

## **IRENA's South East Europe Regional Initiative**

Renewable energy policies in a time of transition



# IRENA's South East Europe Regional Initiative

Progress from March 2018

## Capacity building workshops



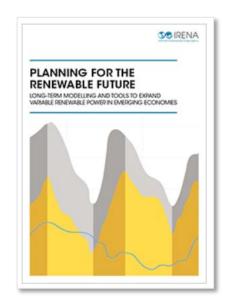
## South East Europe regional workshop - RE project development and financing (12-13 June 2018)

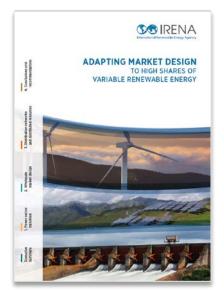
- ✓ For representatives of: i) governments; ii) financial institutions; iii) project developers; and iv) academia
- ✓ To build capacities in developing RE projects with particular focus on solar PV, including with regards to improving conditions for financing such projects.

## South East Europe workshop - Grid Integration of Variable Renewable Energy Sources (Tomorrow)

- ✓ For representatives of: ministries, TSOs, DSOs, and regulatory offices
- ✓ To discuss the technical, regulatory and operational aspects of the integration of VREs to the power systems
- ✓ To identify areas and ways of supporting CPs in developing the necessary skills and mechanisms relevant for systems with higher shares of VREs







# Renewable Readiness Assessment for the Republic of Moldova



- ✓ Support the achievement of 2020 RE targets
- ✓ Initiate a dialogue on post-2020 RE agenda
- ✓ Analyze the RE auction design



## REmap CESEC



- To assess the expected renewable energy deployment with policies in place until 2030
- To identify cost-effective technical options to accelerate renewables deployment by 2030.
- Assess the role that renewables can play in the long-term decarbonization of the region.
- To identify opportunities for further regional integration of energy systems.

#### Sectors

- Power and heat supply
- End-use sectors: buildings, industry, transport.

#### Time horizon

- Detailed analysis to 2030
- Aggregated assessment of RE potential to 2050

#### **Engagement process**

- 3 CESEC Workshops
  - Kick-off workshop (October 2018)
  - Preliminary findings (April 2019)
  - Final workshop (October 2019)
- 3 Sectoral webinars
  - Power, heat, transport (Q1 2019)
- Ongoing data gathering and exchange with countries

## South East Europe RE Market Analysis

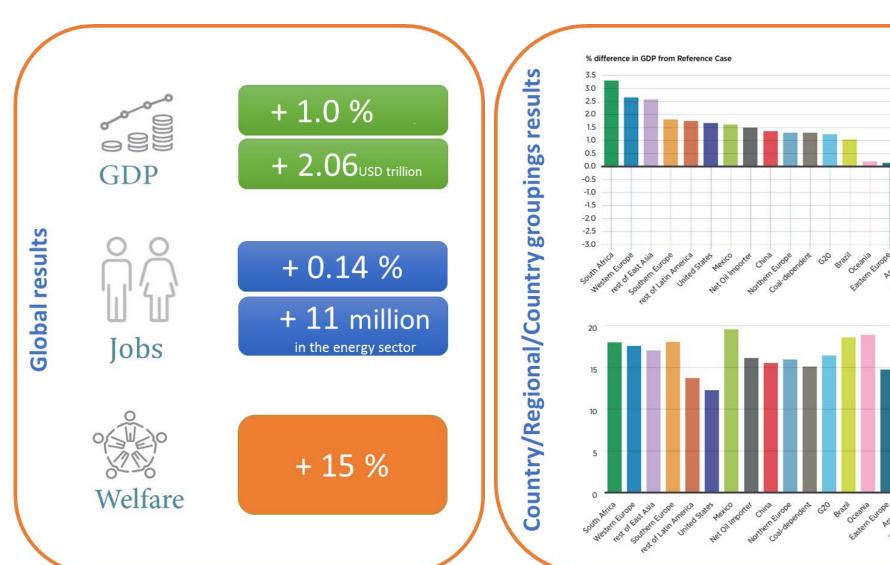


- Next addition of the Market Analysis series
- Present the renewable energy landscape in the region (potential, costs, consumption).
- Focus on the **biomass** sector, potential, production and end-use.
- Assessment of the RES finance: investment trends, evolution of the capital mix, key financing barriers.
- Present the **socio-economic benefits** of renewable energy in the region.
- ➤ Involvement of Governments reviews, suggestions, policy updates Early 2019



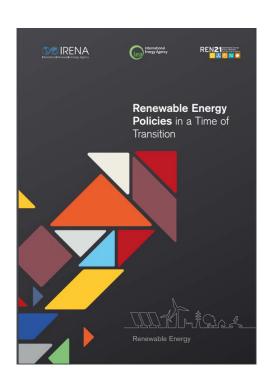
## IRENA's work on Socio-Economic Benefits of RE







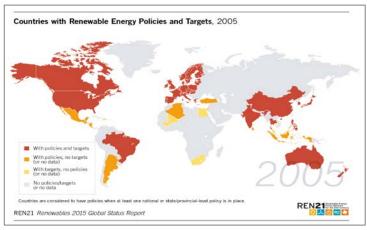


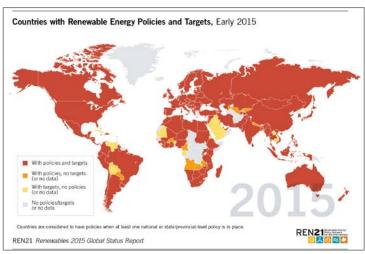


# Renewable energy policies in a time of transition

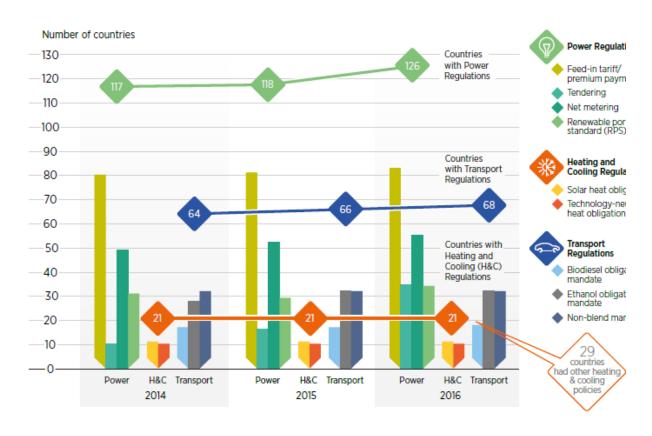
## Renewable energy policies







## Number of countries with renewable energy regulatory incentives and mandates, by type, 2014-16

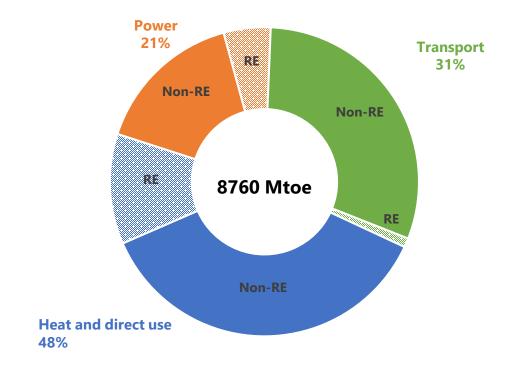


Renewable energy policies have become increasingly widespread. Policy support focuses on power sector. Heating, cooling and transport lag behind

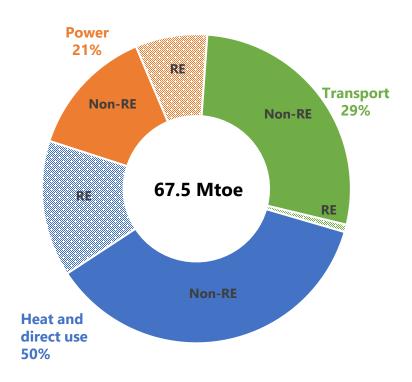
## Uneven progresses across the sectors



### **Energy consumption, Global, 2016**



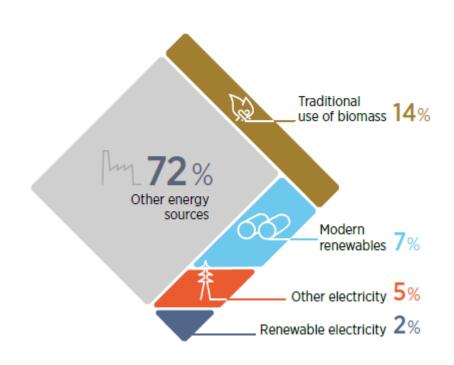
## **Energy consumption, SEE countries, 2016**



## Heat sector: the Cinderella of renewables policy



#### **Total global energy consumption for heat, 2015**



#### **Tailored policy approaches**

Policy Cluster 1: District heating

Policy Cluster 2: Competing with natural gas heating

Policy Cluster 3: Industrial heat and hot water

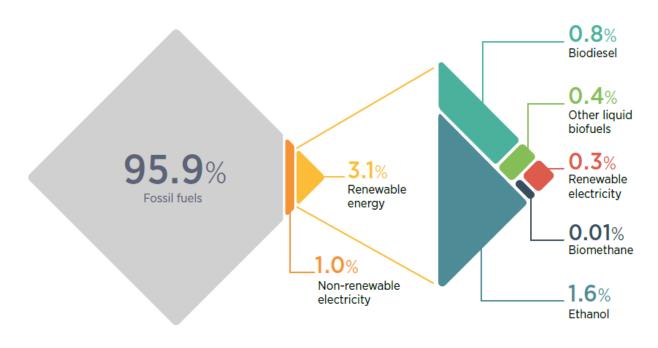
Policy Cluster 4: Clean cooking

Heat end-uses account for more than 50% of global energy consumption yet receive little attention. Policy interventions should be designed to reflect national circumstances.

## Transport sector: a long way to go



#### **Transport energy use by transport fuel, 2015**





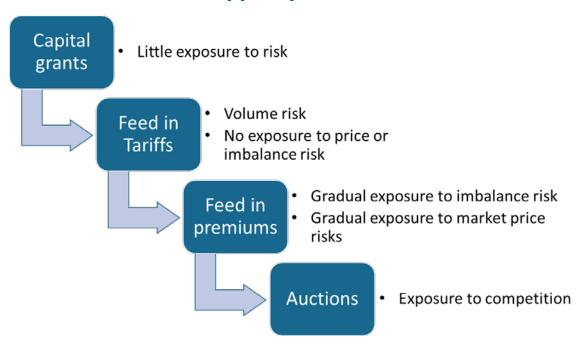


The decarbonization of the transport sector is a huge task that requires a change in the nature of transport demand, improvements in efficiency and changes in the energy mix, which all require major policy push.

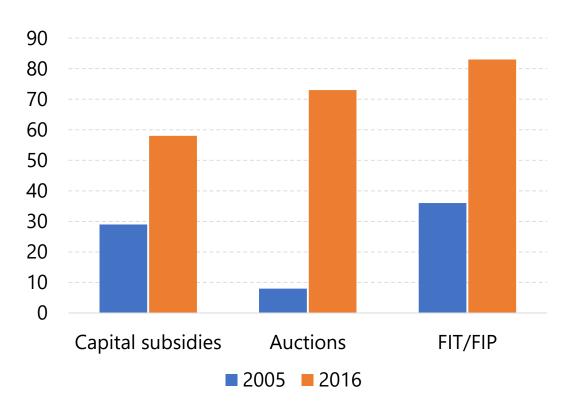
## Power sector: RE policies are evolving



#### The evolution of support policies



## Number of countries adopting selected policy instruments

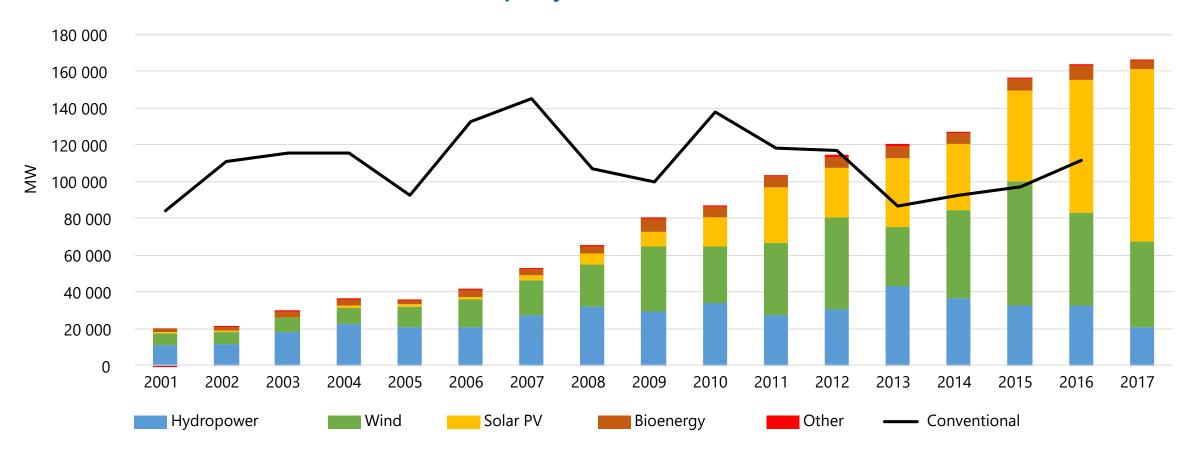


A growing number of countries (both in the developed and in the developing world) are implementing auctions, although usually combined with other instruments.

## The transition in the power sector



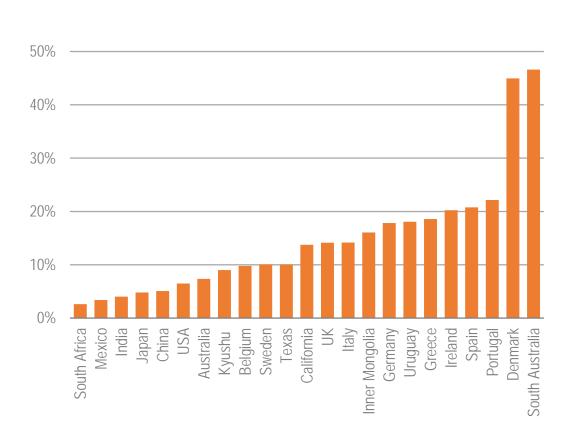
#### **Global capacity addition, 2001-2017**



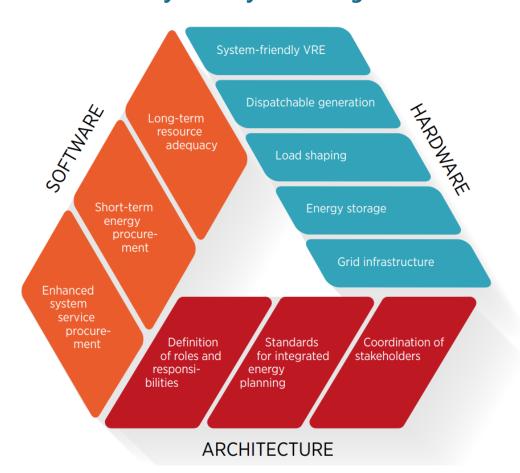
## System integration of Variable Renewables



## Annual shares of solar PV and wind on electricity generation, selected countries/region, 2016



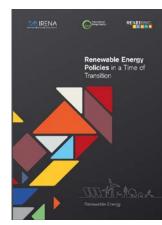
#### **Different layers of system integration of VRE**





## Updated renewable energy policy classification





#### Direct policies include:

- Targets, quotas and obligations
- Regulatory and pricing policies (e.g., administratively set tariffs, competitively set tariffs)
- Fiscal and financial instruments (e.g., tax incentives, subsidies, grants)

#### Integrating policies include:

- Flexibility measures (e.g., support for storage, dispatch able supply, load shaping)
- Infrastructure development policies
- Policies for sector coupling
- Alignment of energy efficiency with renewable energy policies

#### Enabling policies include:

- Fossil fuel subsidy reforms
- Power market redesign
- Land use policies
- RD&D and innovation policies



## Gender and Renewable Energy survey



Complete the survey and contribute to address the data and knowledge gap on gender in renewable energy!

The findings from the survey will contribute to, and will provide quantitative and qualitative insights on the current status of women's participation in the renewable energy sector, existing challenges and potential solutions to improve gender diversity.

