



REPUBLIKA E SHQIPËRIE  
MINISTRIA E ENERGJISË  
DHE INDUSTRIE

# Renewable Energy Sources Albania

Ministry of Energy and Industry

2016

# RES production Albania

## NREAP projection

<b>A</b>	RES to GFEC during 2009-2014	%	<b>31.2%</b>
<b>B</b>	Target of RES to 2020	%	<b>38.0%</b>
<b>C</b>	RES production to GFEC during 2009-2014 period	ktoe	<b>666.7</b>
<b>D</b>	GFEC for Albania during 2009-2014 period (average)	ktoe	<b>2,281.5</b>
<b>E</b>	GFEC projection for Albania on 2020 (inc. EE)	ktoe	<b>2,678.5</b>
<b>F</b>	Yearly RES production as additional to reach the Target of 2020	ktoe	<b>397.0</b>
<b>G</b>	Total RES production on 2020	ktoe	<b>1,017.2</b>

## RES technologies provisions 2020

	<i>RES technologies 2015-2020</i>	<i>Quantity</i> <i>ktoe</i>	<i>Generation</i> <i>GWh</i>	<i>Installation</i> <i>MW</i>
1. RES-E	SHPP up to 10 MW	200	2,326	750
	Eolic (Wind)	30	233	30
	Photovoltaic (PV)	40	582	50
	<b>Total 1</b>	<b><u>270 ktoe</u></b>	<b><u>3,140</u></b>	<b><u>830</u></b>
	<b>% in GFEC</b>	<b>25%</b>		
2. RES-H&C	<u>Biomass</u>	52	800 <sup>th</sup>	-
	<b>Total 2</b>	<b><u>52 ktoe</u></b>		
	<b>% ne GFEC</b>	<b>10%</b>		
3. RES-T	<u>Biofuels FAME</u>	75		-
	<b>Total 3</b>	<b><u>75 ktoe</u></b>		
	<b>% in GFEC</b>	<b>3%</b>		
RES Total	<b>Total 1+2+3</b>	<b><u>397 ktoe</u></b> Part of 1,017 ktoe		
	<b>% ne GFEC 2020</b>	<b>38%</b>		

# RES production- Albania

status quo 2014

## RES-E

- ▶ Hydro : **407 ktoe** (4,726,246 MWh)
- ▶ Photovoltaics: **45.4 toe** (528 MWh Aug.-Dec. 2014 when plant was commissioned)

## RES-H&C

- ▶ Biomass wood fuel : **212 ktoe**
- ▶ Cooling RES-aero thermal Heat Pumps: **n/a**

## RES-T

- ▶ Biodiesel domestic production. **15 ktoe**

# RES consumption – Albania end of 2014

## RES production/consumption 2014 – total 667 ktoe

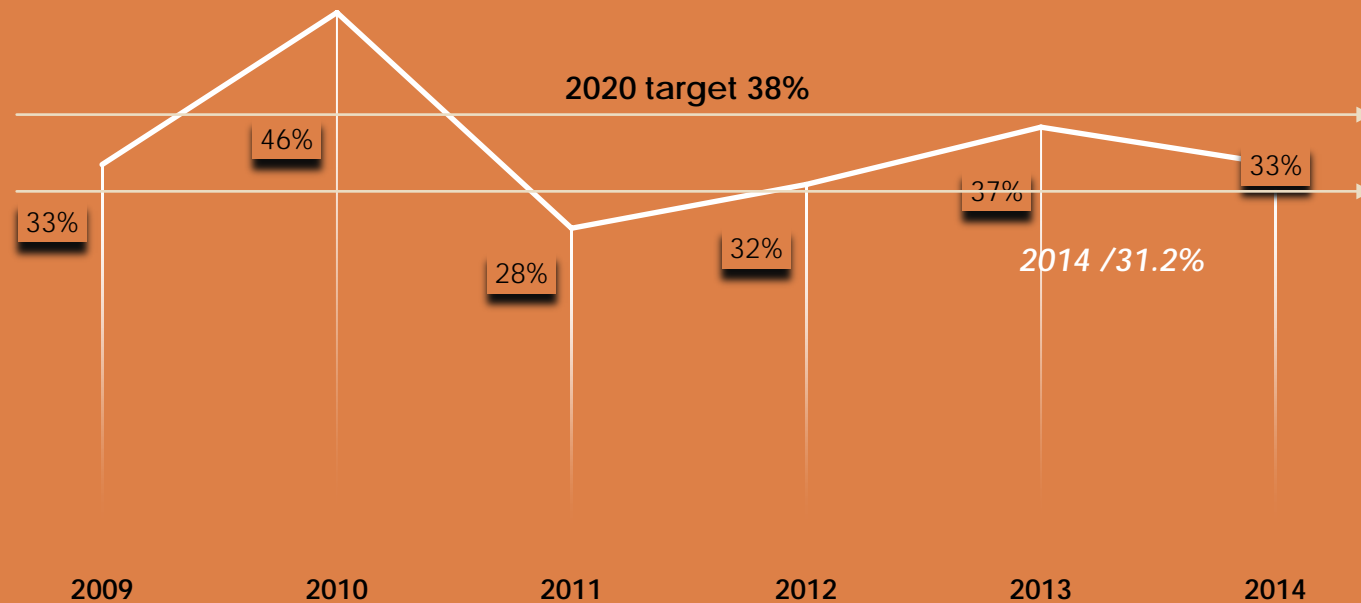
- ▶ Hydro : 407 ktoe
- ▶ Photovoltaics, solar, geothermal: 13 ktoe
- ▶ Biomass, wood fuel : 212 ktoe
- ▶ Biodiesel : 15 ktoe

Gross Final Energy Consumption 2014: **2047** ktoe

RES share for 2009-2014 - **31.2%** (2013/37%)

# RES share to GFEC- Albania 2014

## RES consumption/production(ktoe)

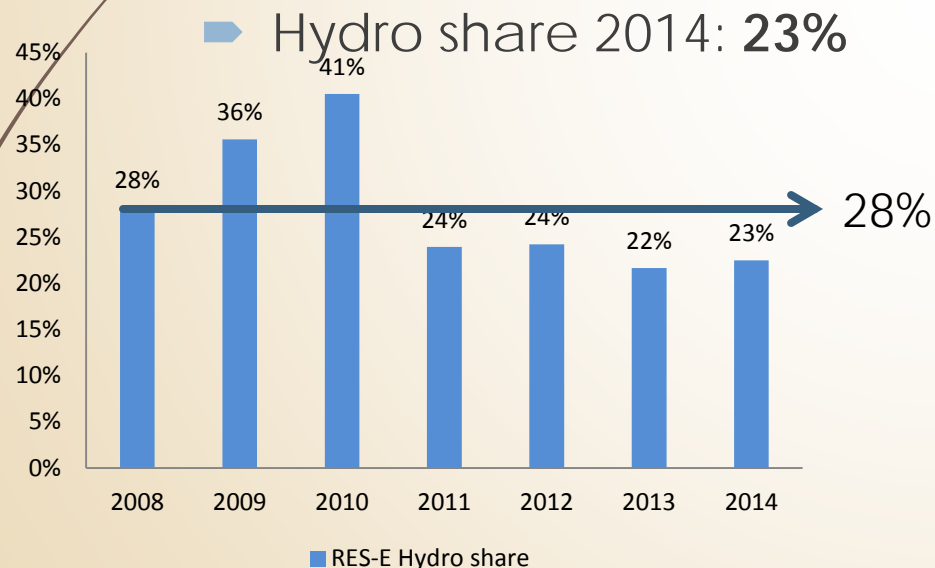


for 2014 – from a total net consumption of primary energy sources of 2047 ktoe only an equivalent of 407ktoe (20% of TPES) are generated by hydro and other RES a share of 13 %. The biomass contribution in TPES was about 11%.

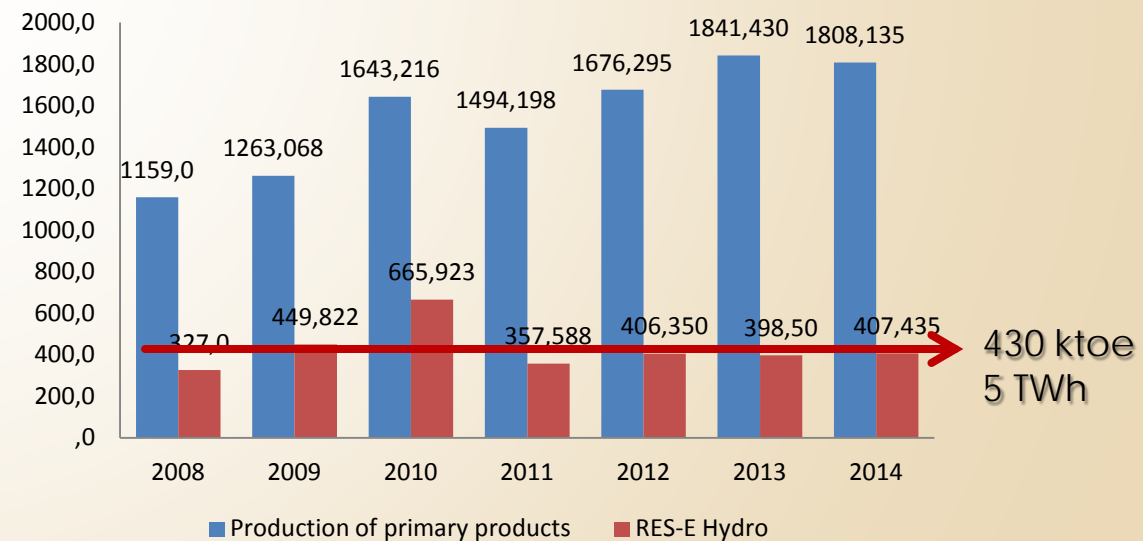
# RES-E domestic production

## 2014 - HYDRO situation

### RES-E hydro production /consumption



### 2014 – total 407 ktoe

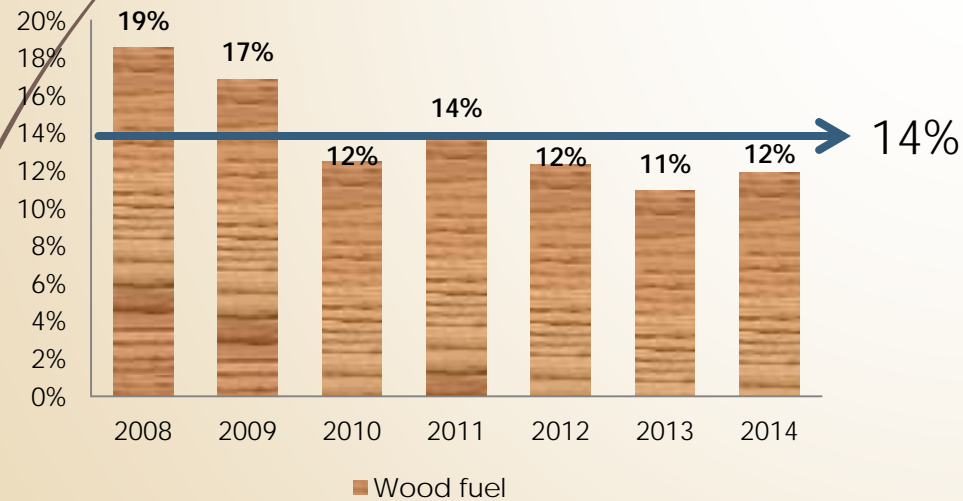


# RES-H&C Albania consumption

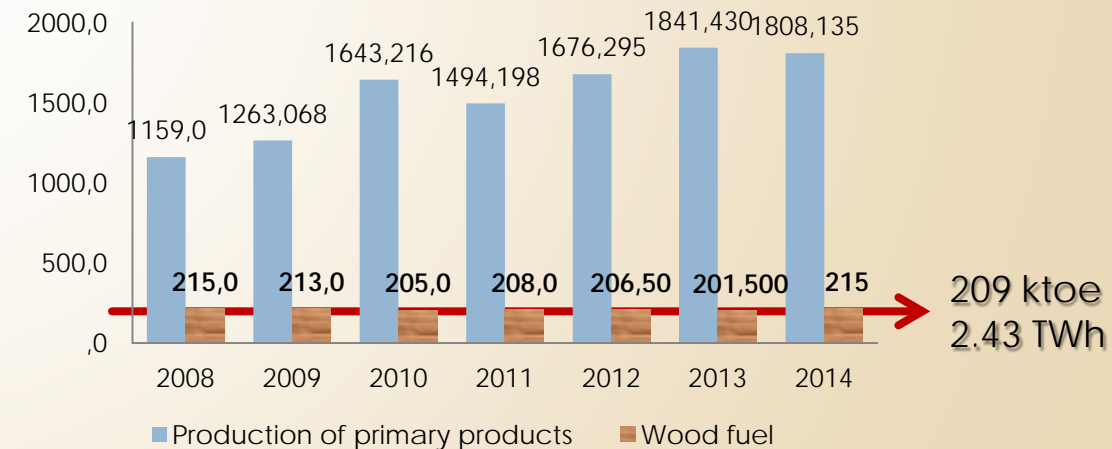
## 2014 – wood fuel situation (RES-C no data available)

### RES-H Wood fuel consumption

▶ Wood fuel 2014: 14%



### 2014 – total 209 ktoe





# RES-T Albania Production and consumption 2014



Grown  
for  
Biofuel

## RES-T Biofuel consumption 2014

- ▶ 28.757 ton (30% biofuel mix)
- ▶ 7.060 ton (above 30% biofuel mix)
- ▶ During 2009-2014 there are 15 ktoe

# RES policy - Albania

## RES policy directions and necessary regulatory framework update

- ▶ **NREAP is finalized by MEI**
- ▶ **New draft law on RES (Recast of 138/2013)**
  - ▶ Support mechanism
  - ▶ Solution for current RES producers
  - ▶ Contracts for Difference (CfD) and support for CFD
  - ▶ Equalisation Scheme and Labelling
- ▶ **New draft law on biofuels (Recast law no 9876, date 14.02.2008)**
  - ▶ Update directive from 2003/30/EC to 2009/28/EC
  - ▶ Sustainability criteria and verification
  - ▶ Market approach in transport

# New draft law on RES - Support mechanism

- ▶ Council of Ministers is authorized to adopt measures to promote the use of energy from renewable sources upon proposal of MEI
- ▶ Installations up to and including an installed capacity of 2 megawatts per generation unit (small installations) are entitled to claim a feed in tariff
- ▶ Installations up to and including an installed capacity of 10 MW will get support under contracts for difference
- ▶ Support granted to producers based on power-purchase agreements concluded before the entry into force of the new Law shall not be affected (but, see next slide); right to switch to the new support scheme for the rest of the contract period

# New draft law on RES - Solution for current RES Producers

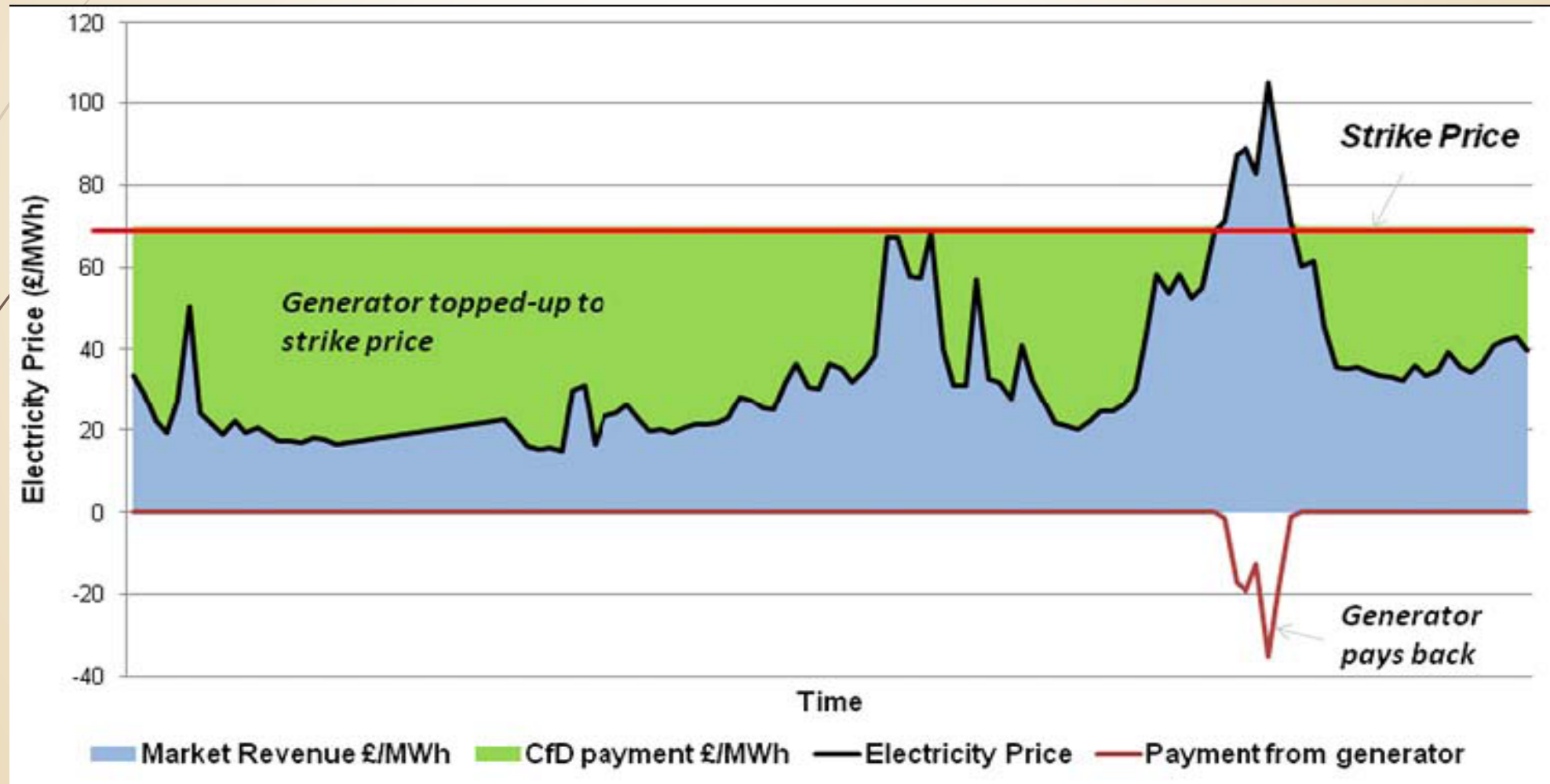
- Renewable Energy Producers with power-purchase agreements concluded before the entry into force of this Law will get fixed feed in tariffs for the rest of the contract period
- The levels of the fixed feed in tariffs are derived (not decided) on Article 40 of the German RES Law 2014 regarding hydropower:
  - ~~6.31~~ cents per kilowatt-hour up to and including an installed capacity of 5 megawatts per company,
  - ~~5.54~~ cent per kilowatt-hour up to and including an installed capacity of 10 megawatts per company,
  - ~~5.34~~ cents per kilowatt-hour up to and including an installed capacity of 15 megawatts per company.

# New draft law on RES - Contracts for Difference (CfD)

- ▶ Support is based on a variable premium calculated as the difference payment between an administratively prefixed price (the strike price) and a measure of the market price for electricity (the reference price)
- ▶ The strike price has to be calculated in such a way as to make a significant volume of a particular renewable energy technology economically viable
- ▶ The reference price is based on APEX price or before on comparable wholesale market price in a given period
- ▶ To avoid overcompensation RES Producers are obliged to pay the difference between the reference price and the strike price to the CfD Counterparty when the reference price exceeds the strike price
- ▶ Final support under a contract for difference (CfD) shall be determined via a competitive, non-discriminatory bidding process (auction)
- ▶ CfD's will have a duration of 12 years
- ▶ CfD Counterparty is the respective grid operator to which the installation is connected.

# New draft law on RES - Support mechanism - CfD

Illustration of the CfD mechanism



# New draft law on RES - Equalisation Scheme and Labelling

- ▶ The costs of any financial support shall be distributed appropriately in view of the user-pays principle
- ▶ The upstream transmission system operator must reimburse the grid system operator with the financial support given to RES Producers
- ▶ The transmission system operator can demand the costs for the necessary expenses from electricity suppliers (Renewable energy surcharge)
- ▶ In return for the payment of the Renewable Energy surcharge electricity suppliers gain the right to label electricity as “renewable energy sources, supported under the Renewable Energy Law”
- ▶ The feature of the electricity shall be identified to final consumers in the context of electricity labelling

## New draft law on BIOFUELS- Existing Legal Framework on biofuel in Albania.

The existing law no 9876, date 14.02.2008

*“On production, transportation and trade of biofuels and other renewable fuels, for transport”, as amended.*

- not in compliance with DIRECTIVE 2009/28/EC,
- in compliance with Directive 2003/30/EC,
- There is no any mechanism to fulfill the RES Target 10% biofuels in transport
- It is not an eligible Calculation for the annual minimal quantity of biofuels in transport.



## New draft law on BIOFUELS- The Purposes of drafting a new law are:

- to promote production and use of biofuels and other renewable fuels used for replacement of oil byproducts in the transport sector in Albania;
- to fulfillment Albanian commitments through a defined target for transport sector and reduction of greenhouse gas emissions on INDC to climate change;
- to promote the cultivation of energy crops, to protect the environment based on sustainability criteria for biofuels and bioliquids, as well as meeting the requirements for the quality of fuel in transport.

This new draft law is in **partial compliance** with DIRECTIVE 2009/28/EC on RES

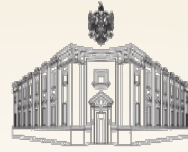
## New draft law on BIOFUELS- The key elements of the new draft law are::

- Establishing **the National Target** consisting on the share of energy from renewable sources in all forms of transport in **2020 will be at least 10 %** of the final consumption of energy in transport sector.
- The new law will define a so called '**support scheme**' in Fiscal Regimes up to 2020
  - ▶ excise duty for the pure biofuels produced in the country will be zero, which should be certified related to the fulfillment of sustainability criteria
  - ▶ No custom and tax regime for all the necessary machineries, materials and equipment which are part of objects used for production of biofuels and other renewable fuels,
- The new draft law have special chapter for **Sustainability criteria for biofuels which is compliance with** Article 17 of the DIRECTIVE 2009/28/EC
- It is definite **the Verification of sustainability criteria for biofuels.** For considering biofuels and bioliquids, the responsible structure for the verifications of sustainability criteria verifies if the economic operators have respected the sustainability criteria

**New draft law on BIOFUELS-** The key elements of the new draft law are:

- The draft law has defined **the procedures for calculation of annual minimal quantity consumed of biofuels** and other renewable fuels
- The law has defined **the monitoring and licensing procedures for produced** the biofuels as well the blending of biofuels with oil by-products, for transport.
- There are **Sanctions defined** as well

The activity of production units of biofuels and other renewable fuels, which are contrary to the provisions of this law constitutes an administrative offense punishable according to the special article in the draft law.



REPUBLIKA E SHQIPËRIË  
MINISTRIA E ENERGJISË  
DHE INDUSTRIË

# THANK YOU

Gjergji Simaku, Ilia Gjermani and Sebastian Glaieser  
Vienna, March 02/2016