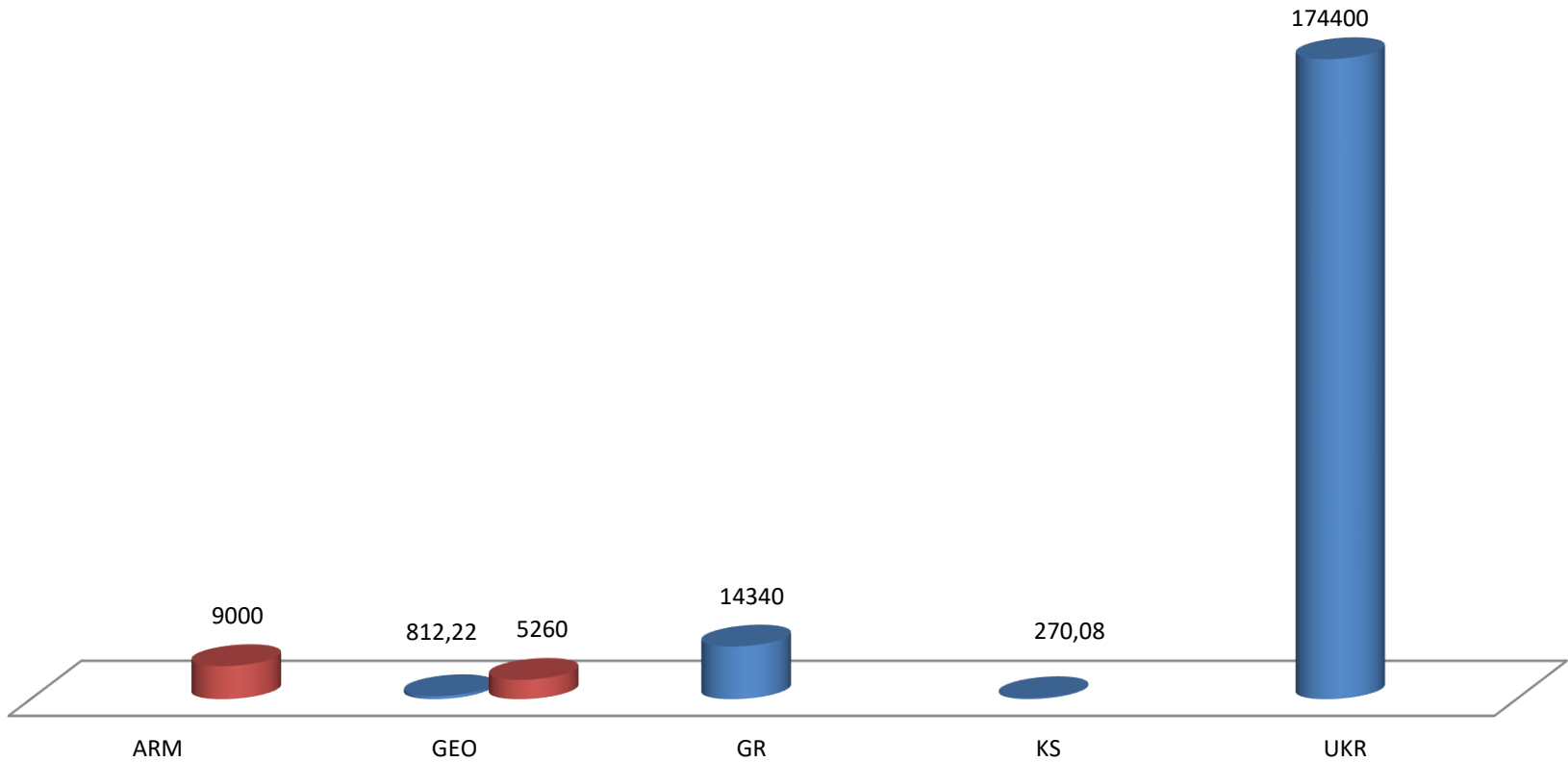
Number of PV systems for self-consumption in operation in CP

| Year | ARM | BIH | GEO | GR | KS | MON | UKR |
|---------------------|-----|-----|-----|------|----|-----|-------|
| 2017 | | 4 | 28 | 746 | | 1 | 3010 |
| 2018 | 779 | 5 | 67 | 1007 | 3 | 2 | 7479 |
| 2019 | | 5 | | 1104 | 3 | 2 | |
| Total number | 779 | 14 | 95 | 2857 | 6 | 5 | 10489 |

Total installed capacity in kW

Installed capacity at Medium and Low Voltage

■ Installed capacity at low V ■ Installed capacity at medium voltage



Application for Prosumer status

- In all CP and observer countries except Kosovo and BIH customers have to apply in DSO;
- No licensing requirements;
- Connection agreement - DSO and customer;
- Supply agreement - Supplier and customer;

Information's on the benefit of changing status from regular consumer to producer

- Most NRA have all information's available on their web site and are **publicly accessible**
- There was no campaign on informing customers for the possibility of switching from regular consumers to producer consumers

Legal framework in Kosovo

- Rule on support scheme for renewable energy sources generators
- Rule on authorization of building new capacities

Rule on support scheme for renewable energy sources generators

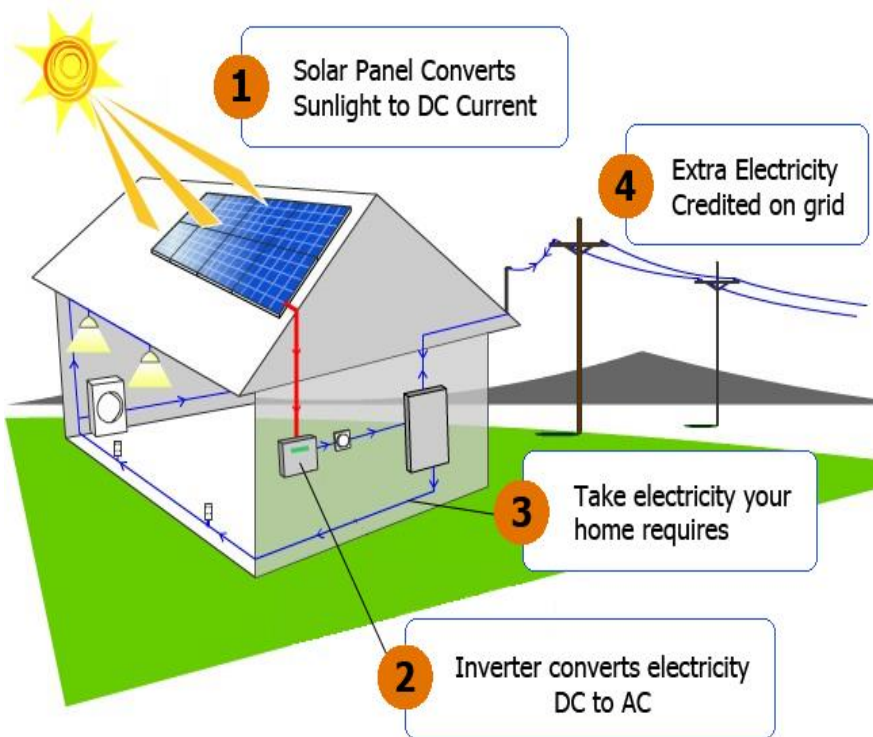
- **Prosumer** - is an electricity customer who is at same time and at the same site the owner of a Micro RES generating facility, connected to the grid and having right to self-consume the generated electricity as well as to deliver the excess of generated electricity to the supplier;
- **Self-consumption Generators** – are the Prosumers who are able to feed excess electricity generation to the grid for future consumption or pay to the supplier the electricity consumed in case of a negative Balance;
- **Micro RES Generating Facility** – means a Generating Facility connected to the network with a capacity up to 100 kW (≤ 100 kW);

Rule on support scheme for renewable energy sources generators

MICRO-GENERATOR

SELF-CONSUMPTION

Max allowed capacity for prosumers in support scheme is **100 kW**



Net metering



Net-metering is a simple arrangement that ensures consumers that who install a generator (usually photovoltaic (PV) systems) receive a one-for-one credit for any electricity their systems generate and export to the grid within a billing period.

REGULATED FRAMEWORK

RES generators not submitted to the Support Scheme, can chose to sell their energy according to the Regulated Framework, with the following conditions:

- With a Price approved by Regulator,
- They will have the dispatching priority, and
- Priority in the connections' assessment.

The Self-consumption Support Scheme

- **Net-Metering scheme**
- Suppliers off-take all electricity produced and deliver all electricity consumed by Prosumers within a Billing Period;
- Suppliers account for the Prosumer Balance of the Billing Period, based on which the monthly invoice is prepared;
- If the Prosumer Balance is positive then the Prosumer is credited in energy (kWh) in the next Billing Period;
- Any outstanding positive Balance on the last Billing Period of a Calendar Year is reset to zero (0 kWh) without compensation from the Supplier;
- If the Prosumer Balance is negative, then the Supplier invoices the Prosumer for the value of the Prosumer Balance

Rule on authorization of building new capacities

Application Procedure

The legal or physical body which plans to construction new generation capacities for self-consumptio is obliged to submit a written request to the Regulator, fulfilling the following evidence.

- The evidence that shall be submitted are:
 - Evidence from DSO on annual energy consumption;
 - Evaluation on annual kWh production of installed equipment;
 - Consent for connection to the grid, issued by DSO; and
 - Consent from the relevant municipality.
- Following the receipt of relevant evidence, and if the Regulator evaluates that they are completed, it shall issue a decision related to construction of new generation capacities for self-consumption

SMALL-SCALE GENERATORS

| Applicant's details | | | |
|--------------------------------------------------------------------------------------------------------------------------------------------|--------------------|----------------------------------|------------------|
| Name | | | |
| Address | | | |
| Contact person | | Meter reference number | |
| Tel. no. | Fax no. | E-mail address | |
| Generating Facility details | | | |
| Name | | Location | |
| Installed Capacity (kW) <small>In case of combined generation with conventional fuels, only the capacity RES shall be presented</small> | | Expected Annual Production (kWh) | |
| Primary Renewable Energy Source | | | |
| Source | Technology | Tick | Additional Notes |
| Solar | Photovoltaic | <input type="checkbox"/> | |
| Other | Specify technology | <input type="checkbox"/> | |
| Place and date | | Signature | |


FORMA E APLIKIMIT PER LIDHJE TE RE/PELQIM PARIMOR/PELQIM ELEKTROENERGJETIK (PEE)

Forma e plotësuar mepostë së bashku me të gjitha dokumentet e nevojshme duhet dorëzuar tek zyrat e shërbimit të Konsumatorëve

A. Lidhje e Re B. Pëlqim Parimor C. Pëlqim Elektroenergjetik
**INFORMATAT PËR KONTAKTIM
APLIKUESI**

 Emri (emri i prindit) mbiemri personit fizik/juridik: _____
 Numri personal i ID: _____
 Numri biznesit (nëse person juridik): _____
 Shifra Konsumatorit (nëse ekziston): _____
 Adresa: _____
 Nr. telefonit : _____
 E-mail adresa: _____

PËRFAQESUESI I AUTORIZUAR (Nëse ka)

 Emri dhe mbiemri _____
 Numri Personal i ID: _____
 Emri kompanisë (nëse ka): _____
 Marrëdhënia me ju (p.sh. Kontraktues): _____
 Adresa: _____
 Nr. telefonit: _____
 E-mail adresa: _____

TE SHJËNOHET: ADRESA E LOKACIONIT TË OBJEKTIT I PARAPARË PËR KY/E (NDËRTIM) SI DHE DISTANCA NGA PIKA KYÇËSE NE RRJETIN ELEKTRIK

**A. Informatat shtesë për Lidhje të re
(plotëso më poshtë)**

Itur dëshironi të kryhen purist

Muall _____ Viti _____

Parashtruesi kekesës është:

M Pronari Q Qiraxhiu

**Dokumentet e nevojshme me rastin e aplikimit për pëlqim parimor apo PEE
(sheno X për secilin dokument që sjell konsumatori dhe bashkangjite në këtë aplikacion)**
B. Dokumentet për Pëlqim Parimor
 Kushtet e Ndërtimit nga Kuvendi Komunal
 Kopja e Planit
 Flea Poseduese
 Orto Foto (jo obligative/preferohet)

C. Dokumentet për Pëlqim Elektroenergjetik
 Informatë mbi destinimin e objektit (veprimtarja)
 Certifikata e biznesit (vetëm për aplikues juridik)
 Projekti elektrik i objektit ndërtimor
 Përmbledhje e projektit elektrik (1 faqe, A4)

**Aplikacioni nuk duhet të merret parasysh nëse nuk plotësohen të gjitha të dhënat dhe nuk bashkangjiten dokumentet e lartpërmendura*

Aplikuesi: _____ Nënshkrimi: _____ Data: _____

Punonjësi i perkujdesit: _____ Nënshkrimi: _____ Data: _____

**Thank you for your
attention**