_	State Repub	olic of Kosovo
General Information	Status EU membership	Potential candidate country; Stabilization and Association Agreement between EU and Kosovo since 2016 <sup>1</sup> ; Member of the European Energy Community (EnC) since 2006 <sup>2</sup> ;
jen	Population	1,786,038 (2021) <sup>3</sup>
J	Land area (km²)	10,887.0 km² (2017) <sup>4</sup>
	Urban population (%)	38% (2011) <sup>5</sup>
Socio-economic situation	GDP (current US\$ billion)	9,412,034 (millions) (2021) <sup>6</sup>
	GDP per capita (EURO)	
	Annual net earnings (Sing without children earning average earning (EURO)	100% of
	Median hourly earnings (EUI	•
conc	World Bank economic cla (2021)	assification Upper-middle-income economy <sup>8</sup>
Socio-e	Unemployment (% of total labor force, persyears)	29.4% (2018); highest rate in EU candidate sons <b>15-74</b> and potential candidate countries <sup>9</sup>
Energy situation in general	Current energy sources    Sources	
	obli <sub>{</sub>	n and mid-term renewable energy plans, in accordance with gations from the Energy Community Treaty. 16 D target of 25% of renewable energy was met
	energy targets	tal Bet 3. 25/8 of renewable energy was met
	ciicibi taibeta	

#### Renewable energy potential

- Solar resource quality (insolation): 1,400 1,500 kWh/m2/year; higher than most EU countries<sup>17</sup>
- Cost-competitive solar potential could reach close to 600 MW in 2030 in Kosovo, as estimated by IRENA (2017)<sup>18</sup>
- "distributed PV could play a significant role in decreasing the electricity demand" 19
- Plans for a new coal power plant were cancelled in March 2020; a large hydropower plant Zhur will not be realized, so other sources gain relevance. Continuous political will is needed to break dependency on coal.<sup>20</sup>

#### Renewable energy support regime

- The Kosovo government is re-designing a *feed-in tariff* regime for renewables.<sup>21</sup>
- Since December 2020 the allocation of feed-in tariffs has been suspended.<sup>22</sup>
- Kosovo has introduced **Net Metering**, any positive imbalance is credited with electricity via per-kWh bill credits; Customers need to be connected to the grid at 0.4kV voltage levels, in order to be eligible. This restricts this opportunity to households and very small companies.<sup>23</sup>

#### Relevant laws, policies, and plans

- Kosovo has adopted the '20-20-200 EU directive (Ibrahimi et al. 2019)<sup>24</sup>
- Draft National Energy and Climate Plan (NECP) 2021-2030
- 2018 Law on Energy Efficiency
- National Energy Efficiency Action Plan (NEEAP) 2019 2021 was submitted to the Secretariat in December 2020<sup>25</sup>
- 2019 2028 National Strategy and Action Plan on Climate Change
- A law on climate change is envisaged to be adopted during 2023<sup>26</sup>
- Kosovo has not signed the Aarhus Convention and access to environmental information (incl. EIAs) is not necessarily given, transparency is a big issue<sup>27</sup>

# Legal and political framework for citizen energy

#### Regulatory framework for citizen energy

- Electricity customers connected to the low voltage distribution network with installed capacity not higher than 100 kW can apply to suppliers to obtain the status of a self-consumer using a net billing scheme. This seems to function well - 56 selfconsumers are connected, and many new applications are in the pipeline.<sup>28</sup>
- Application process for becoming prosumer involves: 1) application to Energy Regulatory Office (ERO) and 2) apply to KEDS, details to be found in a guideline<sup>29</sup>
- From 2017 until the beginning of 2020, an estimated 20 permits to construct solar PV projects configured for self-consumption were issued.<sup>30</sup>

Legal and political framework for

#### **Evaluation of the legal framework**

- While the primary legal framework aligns with the EU package, the absence of secondary legislation and regulations is hindering its full implementation in Kosovo.
- \*An updated evaluation is available in the Energy Community Kosovo Page<sup>31</sup>

### **Existing citizen** projects energy

citizen energy

Citizen energy projects Research and

Green Rural Deal Project<sup>32</sup>

"A bottom-up co-creational process to develop capacities for a transition to a zero-carbon economy in Greece, Kosovo, and Serbia"

# capacity building activities

- "supporting local processes with co-creational workshops for regional stakeholders as a catalyst for transformative projects and policies"
- **EUKI** funding
- five project partners: Wuppertal Institute, Germanwatch, Balkan Green Foundation, RES Foundation as well as a Local Government Association of Western Macedonia
- Municipality of Kamenica involved as case study; wind energy farms with a capacity of 34.8 MW in place in the municipality; but the municipality lacks green energy prioritization policies as well as a specific department dealing with energy.

#### Kosovo Energy Project<sup>33</sup>

- GIZ, 2021-2023
- Improving Energy Efficiency and integration of renewable energy in buildings
- supports the Ministry of Economy/the Kosovo Energy Efficiency Agency and the Ministry of Environment, Spatial Planning, and Infrastructure
- A special focus is on improving energy efficiency and increasing the use of renewable energy sources for self-consumption
- Contribution to get Municipal Energy and Climate Plans (MECPs) in line with the National Energy and Climate Plan (NECP)

NGOs/Civil Society Kosovo Civil Society's Consortium for Sustainable Development (KOSID)<sup>34</sup>

Green Energy Kosova (GEK)<sup>35</sup>

Kosovo Renewable Energy Association<sup>36</sup>

Association of Kosovo Municipalities<sup>37</sup>

**Institute for Policy Development (INDEP)**<sup>38</sup> - a think tank and an advocacy centre that provides independent research-based policy solutions. INDEP has a special focus on strengthening democratic governance and plays the role of public policy watchdog<sup>39</sup>

#### EcoZ 40

#### Balkan Green Foundation<sup>41</sup>

#### Governmental **bodies**

Kosovo Energy Regulatory Office (ERO)<sup>42</sup>

- duty to regulate activities in the energy sector in Kosovo, including electricity, district heating and gas, in accordance with the obligations arising from the Energy Community Treaty
- Providing regulations for self-generation of electricity

#### Ministry of Economic Development (MED)

- Drafts long-term and mid-term renewable energy plans
- responsible for setting up renewable energy
- targets, for monitoring of implementation and annual reporting on achievement of targets

#### Kosovo Energy Efficiency Fund 43

Ministry of Environment, Spatial Planning and Infrastructure (MESPI)

Kosovo Investment and Enterprise Support Agency (KIESA)44

Kosovo Agency for Energy Efficiency (KAEE)<sup>45</sup>

Kosovo Chamber of Commerce (KCC)<sup>46</sup>

Country Profile KOSOVO State: 01.2023

## Local governments

Two municipalities are signatories to the Covenant of Mayors (Gjilan & Podujevo)

#### Kamenica municipality

- Located in the Gjilan District in the east of Kosovo, bordering Serbia in the north and east, in the west border with Pristina, town of Kamenica has 7,331 inhabitants, municipality 36,085 inhabitants (2011), 56 villages in the municipality<sup>47</sup>
- Wind energy farm (KITKA wind farm) with a capacity of 34.8 MW in the municipality<sup>48</sup>; first wind farm in Kosovo in operation since 2019, supported by EBRD<sup>49</sup>
- In December 2020 agreement signed by grid operator Kostt with developer Air Energy 2 for two wind farms and a solar plant in the Kamenica municipality with a combined capacity of 99.6MW, which are expected to come online in 2024<sup>50</sup>
- "Opportunities mainly lie in its geographical position (capacity for wind and solar exploitations), the EU and other international support, i.e. donor programs for cross-border cooperation."
- The municipality is in the focus of the "The Green Rural Deal project" (EUKI funded) by Wuppertal Institute, Germanwatch, Balkan Green Foundation, RES Foundation as well as a Local Government Association of Western Macedonia<sup>52</sup>
- Workshop held 31 March 2021 with local stakeholders as part of Green Rural Deal project<sup>53</sup>

#### **Private actors**

GET (Green Energy Technologies)54

- providing solutions and consultancy in the usage of renewable energy devices, also increasing the energy efficiency
- more than 160 solar projects all around Kosovo; residential, governmental, framing & industry sector
- founded in 2010, located in Pristina

#### JAHA Solar

- Established in 2016
- PV panel producer situated in Prishtina (Kosovo)
- providing knowledge and technology for solar energy development in the country; have already implemented several projects in Kosovo, both roof-top and ground-mounted PV systems; provides on and off-grid systems<sup>55</sup>
- member of the JAHA Group with contact to Germany<sup>56</sup>

Electricity Distribution Services in Kosovo J.s.c (KEDS)<sup>57</sup>

- owned by Turkish companies Çalik Holding and Limak
- operational since 2013
- KEDS distributes, maintains and repairs a stable electrical network for approximately 600,000 thousand customers spread throughout Kosovo
- has exclusivity of electricity distribution throughout the territory of Kosovo
- KEDS includes all medium voltage, low voltage power lines and relevant substations with accompanying facilities

Country Profile KOSOVO State: 01.2023

 Provides information on prosumers and self-consumption generators, including a video and guide of how to apply for becoming prosumer<sup>58</sup>

Kosovo Sustainable Energy Projects (KoSEP)<sup>59</sup>

- Implemented by Stantec global firm, office in Brussles
- developed by the European Bank for Reconstruction and Development
- support energy efficiency investments and renewable energy development in the residential, commercial, industrial, and agricultural sectors by providing tailor-made loan products, free of charge technical assistance, and investment grants.

#### International/ supra-national actors

#### Germanwatch

USAID - Supported development of video on Becoming a  $\mathsf{Prosumer}^{60}$ 

#### GIZ

#### Academia

#### Others

Kosovo Credit Guarantee Fund<sup>61</sup>

 created to help meet the need for increased access to finance for micro, small and medium enterprises in Kosovo; enhance financing opportunities for small and medium enterprises

TEB Bank in cooperation with EBRD offers "Green Loans" for investments including investments for distributed PV. 62 ProCredit Bank offers "Loans for Eco Investments" including investments for distributed PV. 63

#### Summarizing evaluation

#### **Fields of Action**

- Public dialogue on energy transition, public awareness raising, also on options of public participation in transition
- Energy savings measures are much needed and should be a focus; energy efficiency is key, including incentives for energy efficiency in residential and private sectors;
- Advocating for implementing the Third Energy Package, development of additional regulations for effective implementation of the national legislation and empowering energy consumers;
- Strengthen and enforce legislation on building energy certification
- Enhancing financing of measures, outlining option for support and funding
  - Development of grant schemes to encourage women's entrepreneurship in RES;
  - Enhance capacities for project development and donor coordination to securing external funding
- Providing financial support through public-private partnerships, external partners, donors, and co-financing for RES-based citizen energy projects;
- Local authorities need to be encouraged to take a lead on energy efficiency and renewable energy installations
- Further research is needed to fully assess the potential of RES.
   Kosovo has implemented legislation for the energy sector, including RES, aligned with EU standards;

#### \_

Country Profile KOSOVO State: 01.2023

- Building capacity of public institutions, citizens, businesses, energy auditors and energy sector professionals;
- Development of dedicated formal and informal educational programs in RES;
- Implement pilot projects to raise awareness and demonstrate the success of citizen energy;
- Expanding networks of actors involved in and interested in citizen energy;
  - Encouraging youth, women, and minorities to participate and get involved in the energy sector.

Authors of the country profile: Egzona Shala, Tamara Mitrofanenko, Gesa Geißler.

<sup>&</sup>lt;sup>1</sup> https://ec.europa.eu/environment/enlarg/candidates.htm

<sup>&</sup>lt;sup>2</sup> https://www.energy-community.org/implementation/Kosovo.html

<sup>&</sup>lt;sup>3</sup> https://data.worldbank.org/indicator/SP.POP.TOTL?locations=XK

<sup>&</sup>lt;sup>4</sup> https://data.worldbank.org/indicator/AG.LND.TOTL.K2?view=chart

<sup>&</sup>lt;sup>5</sup> https://ask.rks-gov.net/media/2075/final-results\_eng.pdf

<sup>&</sup>lt;sup>6</sup> https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?locations=XK

<sup>&</sup>lt;sup>7</sup> https://rm.coe.int/kosovo-20210630-deliverable-2/1680a5fdf0

<sup>8</sup> https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups

<sup>9</sup> https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Enlargement\_countries\_labour market statistics#Employment rates

<sup>10</sup> http://library.fes.de/pdf-files/bueros/sarajevo/18313.pdf

<sup>&</sup>lt;sup>11</sup> https://www.energy-community.org/dam/jcr:dbe6d342-ea7d-4677-9a9b-e18f22a1cfad/IR2021\_Kosovo.pdf

<sup>12</sup> https://www.iea.org/countries/kosovo

<sup>&</sup>lt;sup>13</sup> Ibid.

 $<sup>^{14}</sup> https://www.rcc.int/download/docs/Leaders\%20Declaration\%20on\%20 the\%20Green\%20Agenda\%20 for\%20 the\%20 WB.p. df/196c92cf0534f629d43c460079809b20.pdf$ 

<sup>&</sup>lt;sup>15</sup> https://www.energy-community.org/dam/jcr:dbe6d342-ea7d-4677-9a9b-e18f22a1cfad/IR2021 Kosovo.pdf

<sup>16</sup> https://www.e3analytics.eu/wp-content/uploads/2020/11/E3A Country-Report Kosovo.pdf

<sup>&</sup>lt;sup>17</sup> Ibid.

<sup>&</sup>lt;sup>18</sup> Ibid.

<sup>19</sup> Ibid.

<sup>&</sup>lt;sup>20</sup> http://library.fes.de/pdf-files/bueros/sarajevo/18313.pdf

<sup>&</sup>lt;sup>21</sup> "In 2016, Kosovo described the feed-in tariffs as 12-year contracts for wind power (85 €/MWh) and solar PV (136 €/MWh). Individual projects were capped at 3 MW for solar PV and 35 MW for wind power. However, no projects have been completed under the regime, even though preliminary authorisation of the wind feed-in tariffs took place in 2013, and of the solar tariffs in 2015." https://germanwatch.org/sites/default/files/2018-09/Study%20Phasing%20in%20Renewables.pdf

 $<sup>{\</sup>color{red}^{22}} \ \underline{\text{https://www.energy-community.org/dam/jcr:dbe6d342-ea7d-4677-9a9b-e18f22a1cfad/IR2021\_Kosovo.pdf}$ 

https://www.e3analytics.eu/wp-content/uploads/2020/11/E3A\_Country-Report\_Kosovo.pdf

<sup>&</sup>lt;sup>24</sup> doi:10.3390/en12244753

<sup>&</sup>lt;sup>25</sup> https://www.energy-community.org/dam/jcr:dbe6d342-ea7d-4677-9a9b-e18f22a1cfad/IR2021\_Kosovo.pdf

<sup>&</sup>lt;sup>26</sup> Ihid

<sup>&</sup>lt;sup>27</sup> http://library.fes.de/pdf-files/bueros/sarajevo/18313.pdf

<sup>&</sup>lt;sup>28</sup> https://www.energy-community.org/dam/jcr:dbe6d342-ea7d-4677-9a9b-e18f22a1cfad/IR2021 Kosovo.pdf

<sup>&</sup>lt;sup>29</sup> https://www.keds-energy.com/Uploads/Data/Docs/Guidelineforbecomingaprosumer\_VXwMvXJzbY.pdf

<sup>30</sup> https://www.e3analytics.eu/wp-content/uploads/2020/11/E3A Country-Report Kosovo.pdf

<sup>&</sup>lt;sup>31</sup> https://www.energy-community.org/implementation/report/Kosovo.html

<sup>32</sup> https://germanwatch.org/fr/node/20187

<sup>33</sup> https://www.giz.de/en/worldwide/98668.html

<sup>34</sup> https://www.facebook.com/KOSID.Kosovo/

<sup>35</sup> https://www.facebook.com/gek.kosova/

<sup>&</sup>lt;sup>36</sup> https://www.facebook.com/people/Shoqata-për-Energji-të-Ripërtëritshme-e-Kosovës/100064729716943/

<sup>37</sup> https://komunat-ks.net/?lang=sq

<sup>38</sup> https://indep.info/en/

<sup>&</sup>lt;sup>39</sup> https://www.devex.com/organizations/institute-for-development-policy-indep-100816

<sup>40</sup> https://www.facebook.com/Yecozone/

- <sup>41</sup> https://www.balkangreenfoundation.org/
- <sup>42</sup> https://www.ero-ks.org/zrre/en/konsumatoret-shtepiak/energjia-elektrike/vet-gjenerimi-i-energjise-elektrike
- 43 https://fkee-rks.net/en/news/
- 44 https://kiesa.rks-gov.net/page.aspx?id=2,2
- $^{45}\,https://me.rks-gov.net/en/promotion-and-project-management-sector\#.ZC6fPhVBxol$
- 46 https://www.oek-kcc.org/En/rreth-nesh/
- <sup>47</sup> https://www.osce.org/files/f/documents/e/6/13119\_1.pdf
- 48 https://germanwatch.org/fr/node/20187
- <sup>49</sup> https://www.ebrd.com/work-with-us/projects/psd/kitka-wind.html
- $^{50}\ https://www.argusmedia.com/en/news/2171377-kosovo-signs-agreements-for-100mw-of-wind-solar$
- 51 https://germanwatch.org/fr/node/20187
- 52 Ibid.
- <sup>53</sup> https://www.balkangreenfoundation.org/en-us/press/320/bgf-gathers-local-stakeholders-of-the-municipality-of-kamenica-for-advancement-towards-a-zero-carbon-economy/?beta=1
- 54 http://get-ks.com/
- 55 https://www.jahasolar.com/projects.html
- 56 http://www.jahagroup.eu/who-we-are/
- <sup>57</sup> https://www.keds-energy.com/eng/about-us/keds-profile/
- 58 https://www.keds-energy.com/eng/services/prosumer/
- <sup>59</sup> https://www.stantec.com/en/projects/belgium-projects/kosovo-sustainable-energy-projects
- 60 https://youtu.be/2M\_SuUZxsA8
- <sup>61</sup> https://www.e3analytics.eu/wp-content/uploads/2020/11/E3A\_Country-Report\_Kosovo.pdf
- 62 Ibid.
- 63 Ibid.