



European Sustainable Energy Seminar - August 17-20/21, 2021
Venue: Nordic Folkecenter for Renewable Energy, Denmark



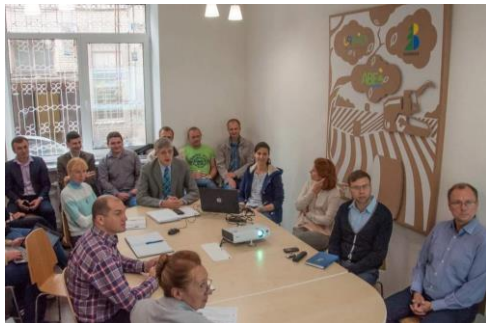
Transition of Ukraine towards sustainable energy

Oleksandra Tryboi
Renewable Energy Agency, NGO (Ukraine)
www.rea.org.ua

Seminar Proceedings: https://www.inforse.org/europe/seminar_2021_INFORSE-Europe_DK.htm

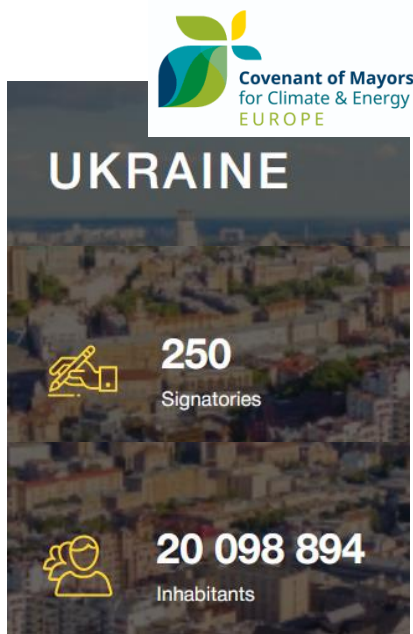
Profile: REA and its activity

- ▶ **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
- ▶ **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		
	RES	Energy Efficiency	CO ₂ Reduction
Bakhmut	20% until 2020*	-21% in 2020 compared to 2012	-21% in 2020 compared to 2012
Kyiv	27% until 2020*	-21% in 2020 compared to 2013	-34% in 2020 compared to 2013
Zhytomyr (100 RES)	n/a	n/a	-21.4% in 2020 compared to 2010
Kamianets-Podilskyi (100 RES)	20% in 2020 (GFEC)	-20% in 2020 compared to 2012	-20% in 2020 compared to 2012
Lviv (100 RES)	11% in 2020 (GFEC)	-20% in 2020 compared to 2007-2009	-21% in 2020 до 2009
Poltava (100 RES)	n/a	n/a	-22.4% in 2020 compared to 2010
Chortkiv (100 RES)	3% in 2030 (GFEC)	-28% in 2030 compared to 2013	-32% in 2030 compared to 2013
Trostianets (100 RES)	28% in 2030 (GFEC)	-42% in 2030 compared to 2013	-58% in 2030 compared to 2013
Korosten	12.6% in 2020 (GFEC)	-22% in 2020 compared to 2012	-21% in 2020 compared to 2012

* For the heating and cooling sector (DH and individual) and transport

Documents with the objectives of the transition to RES

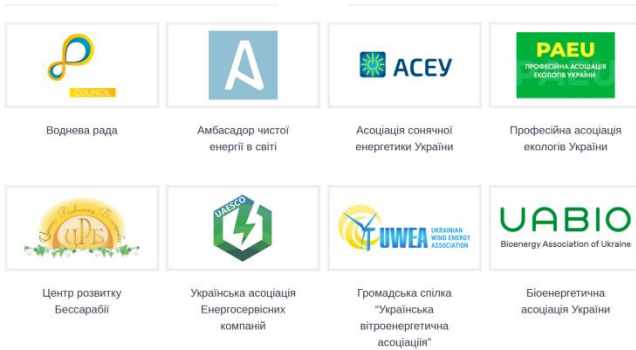
No	Title	Developer	Year of publication, status
1	Energy Strategy of Ukraine until 2035 "Security, Energy Efficiency, Competitiveness	Ministry of Energy	2017, approved by the Cabinet of Ministers
2	The concept of implementation of state policy in the field of heat supply	Ministry of Regional Development	2017, approved by the Cabinet of Ministers
3	The concept of "green" energy transition of Ukraine until 2050	Ministry of Energy	2020, draft
4	Vectors of Ukraine's economic development until 2030	Cabinet of Ministers of Ukraine	2020 (November)
5	Roadmap of Ukraine's climate goals until 2030	NGO Ecoact	2020, report of consultants
6	Transition of Ukraine to renewable energy by 2050	Heinrich Böll Stiftung Ukraine, IEF NASU	2017, report of consultants
7	Transition of Ukrainian energy sector towards 100% RES in 2050	ASET project, NGO REA, INFORSE-Europe	2017, report of consultants
8	The concept of transition to 100% RES by 2070	CU Global 100 RE Ukraine	2019, vision concept
9	Forecast of energy development until 2050 for 2 nd NDC of Ukraine within the framework of the Paris Climate Agreement	EBRD project, IEF NASU	2020, report of consultants
10	Roadmap for the development of bioenergy until 2050	NGO REA, CU UABIO	2020 (October), report of consultants

NGOs supporting the "green" energy transition in Ukraine



Global 100RE Ukraine:

Office of the Ambassador of Renewable Energy in Ukraine, Public Union “Ukrainian Wind Energy Association” , Public Union “Bioenergy Association of Ukraine”, Solar Energy Association of Ukraine, Professional Association of Ecologists of Ukraine, NGO "Ukrainian Association of Energy Service Contracts", NGO "Bessarabia Development Center", NGO "Institute of Global Transformations"

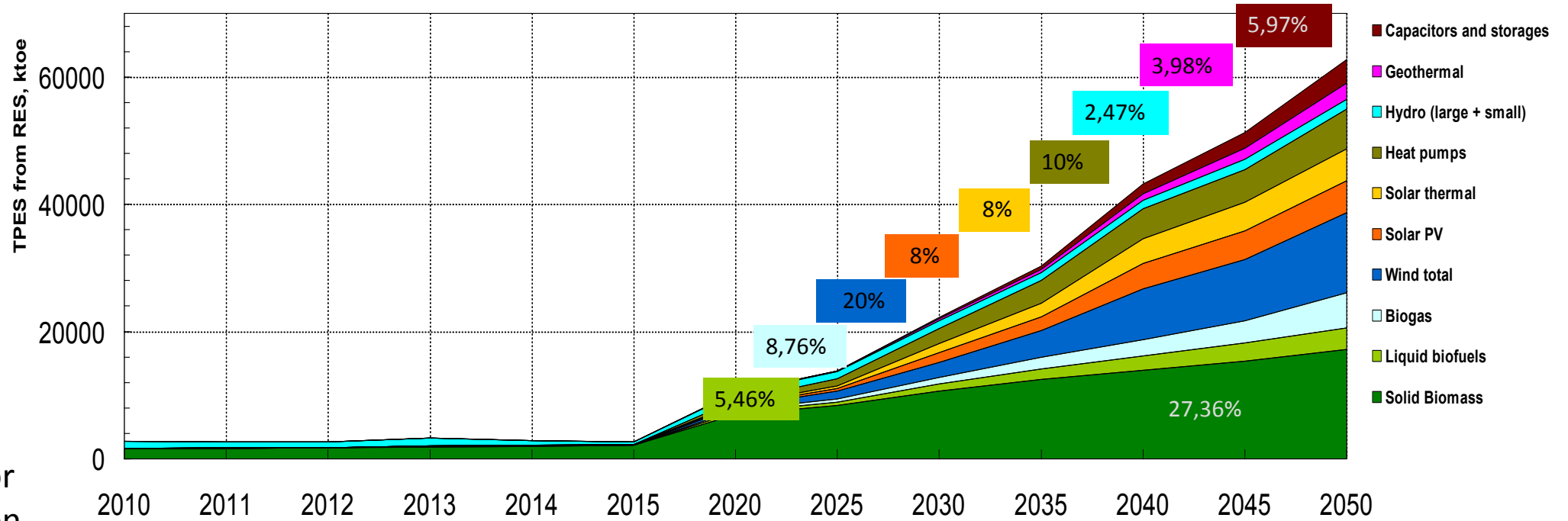


Energy Transition Coalition:

350.org, NGO Ecoclub, NGO Ecoaction, Khmelnytskyi Energy Cluster, Ecoltava, Ukrainian Climate Network, All-Ukrainian Sustainable Development & Investments Agency



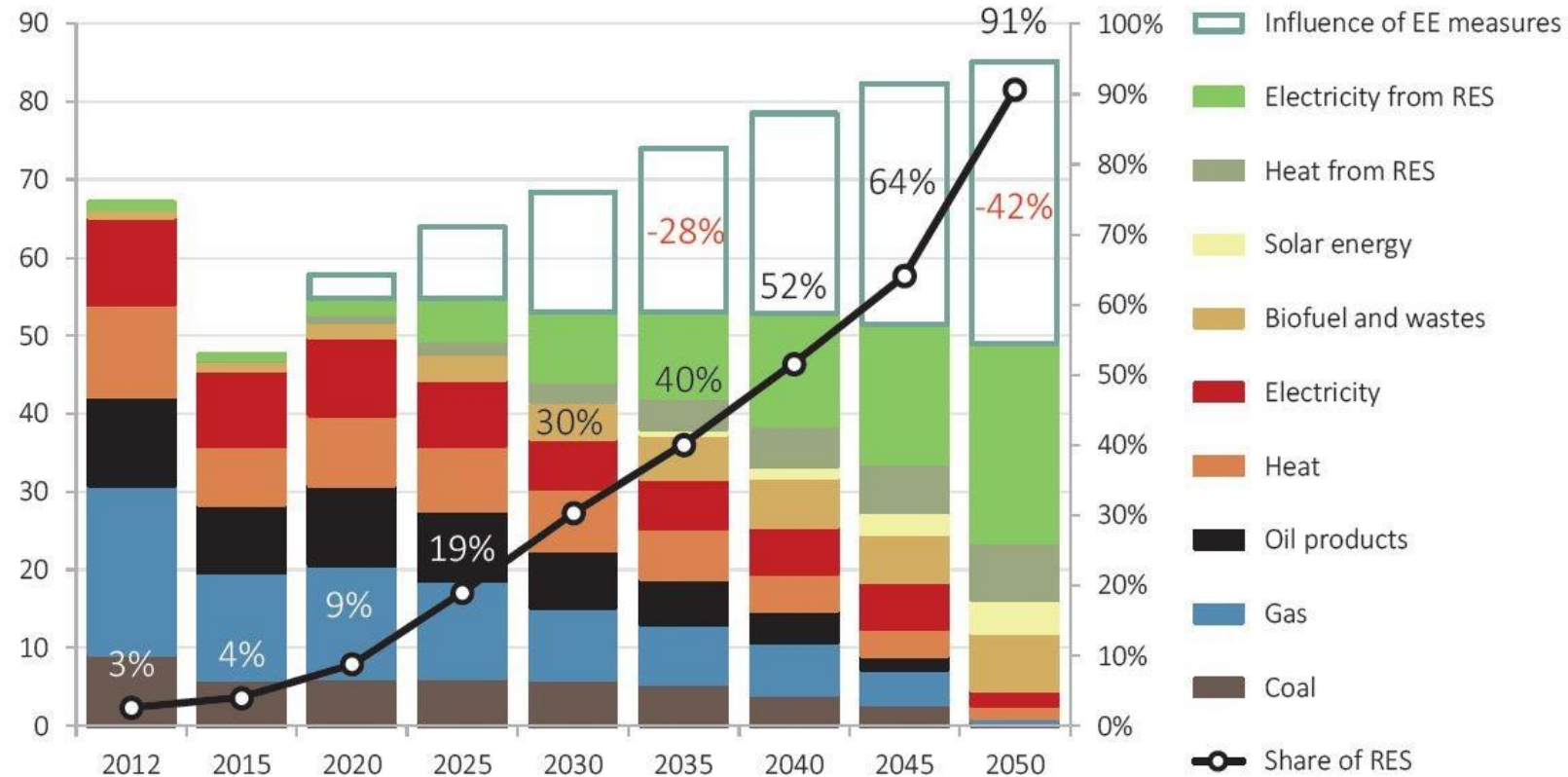
100% RES scenario (ASET project, NGO REA, INFORSE-Europe)



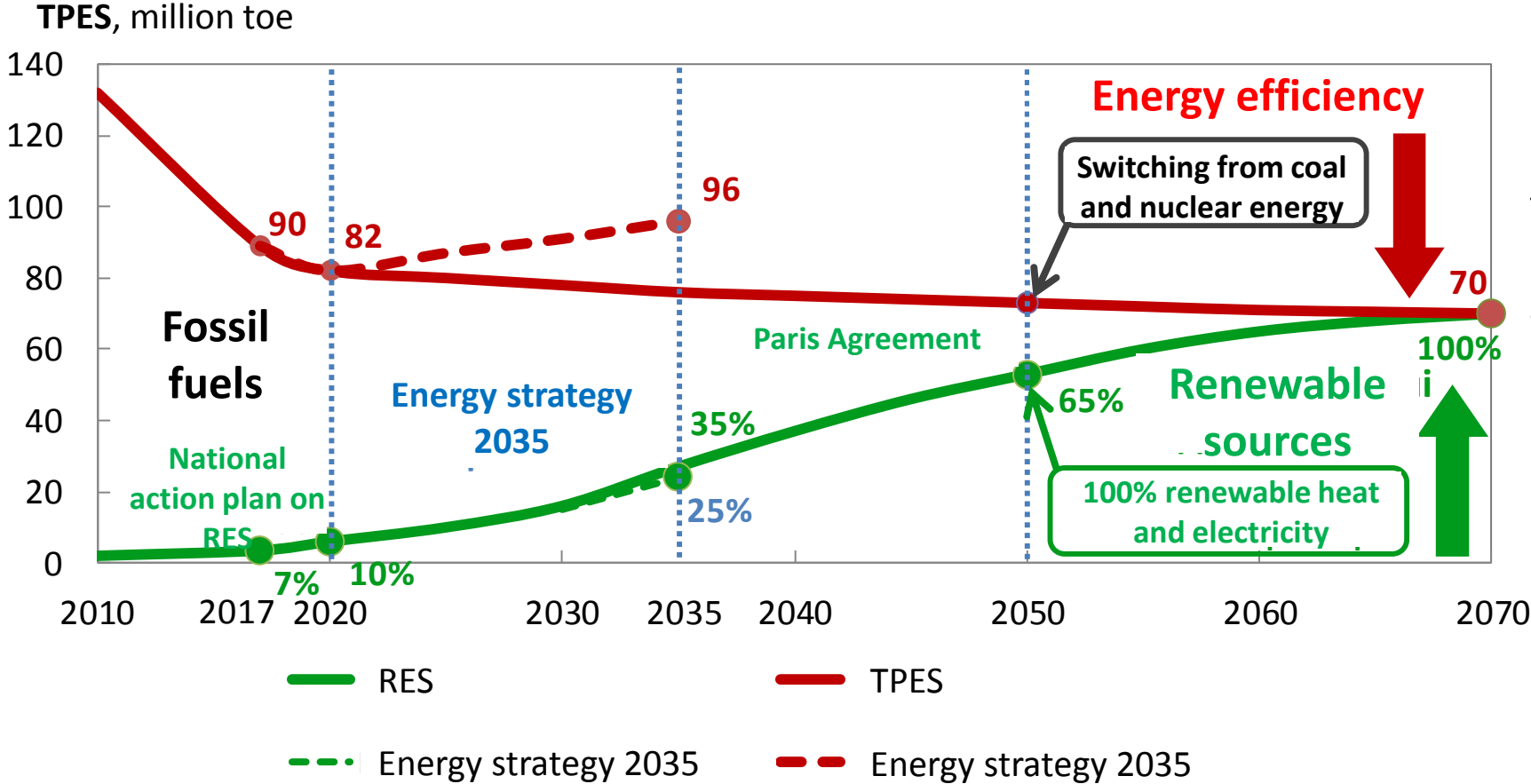
100% RE Scenario for Ukraine presented on September 20, 2017

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)



Concept of Ukraine's transition to 100% RES presented on September 24, 2019

TPES – total primary energy supply

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
- Unrediness 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://rea.org.ua/en/news/504/>

<https://www.inforse.org/europe/SELNEE.htm>

<https://www.inforse.org/europe/Vision2050.htm>

