Study on 2030 overall targets
(energy efficiency, renewable energies, GHG emissions reduction) for the Energy Community
- a first comparison of RE ambition exemplified for selected CPs

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- Step 1 – Methodology for 2030 target setting

  - Including Methodology for EE, RE and GHG targets

- Step 2 – 2030 Target Calculation

  - Including data collection, actual target calculation, and overview on targets

- Step 3 – **Evaluation of the impact of target fulfilment**

  Energy modelling

  - The impacts arising from the uptake of renewable energies and of a possible future carbon pricing for the electricity sector are explored using two models with complementary strengths and focal points:

  - Electricity Market Model - EEMM (REKK)

  - Green-X model (TU Wien)

  - Both models have been applied in combination within the SEERMAP project to undertake a detailed assessment of electricity futures for South Eastern Europe.
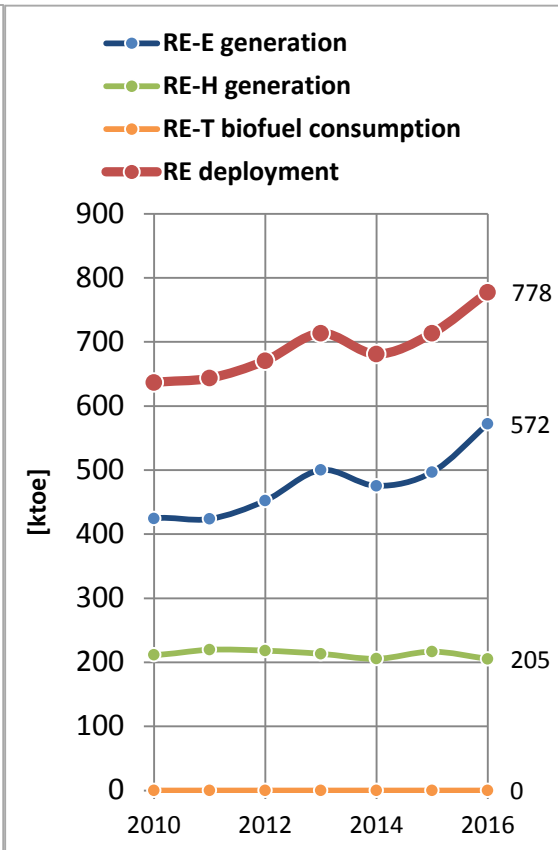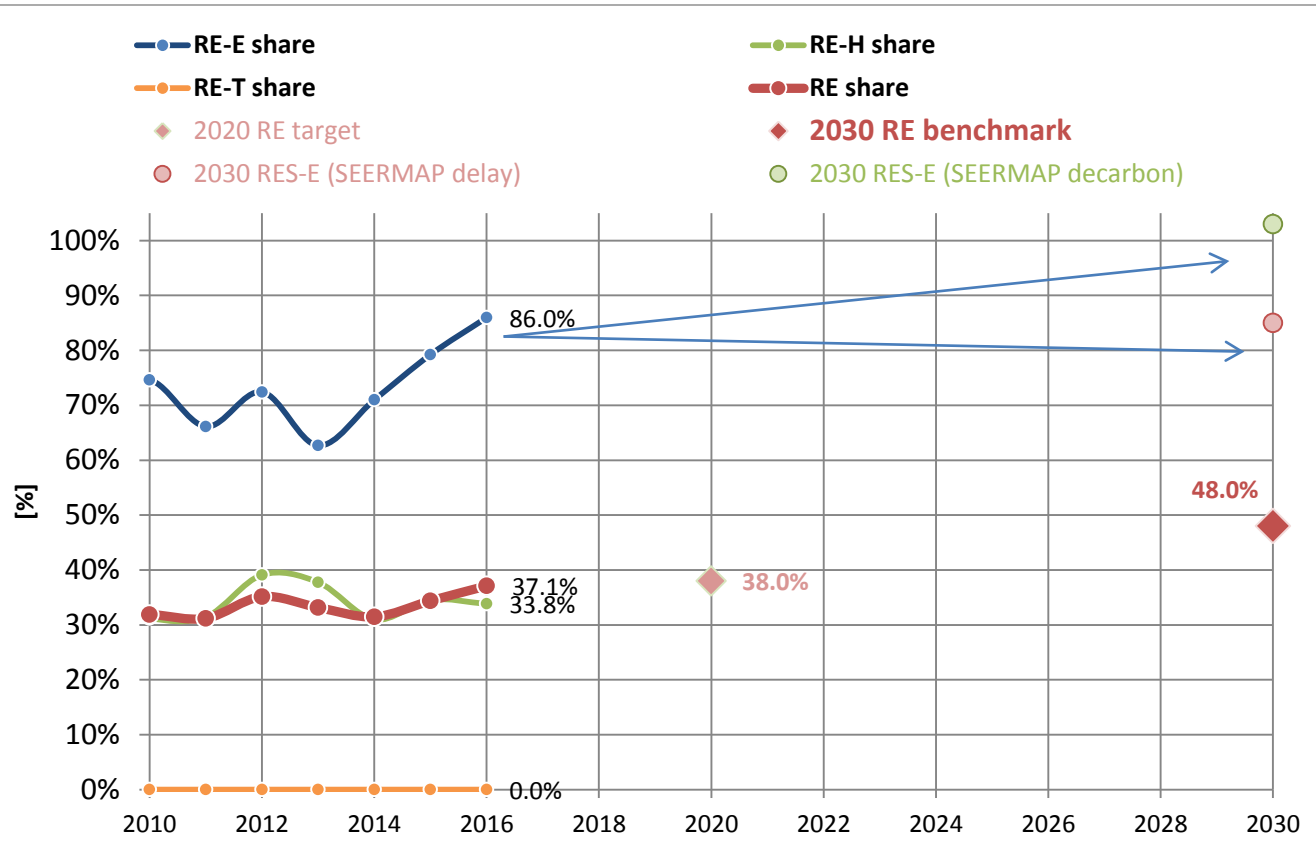
Figure: Past and required future RE deployment in relative terms (left) & in absolute terms (right) *(limited to historic trends)*

A first comparison of past and required future trends at CP level

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Albania

Overview on historic RE use and future (2020, 2030) RE targets		Historical and 2020 RE shares / use									Proposed approach for 2030 RE targets: Flat rate approach	
Year		**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2020**	**2030**	**increase vs 2020**
Contracting Party												
Albania												
RE share	%	**31.4%**	**31.9%**	**31.2%**	**35.2%**	**33.2%**	**31.5%**	**34.4%**	**37.1%**	**38.0%**	**48.0%**	**10.0%**
RE-E share	%	70.7%	74.6%	66.1%	72.4%	62.7%	71.0%	79.2%	86.0%			
RE-H share	%	34.7%	31.3%	31.4%	39.1%	37.8%	31.0%	34.6%	33.8%			
RE-T share	%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%			
RE deployment	ktoe	**618.0**	**636.4**	**643.5**	**670.6**	**713.5**	**681.1**	**713.6**	**777.6**			
RE-E generation	ktoe	401.4	424.7	423.8	452.3	500.1	475.5	496.9	572.1			
RE-H generation	ktoe	216.7	211.7	219.7	218.3	213.4	205.6	216.7	205.5			
RE-T biofuel consumption	ktoe	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Gross final energy demand	ktoe	1,965.9	1,997.0	2,063.3	1,907.7	2,151.3	2,164.0	2,075.1	2,096.3			

Table: Past and required future RE deployment in relative terms & in absolute terms
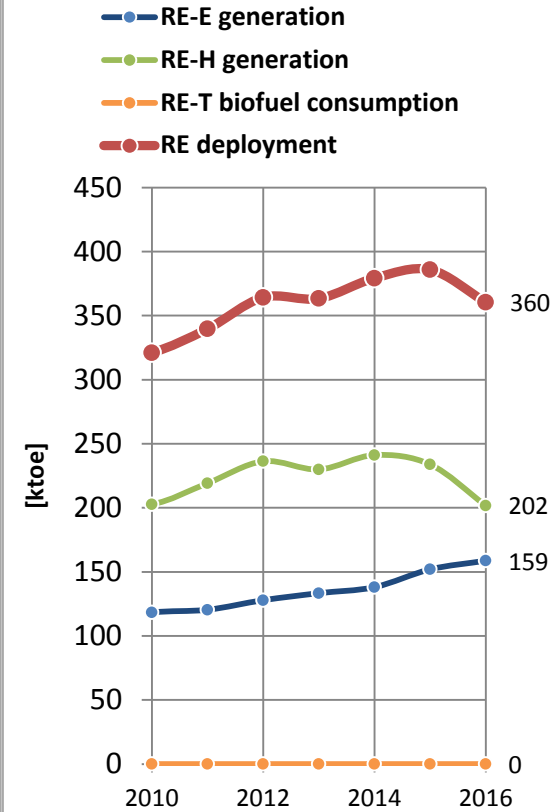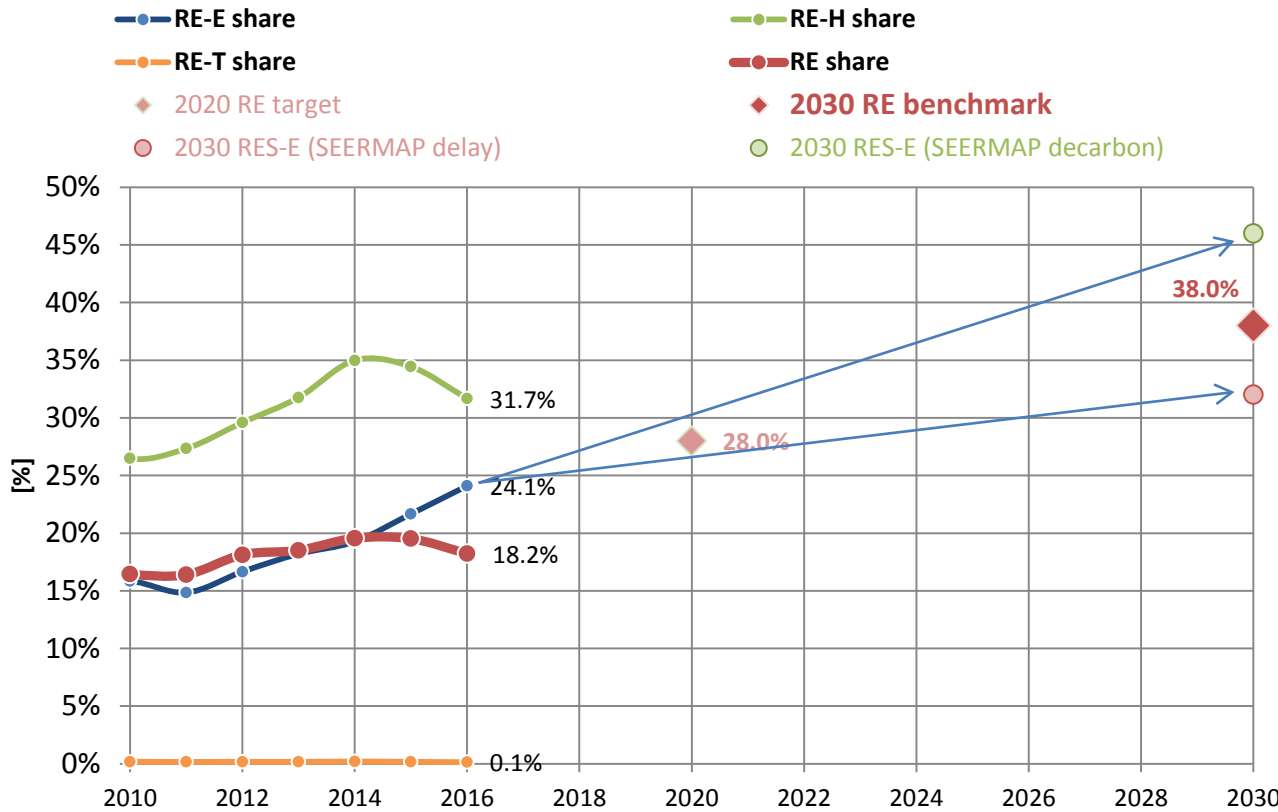*(limited to historic trends)*

Figure: Past and required future RE deployment in relative terms (left) & in absolute terms (right) (limited to historic trends)

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FYR of Macedonia

Overview on historic RE use and future (2020, 2030) RE targets		Historical and 2020 RE shares / use									Proposed approach for 2030 RE targets: Flat rate approach	
Year		2009	2010	2011	2012	2013	2014	2015	2016	2020	2030	increase vs 2020
Contracting Party												
FYR of Macedonia												
RE share	%	**17.2%**	16.5%	16.4%	18.1%	18.5%	19.6%	19.5%	18.2%	**28.0%**	**38.0%**	**10.0%**
RE-E share	%	15.5%	15.8%	14.8%	16.7%	18.2%	19.3%	21.7%	24.1%			
RE-H share	%	29.2%	26.5%	27.3%	29.6%	31.8%	35.0%	34.4%	31.7%			
RE-T share	%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.1%			
RE deployment	ktoe	**314.7**	**321.1**	**339.7**	**364.3**	**363.4**	**379.3**	**385.9**	**360.5**			
RE-E generation	ktoe	109.9	118.3	120.5	127.9	133.4	138.1	152.0	158.7			
RE-H generation	ktoe	204.8	202.8	219.2	236.3	230.0	241.2	233.9	201.8			
RE-T biofuel consumption	ktoe	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Gross final energy demand	ktoe	1,826	1,952	2,070	2,009	1,963	1,939	1,977	1,978			

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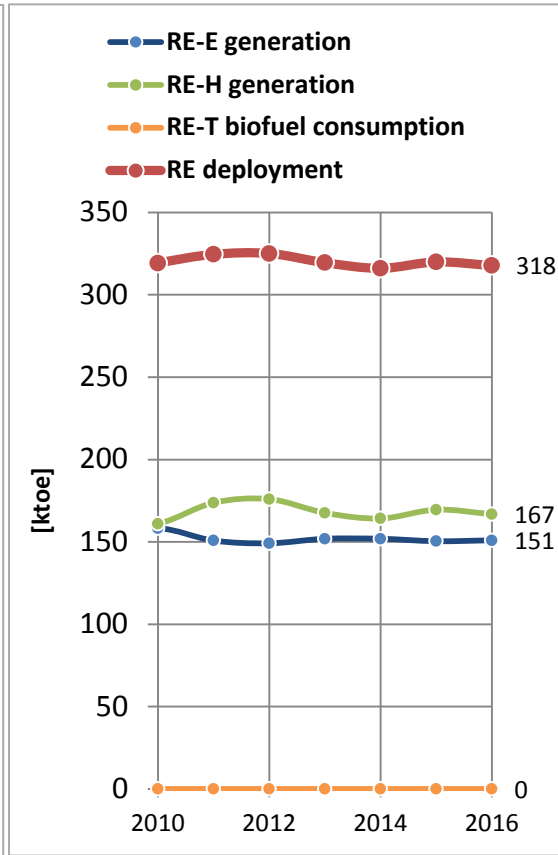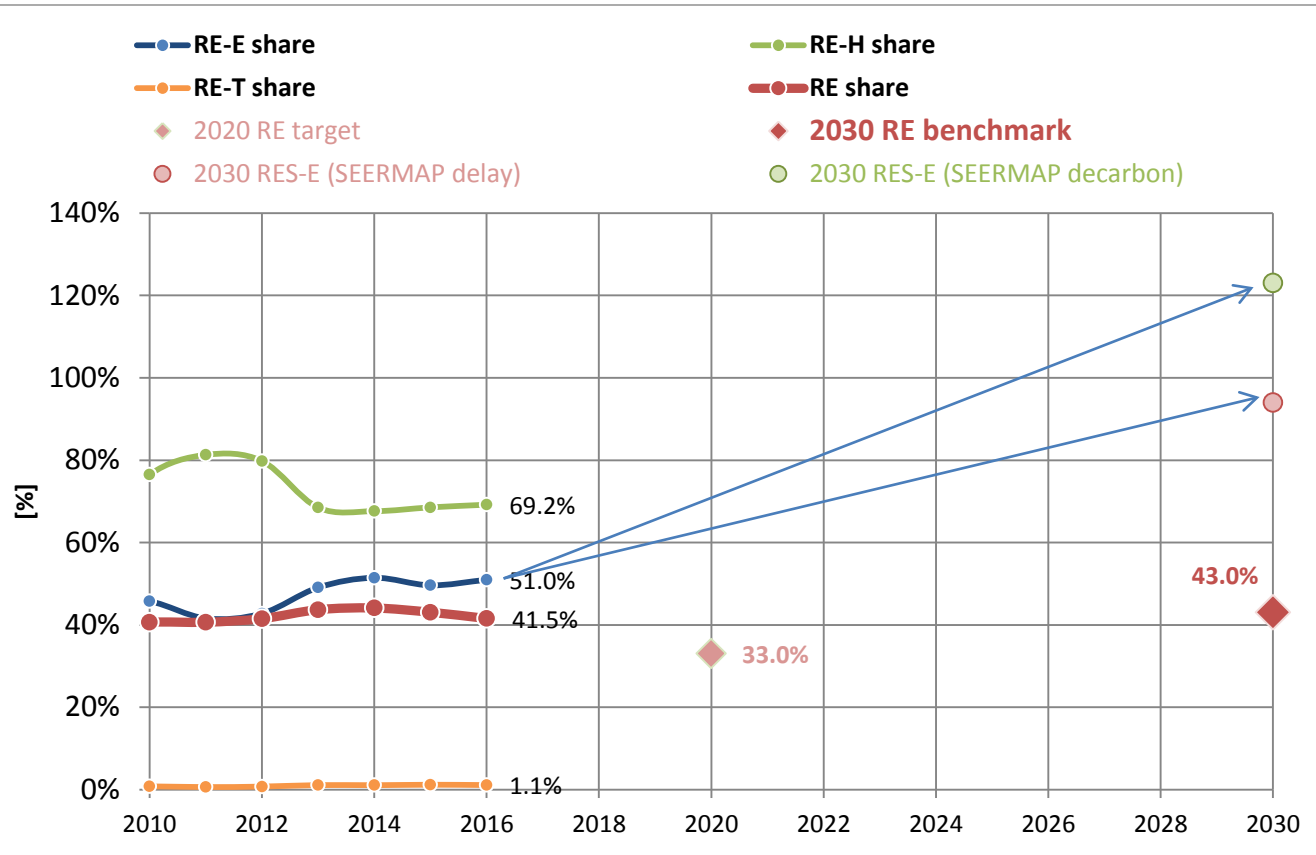*(limited to historic trends)*

Montenegro

Figure: Past and required future RE deployment in relative terms (left) & in absolute terms (right) (limited to historic trends)

A first comparison of past and required future trends at CP level

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Energy Economics Group

Montenegro

Overview on historic RE use and future (2020, 2030) RE targets		Historical and 2020 RE shares / use									Proposed approach for 2030 RE targets: Flat rate approach	
Year		2009	2010	2011	2012	2013	2014	2015	2016	2020	2030	increase vs 2020
Contracting Party												
Montenegro												
RE share	%	39.4%	40.6%	40.6%	41.5%	43.7%	44.1%	43.1%	41.5%	33.0%	43.0%	10.0%
RE-E share	%	46.6%	45.7%	41.6%	42.8%	49.1%	51.4%	49.6%	51.0%			
RE-H share	%	62.1%	76.5%	81.3%	79.8%	68.5%	67.6%	68.5%	69.2%			
RE-T share	%	0.7%	0.8%	0.6%	0.7%	1.1%	1.1%	1.2%	1.1%			
RE deployment	ktoe	312.4	319.3	324.6	325.1	319.5	316.1	320.0	317.8			
RE-E generation	ktoe	152.9	158.3	150.8	149.1	151.9	151.9	150.4	151.0			
RE-H generation	ktoe	159.5	161.0	173.8	176.0	167.6	164.2	169.6	166.8			
RE-T biofuel consumption	ktoe	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
Gross final energy demand	ktoe	794	786	798	783	731	717	743	765			

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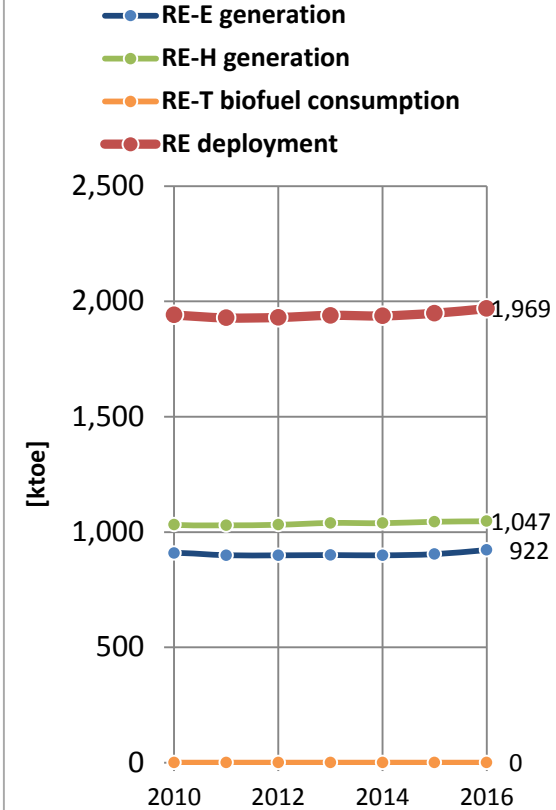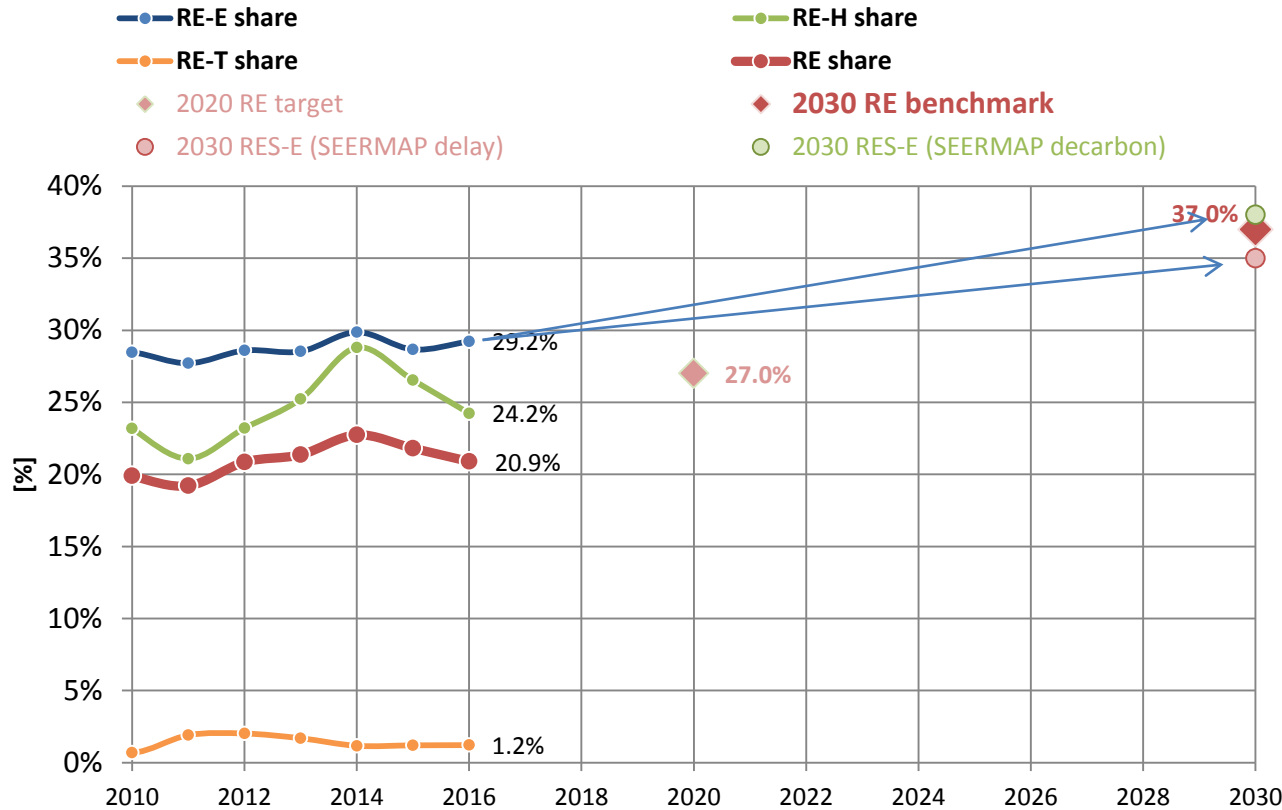*(limited to historic trends)*

Serbia

Figure: Past and required future RE deployment in relative terms (left) & in absolute terms (right) *(limited to historic trends)*

A first comparison of past and required future trends at CP level

TU WIEN — TECHNISCHE UNIVERSITÄT WIEN — EEG Energy Economics Group

Serbia

Overview on historic RE use and future (2020, 2030) RE targets		Historical and 2020 RE shares / use									Proposed approach for 2030 RE targets: Flat rate approach	
Year		2009	2010	2011	2012	2013	2014	2015	2016	2020	2030	increase vs 2020
Contracting Party												
Serbia												
RE share	%	21.2%	19.9%	19.2%	20.9%	21.4%	22.7%	21.8%	20.9%	27.0%	37.0%	10.0%
RE-E share	%	28.7%	28.5%	27.7%	28.6%	28.5%	29.9%	28.7%	29.2%			
RE-H share	%	26.5%	23.2%	21.1%	23.2%	25.2%	28.8%	26.5%	24.2%			
RE-T share	%	1.5%	0.7%	1.9%	2.0%	1.7%	1.2%	1.2%	1.2%			
RE deployment	ktoe	1,954	1,941	1,929	1,930	1,940	1,937	1,949	1,969			
RE-E generation	ktoe	894	909	899	899	900	899	904	922			
RE-H generation	ktoe	1,060	1,032	1,029	1,032	1,039	1,038	1,045	1,047			
RE-T biofuel consumption	ktoe	0	0	0	0	0	0	0	0			
Gross final energy demand	ktoe	9,236	9,756	10,038	9,257	9,078	8,519	8,934	9,421			

Table: Past and required future RE deployment in relative terms & in absolute terms
(limited to historic trends)