



# Sustainable energy: How far has SEE come in the last five years? South East Europe Energy Watchdog Report 2016



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It is well known that the countries of South East Europe<sup>1</sup> have outdated, polluting and wasteful energy systems and that change has been slow in coming<sup>2</sup>. But are there signs of hope? This scorecard report seeks to answer this question by giving a glimpse into changes in the energy sector between 2010 and now.

All the Western Balkan countries aspire to EU membership and are already part of the Energy Community<sup>3</sup>. Yet a 2013 publication<sup>4</sup> produced by a group of 17 civil society organizations as part of the South East Europe Sustainable Energy Policy (SEE SEP) project showed that across five key sustainability indicators<sup>5</sup>, all the southeast European countries lagged far behind the EU.

The report also sought to draw public attention to the fact that as old energy infrastructure is becoming increasingly dilapidated, the region faces a real choice: Build yet more coal plants and large hydropower? Or make a decisive turnaround towards an energy efficient electricity sector based on sustainable forms of renewable energy such as appropriately-sited solar and wind?

This choice is becoming more and more relevant, as the countries of the region have agreed for the first time to take action to tackle climate change under the Paris Agreement<sup>6</sup>. As they accede to the EU they will have to adhere to increasingly strict EU targets on greenhouse gas reduction, energy efficiency and renewable energy, essentially decarbonising their energy sectors by 2050.

So far the region's energy policies have not caught up, but it is still possible to change this and avoid being further "locked in" to fossil fuel use. In recent years only the Stanari coal power plant<sup>7</sup> in Bosnia and Herzegovina has been built, while plans for the Plomin C plant<sup>8</sup> in Croatia have recently been can-

- 2 This is for example regularly reflected in the Energy Community's annual implementation reports, which can be found here: https://www.energy-community.org/portal/page/portal/ ENC\_HOME/AREAS\_OF\_WORK/Implementation
- 3 The Energy Community Treaty aims to extend the EU internal energy market to South East Europe and beyond on the basis of a legally binding framework. In order to create a level playing field it incorporates elements of the EU's environmental legislation relevant to the energy sector.
- 4 Warm, Safe, Clean Energy Which Path are the SEE countries taking? http://seechangenetwork.org/war-safe-clean-energy-which-path-are-the-see-countries-taking/
- 5 Energy efficiency targets, coal-based electricity, solar and wind electricity, energy theft and losses, and energy intensity.
- 6 For more information see: http://ec.europa.eu/clima/policies/international/negotiations/paris/index\_en.htm
- 7 For more information, see http://bankwatch.org/our-work/projects/stanari-lignite-power-plant-bosnia-and-herzegovina
- 8 For more information, see http://bankwatch.org/our-work/projects/plomin-coal-power-plant-croatia

Albania, Bosnia and Herzegovina, Croatia, Kosovo\*, Macedonia\*\*, Montenegro and Serbia.
\*According to the UN, Kosovo is "under the United Nations Interim Administration Mission in Kosovo (UNMIK) established pursuant to Security Council Resolution 1244."
\*\* According to the UN, the official name for Macedonia is "The former Yugoslav Republic of Macedonia".

celled. There is still time to cancel the other coal plants planned in Bosnia and Herzegovina, Kosovo, Montenegro and Serbia<sup>°</sup> and make space for renewables and energy efficiency, if decisive action is taken fast.

And there are other positive signs: Although so far only Croatia and Macedonia have any significant wind capacity operating, a recent analysis<sup>10</sup> by CEE Bankwatch Network found that around 1166 MW of wind projects are planned across the region (excluding Croatia). However, this figure is dwarfed by the 2800 MW of coal plants being planned<sup>11</sup>. In addition, the massive potential of rooftop solar<sup>12</sup> continues to be undermined across the region, and the potential for consumer-owned energy generation or municipality-owned electricity generation whose benefits stay within the community remains largely unrealised.

Each year the European Commission issues a progress report about the countries' progress<sup>13</sup> in implementing EU legislation in the previous year, while the Energy Community also issues a report on progress in implementing the more limited legislation required by the Treaty. This scorecard report is intended to compliment such detailed annual reports by taking a wider view over several years and focusing on sustainability. Overall the findings show that not enough has changed and that much more work is needed. However there are interesting variations between the countries and at least some improvements are visible. The challenge now is to ramp up these improvements and prevent setbacks and distractions such as new fossil fuel infrastructure, which not only pollute but also take up time and money that could be spent on demand-side energy efficiency, grid improvements and renewable energy.

As a **recommendation**, we ask the EC to reflect the growing concerns outlined below in its communication with the accession and pre-accession countries. While it is of course necessary to acknowledge progress where credit is due, after the Paris Agreement it is time for the EC to take more seriously greenhouse gas emissions, energy waste and potential stranded assets, the costs of which will ultimately be paid by consumers.

<sup>9</sup> For more information, see http://bankwatch.org/campaign/coal/projects

<sup>10</sup> http://bankwatch.org/publications/western-balkans-countries-invest-least-24-times-muchcoal-wind-power

<sup>11</sup> Both figures relate to projects which are being pursued actively and which could potentially start construction before around 2020, and exclude projects for both wind and coal which are either dormant or consist mostly of political declarations rather than moving forward with obtaining permits and financing.

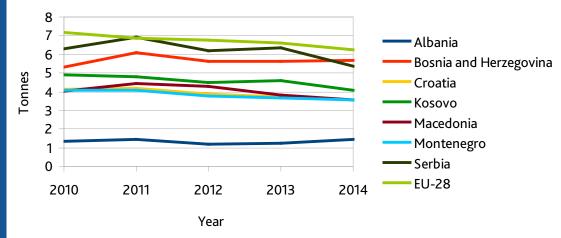
<sup>12</sup> For more information about solar potential see: http://see2050carboncalculator.net/

<sup>13</sup> Except Croatia, as it is already in the EU.

## **Regional highlights**

#### CO₂ intensity – emissions per capita

- Bosnia and Herzegovina had the highest CO<sub>2</sub> emissions per capita in 2014, at 5.66 tonnes. This is alarming because EU emissions are declining while Bosnia-Herzegovina's are growing. All other countries in the region except Albania exhibited declines in emissions per capita in this period.
- Albania has by far the lowest CO<sub>2</sub> emissions per capita in the region. The challenge will be to diversify its hydropower-dependent energy mix without increasing CO<sub>2</sub> emissions and while taking adequate measures to preserve biodiversity.



#### CO<sub>2</sub> per capita 2010–2014

Serbia's 2014 emissions drop are likely to have been due to cuts in coal-fired electricity generation due to the May floods.

#### Percentage of electricity generation from coal

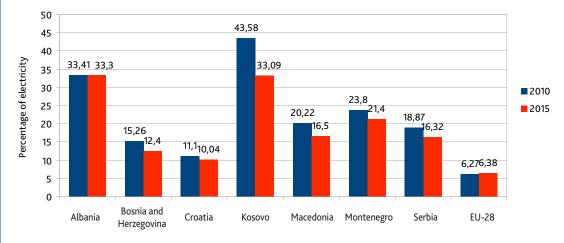
- Kosovo and Albania have the least diverse electricity mixes in the region, with Kosovo generating 97% of its electricity from coal in 2014 and Albania generating 100% of its electricity from hydropower since 2010. There was no improvement in either case between 2010 and the latest years for which data is available (2014 and 2015 respectively).
- Macedonia and Serbia are the second most coal dependent countries after Kosovo, with 69.5% and 64.8% respectively of their electricity generated from coal in 2014. For comparison, the EU generated 26.3% of electricity from coal in 2014.

#### Electricity generation from solar and wind

- Croatia is the wind and solar leader in the region, with 5.5% of electricity from wind in 2014, up from 0.99% in 2010. In 2014 it generated 35 GWh from solar PV, up from virtually none in 2010. However it has used only a negligible fraction of its potential.
- Sunny Macedonia is the only other country to have got started with wind and solar PV generation.
- All the countries in the region are far behind the EU, which generated nearly 8% of its electricity from wind and 3% from solar in 2014.

#### Losses and theft

- Albania and Kosovo have the highest losses in the region. In 2015 one third of electricity in Albania and Kosovo was lost or stolen in transmission and distribution.
- Kosovo made the most progress between 2010 and 2015, bringing losses and theft down from 43.58% to 33% still an astonishing amount of electricity to lose...
- Croatia has the lowest losses in the region at 10.04% in 2014, followed by Bosnia and Herzegovina with 12.4%. However both of these are still quite far behind the EU-wide losses, which stand at 6.38%.

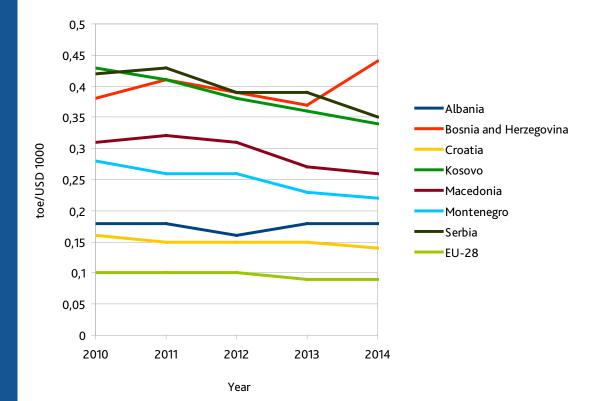


#### Transmission and distribution losses including commercial losses

Figures are for 2015 except for the EU-28 and Croatia, which are for 2014.

#### Energy intensity – the amount of energy required to make a unit of GDP

- Albania and Croatia are the least energy intensive countries in the region, while Bosnia and Herzegovina, Serbia and Kosovo are the most energy intensive. These differences are most likely mainly caused by different economic structures rather than serious efforts on the part of the less energy intensive countries.
- Bosnia and Herzegovina is more than 4 times as energy intensive as the EU average.
- Between 2010 and 2014 Kosovo made the most improvements in their energy intensity, but remains more than 3 times as energy intensive as the EU. The reasons for the change in Kosovo are not clear but may reflect an increase in energy efficiency and decrease in losses or an increasing share of services rather than production in the economy.
- Serbia, Montenegro and Macedonia have all made some improvements as well. The changes in Montenegro may be partly a result of declining aluminium production, which is heavily energy-intensive.



#### Energy intensity – Total primary energy supply/GDP

#### Corruption Perceptions Index

- In 2010 Kosovo was perceived as the most corrupt country in the region and was in position 110, with 1 (Denmark) being perceived as the least corrupt and 178 (Somalia) the most corrupt.
- In the same year, Croatia was perceived as the least corrupt in the region, in 62nd place, but still scored only 4.2 out of 10.
- In 2015, the countries in the region had slightly moved up the ranking and slightly improved their scores, except Macedonia which maintained a similar score but fell from 62nd to 66th place, and Albania, which stayed in a similar position, moving from 87th to 88th place. Only Croatia scored over half and only just (51 out of 100 points).

#### Countries

#### Albania

Albania and Kosovo have the highest losses in the region. In 2015 one third of electricity in Albania and Kosovo was lost or stolen in transmission and distribution.

Albania has by far the lowest CO<sub>2</sub> emissions per capita in the region although they slightly increased between 2010 and 2014. The challenge will be to diversify its hydropower-dependent energy mix without increasing CO<sub>2</sub> emissions and while taking adequate measures to preserve biodiversity.

Albania was in 2015 still 100% reliant on hydropower for electricity and had no wind generation or solar PV generation.

#### Bosnia and Herzegovina

Bosnia and Herzegovina's  $CO_2$  emissions per capita rose between 2010 and 2014, from 5.34 to 5.66 tonnes. This appears to be mainly the result of rising transport energy demand. All other countries in the region except Albania exhibited small declines in emissions per capita in this period.

Bosnia and Herzegovina had 60.5% of its electricity generated from coal in 2014. For comparison, the EU generated 26.3% of electricity from coal in 2014.

Bosnia and Herzegovina still has only a tiny amount of electricity from wind and solar (much less than 1% of each).

After Croatia, Bosnia and Herzegovina has the second-lowest transmission and distribution losses in the region, at 12.4%. With EU-wide losses at 6.38%, BiH can still do better.

In 2014 Bosnia and Herzegovina was the most energy-intensive country in the region and was more than 4 times as energy intensive as the EU average.

#### Croatia

Croatia is the wind leader in the region, with 5.5% of electricity from wind in 2014, up from 0.99% in 2010. However it has used only a small fraction of its potential.

Croatia has the lowest losses in the region at 10.04% in 2014. However, compared with EU-wide losses of 6.38%, Croatia can still do a lot better....

#### Kosovo

Kosovo and Albania have the least diverse electricity mixes in the region, with Kosovo generating 97% of its electricity from coal in 2014 and Albania generating 100% of its electricity from hydropower since 2010. There was no improvement between 2010 and the latest years for which data is available (2014 and 2015 respectively).

Kosovo has made little progress with wind and solar energy in recent years. It will need to drastically increase its activity if it is to meet its 2020 renewable energy target.

Of the Western Balkans countries, Kosovo made the most progress in reducing transmission and distribution losses between 2010 and 2015, down from 43.58% to 33% – still an astonishing amount of electricity to lose.

#### Macedonia

In 2014 Macedonia generated 69.5% of its electricity from coal. In absolute terms coal generation decreased by more than 1000 GWh from 2010, but in percentage terms it increased, probably due to the high rainfall in 2010.

It generated 14 GWh from solar PV in 2014, making second in the region after Croatia, but still only using a negligible fraction of its potential.

Macedonia reduced its transmission and distribution losses from 20.22% in 2010 to 16.5% in 2015.

It decreased its energy intensity between 2010 and 2014, from 0.31 to 0.26 toe/ USD 1000, compared to 0.09 in the EU.

#### Montenegro

In 2015 coal still accounted for around half of electricity generation in Montenegro, with no reported generation from wind or solar.

Between 2010 and 2015 Montenegro reduced its transmission and distribution losses from 23.8% to 21.4%. This is still more than 3 times as much as the EU average.

Between 2010 and 2014, Serbia, Montenegro and Macedonia all made some improvements in their energy intensity. The changes in Montenegro – from 0.28 to 0.22 toe/USD 1000 – may be partly a result of declining aluminium production, which is heavily energy-intensive.

#### Serbia

Macedonia and Serbia are the joint second most coal dependent countries after Kosovo, with 69.5% and 64.8% respectively of their electricity generated from coal in 2014. For comparison, the EU generated 26.3% of electricity from coal in 2014.

Serbia is the second most energy-intensive country in the region after Bosnia and Herzegovina. It is more than 3.5 times as energy intensive as the EU average.

Nevertheless, Serbia reduced its per capita  $CO_2$  emissions from 6.29 tonnes in 2010 to 5.35 in 2014. This may be related to lower coal generation due to flooding and high hydropower generation due to rainy weather. The challenge will be to maintain this decrease in less rainy years by diversifying renewable energy sources.

## **Background data**

## 1. CO<sub>2</sub> intensity – emissions per capita<sup>14</sup>

Country	2010	2011	2012	2013	2014
ALBANIA	<b>1.35</b>	<b>1.43</b>	<b>1.2</b>	<b>1.26</b>	<b>1.42</b>
http://www.iea.org/statistics/statisticssearc	h/report/?co	untry=ALBANI	A&product=ind	dicators&year=	2010
BOSNIA AND HERZEGOVINA		<b>6.11</b>	<b>5.65</b>	<b>5.63</b>	<b>5.66</b>
http://www.iea.org/statistics/statisticssearc		untry=BOSNIA	HERZ&product=	=indicators&ye	ar=2010
<b>CROATIA</b>	<b>4.13</b> h/report/?co	<b>4.19</b>	<b>3.85</b>	<b>3.74</b>	<b>3.57</b>
http://www.iea.org/statistics/statisticssearc		untry=CROATIA	A&product=ind	licators&year=3	2010
KOSOVO	<b>4.9</b>	<b>4.81</b>	<b>4.5</b>	<b>4.57</b>	<b>4.06</b>
http://www.iea.org/statistics/statisticssearc	h/report/?co	untry=KOSOVC	)&product=ind	icators&year=2	
MACEDONIA	<b>4.04</b>	<b>4.44</b>	<b>4.26</b>	<b>3.8</b>	<b>3.58</b>
http://www.iea.org/statistics/statisticssearc	h/report/?co	untry=FYROM8	&product=indi	cators&year=2	
MONTENEGRO	<b>4.09</b>	<b>4.09</b>	<b>3.76</b>	<b>3.66</b>	<b>3.57</b>
http://www.iea.org/statistics/statisticssearc	h/report/?co	untry=MONTEI	NEGRO&produc	t=indicators&y	vear=2010
SERBIA	<b>6.29</b>	<b>6.92</b>	<b>6.2</b>	<b>6.34</b>	<b>5.35*</b>
http://www.iea.org/statistics/statisticssearc	h/report/?co	untry=SERBIA8	&product=indi	cators&year=20	
<b>EU-28</b> http://www.iea.org/statistics/statisticssearc	<b>7.17</b> h/report/?co	<b>6.86</b> untry=EU28&p	<b>6.77</b> product=indica	<b>6.6</b> tors&year=201	<b>6.22</b>

\*Most likely lower than usual due to cuts in coal electricity generation due to floods

<sup>14</sup> IEA appears to have modified the 2010 data since it was originally published.

## 2. Percentage of electricity generation from coal (GWh) and

3. Electricity generation from solar and wind (GWh)

## 2010 Electricity generation

Country	Coal (GWh)	Hydro (GWh)	Oil/Gas (GWh)	Nuclear (GWh)	Wind (GWh)	Solar (GWh)
ALBANIA www.instat.gov.al/m	<b>0</b> edia/141334/tb4	<b>7673.7</b> .xls	0	0	0	0
BOSNIA AND HERZEGOVINA http://www.derk.ba/		<b>7946.20</b> DERK%20izvjest	<b>0</b> taj%20o%20ra	<b>0</b> du%202010-b.p	<b>O</b> df	0
CROATIA http://www.iea.org/s	2385 tatistics/statistics	8435 ssearch/report/?	<b>3113</b> Country=CROA	<b>0</b> TIA&product=el	<b>139</b> ectricityandhea	<b>O</b> it&year=2010
KOSOVO http://www.iea.org/s	<b>4989</b> tatistics/statistics	156 ssearch/report/?	<b>22</b> ?country=KOSO	<b>0</b> VO&product=el	<b>1</b> ectricityandhea	<b>0</b> t&year=2010
MACEDONIA http://www.stat.gov. http://www.iea.org/s		1	<b>86</b> Pcountry=FYR0	<b>0</b> M&product=ele	<b>0</b> ctricityandheat	<b>0.023</b> &year=2010
MONTENEGRO http://www.epcg.cor proizvodnja_2		-	<b>0</b> osting.com/file	<b>0</b> s/multimedia/m	<b>O</b> nain_pages/files	<b>0</b> s/2013/08/
SERBIA http://webrzs.stat.go http://webrzs.stat.go		5				
<b>EU</b> http://www.iea.org/s	864,043 statistics/statistics	407,979 ssearch/report/?	<b>851,785</b> ?year=2010&co	<b>916,610</b> untry=EU28≺	149,357 roduct=Electric	<b>23,267</b> ityandHeat

In 2010 the EU also generated 107,048 from biofuels; 35,883 from waste, 5,602 from geothermal, 478 from tide and 4,378 from other sources.

### Electricity generation for latest year available

Country	Coal (GWh)	Hydro (GWh)	Oil/Gas (GWh)	Nuclear (GWh)	Wind (GWh)	Solar (GWh)
ALBANIA (2015) www.instat.gov.al/med	0	5865.6	0	0	0	0
5	8920.65 <sup>16</sup>	<b>5820.52</b> ′DERK_izvjestaj_	<b>0</b> _o_radu_2014	<b>O</b> -b.pdf	1.08	1.269
CROATIA (2014) <sup>17</sup> http://www.iea.org/sta	<b>2368</b> itistics/statistic	9125 ssearch/report/?	<b>1131</b> <sup>2</sup> year=2013&co	<b>O</b> puntry=CROATIA	<b>730</b> &product=Elec	<b>35</b> tricityandHeat
KOSOVO (2014) http://www.iea.org/sta	<b>5270</b> itistics/statistic	151 ssearch/report/?	<b>15</b> ?country=KOSO	<b>O</b> VO&product=el	<b>O</b> ectricityandhea	<b>0</b> t&year=2013
MACEDONIA (2014) Energy balance 2014, Si http://www.iea.org/sta			5			<b>14</b> &year=2014
MONTENEGRO (2015) http://www.epcg.com/	<b>1411</b> o-nama/proizv	<b>1460</b> rodnja-i-elektroe	<b>O</b> energetski-bilar	<b>0</b> 15	0	0
SERBIA (2014) http://webrzs.stat.gov.rs	22,073 <sup>18</sup>	11,617	364	0	<b>O</b> ricne%20energ	<b>6</b> ije,%202014.pd
EU-28 (2014) <sup>19</sup> http://www.iea.org/sta	<b>841,408</b>	406,473	514,777	876,293	253,157	<b>97,781</b>

http://www.iea.org/statistics/statisticssearch/report/?country=EU28&product=Indicators&year=2014

16 According to the IEA, coal is 10,151 GWh in 2014.

17 In addition: Biofuels 165 GWh

- 18 IEA data for 2013 states 28,690 GWh the drop in 2014 is most likely due to the floods that hit Serbia and affected production at the Nikola Tesla and Kostolac A power plants in May and July 2014 respectively.
- 19 In addition: biofuels 148,533; waste 40,894; geothermal – 6,219; tide – 483; other sources – 4,663

## 4. Energy losses and theft (percentage) 2010 and 2015 (2014 for Croatia and the EU-28)

Country	Transmission losses (%)	Distr	ibution losses (%)
ALBANIA (2010) https://www.energy-communid			30.38
	0178/0633975ABBDE7B9CE053C92FA8C06338.PDF	pg.26	24.2
(2015) https://www.energy-communit /ENC_HOME/DOCS/4332	<b>2.0</b> ty.org/portal/page/portal 2394/3D790302C9FD5024E053C92FA8C0D492.pdf	pg. 27	31.3
BOSNIA AND HERZEG (2010)	iovina 1.81		13.45
https://www.energy-communit	ty.org/portal/page/portal 0178/0633975ABBDE7B9CE053C92FA8C06338.PDF		
(2015) https://www.energy-communit			10.4
	2394/3D790302C9FD5024E053C92FA8C0D492.pdf	pg. 57	~ -
/1146177/0633975AB4l https://www.energy-communit	<b>2.4</b> ty.org/portal/page/portal/ENC_HOME/DOCS F77B9CE053C92FA8C06338.PDF ty.org/portal/page/portal 0178/0633975ABBDE7B9CE053C92FA8C06338.PDF		8.7
(2014) https://www.hera.hr/hr/docs/H	<b>1.9</b> IERA_izvjesce_2014.pdf pg.35-36		8.14
KOSOVO (2010) https://www.energy-communit /ENC HOME/DOCS/114{	<b>2.38</b> ty.org/portal/page/portal 6177/0633975AB4F77B9CE053C92FA8C06338.PDF		41.2
(2015) https://www.energy-communit	1.29	pg. 67	31.8
MACEDONIA (2010)	2.52	pg. 07	17.7
https://www.energy-communit			.,.,
(2015) https://www.energy-communit /ENC_HOME/DOCS/4332	<b>1.7</b> ty.org/portal/page/portal 2394/3D790302C9FD5024E053C92FA8C0D492.pdf	pg. 83	14.8
MONTENEGRO (2010)	) 3.9		19.9
https://www.energy-communit /ENC_HOME/DOCS/1770	ty.org/portal/page/portal 0178/0633975ABBDE7B9CE053C92FA8C06338.PDF		
(2015) https://www.energy-communit	<b>3.8</b>		17.6
	2267/23B450386A075E64E053C92FA8C0F69F.PDF	pg.119	

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continued ->

SERBIA (2010)	2.57	16.3
https://www.energy-community.org/p /ENC_HOME/DOCS/1770178/06	oortal/page/portal 533975ABBDE7B9CE053C92FA8C06338.PDF	
(2015)	2.22	14.1
https://www.energy-community.org/p	oortal/page/portal	
/ENC_HOME/DOCS/4332394/31	D790302C9FD5024E053C92FA8C0D492.pdf	pg.135
EU-28 (2010)		6.27 (T&D)
http://www.iea.org/statistics/statistics	search/report/?country=EU28&product=ele	ectricityandheat&year=2010
(2014)		6.38 (T&D)
http://www.iea.org/statistics/statistics	search/report/?year=2014&country=EU288	kproduct=ElectricityandHeat

## 5. Energy intensity – the amount of energy required to make a unit of GDP – Total primary energy supply/GDP (toe/USD 1000)<sup>20</sup>

Country	2010	2011	2012	2013	2014
ALBANIA	0.18	<b>0.18</b>	<b>0.16</b>	<b>0.18</b>	<b>0.18</b>
http://www.iea.org/statis	tics/statisticssearc	h/report/?country	/=ALBANIA&produ	Ict=indicators&yea	ar=2014
BOSNIA AND HERZEGOVINA http://www.iea.org/statis	0.38	0.41	<b>0.39</b> /=BOSNIAHER7&p	0.37	<b>0.44</b> &vear=2013
CROATIA http://www.iea.org/statis	0.16	0.15	0.15	0.15	0.14
KOSOVO	<b>0.43</b>	<b>0.41</b>	<b>0.38</b>	<b>0.36</b>	<b>0.34</b>
http://www.iea.org/statis	tics/statisticsseare	h/report/?country	/=KOSOVO&produ	ct=indicators&yea	r=2014
MACEDONIA	0.31	<b>0.32</b>	<b>0.31</b>	<b>0.27</b>	<b>0.26</b>
http://www.iea.org/statis	tics/statisticssearc	h/report/?country:	/=FYROM&produc	t=indicators&year	=2014
MONTENEGRO	<b>0.28</b>	<b>0.26</b>	<b>0.26</b>	<b>0.23</b>	<b>0.22</b>
http://www.iea.org/statis	tics/statisticssear	h/report/?country	/=MONTENEGRO&	product=indicator	
SERBIA	<b>0.42</b> tics/statisticssearc	<b>0.43</b>	<b>0.39</b>	<b>0.39</b>	<b>0.35</b>
http://www.iea.org/statis		h/report/?country:	/=SERBIA&produc	t=indicators&year	=2014
EU	<b>0.1</b>	<b>0.1</b>	<b>0.1</b>	0.09	<b>0.09</b>
http://www.iea.org/statis	tics/statisticssearc	:h/report/?country	/=EU28&product=	indicators&year=	2014

20 It appears that the IEA has updated the previous years' data as well as adding 2014 so there are some small differences with the 2010–2013 data used for our June 2016 paper.

## 6. Transparency International corruption perceptions index: The perceived levels of public sector corruption in countries/territories around the world

Country	TI Corruption perceptions index 2010 <sup>21</sup>	TI Corruption perceptions index 2015 <sup>22</sup>
	Ranking relative to other countries (178) Score on a scale of 0 (highly	Ranking relative to other countries (168)
	corrupt) to 10 (very clean)	corrupt) to 100 (very clean)
DENMARK	1 of 178 (score 9.3)	1 of 168 (score 91)
http://www.transparency.org/cpi2010 http://www.transparency.org/cpi2015	/results ?gclid=CPPht_mqxM0CFegp0wod-0QNI	A#results-table
ALBANIA	87 of 178 (score 3.3)	88 of 168 (score 36)
http://www.transparency.org/cpi2010 http://www.transparency.org/cpi2015	/results ?gclid=CPPht_mqxM0CFegp0wod-0QNI	A#results-table
BOSNIA AND HERZEGOVIN		76 of 168 (score 38)
http://www.transparency.org/cpi2010 http://www.transparency.org/cpi2015	/results ?gclid=CPPht_mqxM0CFegp0wod-0QNI	A#results-table
CROATIA	62 of 178 (score 4.2)	50 of 168 (score 51)
http://www.transparency.org/cpi2010 http://www.transparency.org/cpi2015	/results ?gclid=CPPht_mqxM0CFegp0wod-0QNI	A#results-table
KOSOVO	110 of 178 (score 2.8)	103 of 168 (score 33)
http://www.transparency.org/cpi2010 http://www.transparency.org/cpi2015	/results ?gclid=CPPht_mqxM0CFegp0wod-0QNI	A#results-table
MACEDONIA	62 of 178 (score 4.1)	66 of 168 (score 42)
http://www.transparency.org/cpi2010 http://www.transparency.org/cpi2015	/results ?gclid=CPPht_mqxM0CFegp0wod-0QNI	A#results-table
MONTENEGRO	69 of 178 (score 3.7)	61 of 168 (score 44)
http://www.transparency.org/cpi2010 http://www.transparency.org/cpi2015	/results ?gclid=CPPht_mqxM0CFegp0wod-0QNI	A#results-table
SERBIA	78 of 178 (score 3.5)	71 of 168 (score 40)
http://www.transparency.org/cpi2010 http://www.transparency.org/cpi2015	/results ?gclid=CPPht_mqxM0CFegp0wod-0QNI	A#results-table
SOMALIA	178 of 178 (score 1.1)	168 of 168 (score 8)
http://www.transparency.org/cpi2010	/results ?gclid=CPPht_mqxM0CFegp0wod-0QNI	A#results-table

21 The Corruption Perceptions Index ranks countries/territories based on how corrupt their public sector is perceived to be. A country/territory's score indicates the perceived level of public sector corruption on a scale of 0–10, where 0 means that a country is perceived as highly corrupt and 10 means that a country is perceived as very clean. A country's rank indicates its position relative to the other countries/territories included in the index. The 2010 Corruption Perceptions Index includes 178 countries and territories.

22 A country or territory's score indicates the perceived level of public sector corruption on a scale of 0 (highly corrupt) to 100 (very clean). A country's rank indicates its position relative to the other countries in the index. The 2015 Corruption Perceptions Index includes 168 countries and territories.

## South East Europe Sustainable Energy Policy Programme

With approximately 25 million potential new EU citizens in South East Europe, who are all energy consumers, energy is perhaps one of the most complex issues which is facing the region. It has inter-related and far reaching impacts on several areas, including society, the economy and the environment, particularly as South East Europe faces the imminent deregulation of the market in a less than ideal governance environment.

The South East Europe Sustainable Energy Policy (SEE SEP) programme is designed to tackle these challenges. This is a multi-country and multi-year programme which has 17 CSO partners from across the region (Albania, Bosnia and Herzegovina, Croatia, Kosovo, Macedonia, Montenegro and Serbia) and the EU, with SEE Change Net as lead partner. It is financially supported by the European Commission.

The contribution of the SEE SEP project is to empower CSOs and citizens to better influence policy and practice towards a fairer, cleaner and safer energy future in SEE.

