Transition of Ukraine towards sustainable energy

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Seminar Proceedings: https://www.inforse.org/europe/seminar_2021_INFORSE-Europe_DK.htm
Profile: REA and its activity

- **Who we are:** Renewable Energy Agency
- **Founded:** January 2003
- **Members:** 12 persons (including 7 PhD)
- **Legal status of organization:** non-profit, non-governmental and non-party.
- **Web site:** [www.rea.org.ua](http://www.rea.org.ua)
- **REA’s Main Goal:** contribution to the sustainable development and improvement of environment by means of introduction of renewable energy and energy saving technologies.
- **Member of the International Network for Sustainable Energy “INFORSE-Europe” and of the Bioenergy Association of Ukraine**
### Ukraine: steps towards climate neutrality

- Party to Annex I to UNFCCC since 1997;
- Party to Annex B to Kyoto Protocol since 2004;
- First country in the world in joint projects implementation (250 projects), 47 million assigned amount units were issued under the green investment scheme over 2008-2012 in the framework of Kyoto Protocol;
- Active participant to negotiation process taking place in the framework of UNFCCC;
- Climate related obligations were determined in accordance to EU-Ukraine Association Agreement (2014);
- Party to Paris Agreement (2016).

### City Targets

<table>
<thead>
<tr>
<th>City</th>
<th>RES</th>
<th>Energy Efficiency</th>
<th>CO₂ Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bakhmut</td>
<td>20% until 2020*</td>
<td>-21% in 2020 compared to 2012</td>
<td>-21% in 2020 compared to 2012</td>
</tr>
<tr>
<td>Kyiv</td>
<td>27% until 2020*</td>
<td>-21% in 2020 compared to 2013</td>
<td>-34% in 2020 compared to 2013</td>
</tr>
<tr>
<td>Zhytomyr</td>
<td>n/a</td>
<td>n/a</td>
<td>-21.4% in 2020 compared to 2010</td>
</tr>
<tr>
<td>Kamianets-Podilskyi (100 RES)</td>
<td>20% in 2020 (GFEC)</td>
<td>-20% in 2020 compared to 2012</td>
<td>-20% in 2020 compared to 2012</td>
</tr>
<tr>
<td>Lviv (100 RES)</td>
<td>11% in 2020 (GFEC)</td>
<td>-20% in 2020 compared to 2007-2009</td>
<td>-21% in 2020 до 2009</td>
</tr>
<tr>
<td>Poltava (100 RES)</td>
<td>n/a</td>
<td>n/a</td>
<td>-22.4% in 2020 compared to 2010</td>
</tr>
<tr>
<td>Chortkiv (100 RES)</td>
<td>3% in 2030 (GFEC)</td>
<td>-28% in 2030 compared to 2013</td>
<td>-32% in 2030 compared to 2013</td>
</tr>
<tr>
<td>Trostianets (100 RES)</td>
<td>28% in 2030 (GFEC)</td>
<td>-42% in 2030 compared to 2013</td>
<td>-58% in 2030 compared to 2013</td>
</tr>
<tr>
<td>Korosten</td>
<td>12.6% in 2020 (GFEC)</td>
<td>-22% in 2020 compared to 2012</td>
<td>-21% in 2020 compared to 2012</td>
</tr>
</tbody>
</table>

* For the heating and cooling sector (DH and individual) and transport
<table>
<thead>
<tr>
<th>No</th>
<th>Title</th>
<th>Developer</th>
<th>Year of publication, status</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>The concept of implementation of state policy in the field of heat supply</td>
<td>Ministry of Regional Development</td>
<td>2017, approved by the Cabinet of Ministers</td>
</tr>
<tr>
<td>3</td>
<td>The concept of &quot;green&quot; energy transition of Ukraine until 2050</td>
<td>Ministry of Energy</td>
<td>2020, draft</td>
</tr>
<tr>
<td>4</td>
<td>Vectors of Ukraine's economic development until 2030</td>
<td>Cabinet of Ministers of Ukraine</td>
<td>2020 (November)</td>
</tr>
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<td>5</td>
<td>Roadmap of Ukraine's climate goals until 2030</td>
<td>NGO Ecoact</td>
<td>2020, report of consultants</td>
</tr>
<tr>
<td>6</td>
<td>Transition of Ukraine to renewable energy by 2050</td>
<td>Heinrich Böll Stiftung Ukraine, IEF NASU</td>
<td>2017, report of consultants</td>
</tr>
<tr>
<td>7</td>
<td>Transition of Ukrainian energy sector towards 100% RES in 2050</td>
<td>ASET project, NGO REA, INFORSE-Europe</td>
<td>2017, report of consultants</td>
</tr>
<tr>
<td>8</td>
<td>The concept of transition to 100% RES by 2070</td>
<td>CU Global 100 RE Ukraine</td>
<td>2019, vision concept</td>
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<tr>
<td>9</td>
<td>Forecast of energy development until 2050 for 2nd NDC of Ukraine within the framework of the Paris Climate Agreement</td>
<td>EBRD project, IEF NASU</td>
<td>2020, report of consultants</td>
</tr>
<tr>
<td>10</td>
<td>Roadmap for the development of bioenergy until 2050</td>
<td>NGO REA, CU UABIO</td>
<td>2020 (October), report of consultants</td>
</tr>
</tbody>
</table>
NGOs supporting the "green" energy transition in Ukraine

**Global 100RE Ukraine:**

**Energy Transition Coalition:**
350.org, NGO Ecoclub, NGO Ecoaction, Khmelnytskyi Energy Cluster, Ecoltava, Ukrainian Climate Network, All-Ukrainian Sustainable Development & Investments Agency
100% RES scenario (ASET project, NGO REA, INFORSE-Europe)

100% RE Scenario for Ukraine presented on September 20, 2017
Final energy consumption according to the REvolutionary Scenario
(“Transition of Ukraine to the Renewable Energy by 2050” (State Organization “Institute for Economics and Forecasting” of the National Academy of Sciences of Ukraine supported by Heinrich Boell Foundation Regional Office in Ukraine)
Concept of Ukraine’s transition to 100% RES (vision of Global 100 RE UA)

TPES – total primary energy supply

100% renewable heat and electricity

Switching from coal and nuclear energy

Energy efficiency

Renewable sources

Energy strategy 2035

Paris Agreement

National action plan on RES

90
82
96
100%

Concept of Ukraine’s transition to 100% RES presented on September 24, 2019
Main barriers to the transition to 100% RES in Ukraine

- No political will
- Instability of state policy on RES development
- Barriers at the Electricity market
- Barriers at the Heat market
- Unreadiness of the energy system to the closure of coal Power plants
- Weak mechanisms for RES and energy efficiency stimulation
- Energy poverty
On November 18th, 2020 the Joint Statement of more than 20 civil society organizations, associations, experts of the RES sector was signed and sent to Ukrainian Government on the need to immediately start developing the National Green Deal and the new Green Energy Strategy of Ukraine until 2050-2070 to synchronize Ukraine with the EU Green Energy Transition.
Development of NDC-2 of Ukraine

- Meeting of the Working Group for the Development of the NDC-2 of Ukraine (under the Ministry of Environment / Ministry of Energy)
  - First meeting: February 4, 2019
  - Second meeting: August 17, 2019
  - Third meeting: 14 February 2020
  - Fourth meeting: presentation and discussion of policies and measures for the implementation of NDC2, adaptation goals, scenarios in the context of sustainable development goals, assessment of climate finance
  => Time frame: June 2020 (online)

- Consultation with stakeholders on the NDC-2 project
  - Ministries, central authorities, Parliament of Ukraine, Office of the President, Cabinet of Ministers of Ukraine, National Security and Defence Council
  - Local governments
  - Civil society and non-governmental organizations
  - Professional and industry associations, public and private business
  - International organizations, donors and international financial institutions
  => Time frame: June-July 2020 (online)
THANK YOU

More information:


https://www.inforse.org/europe/SELNEE.htm
https://www.inforse.org/europe/Vision2050.htm