

Summary of the Renewables 2016 Global Status Report

Introduction

Global consumption of energy in transport has increased by an average of 2% annually since 2000 and accounts for about 28% of overall energy consumption. Most of the total energy demand (around 60%) is for passenger transport, a majority of which is for passenger cars. Road transport also accounts for a majority (around 67%) of freight transport, with shipping (23%) and rail (4%) accounting for smaller shares.

The report highlights how liquid biofuels have become the most popular renewable energy source in the transport sector, accounting for an estimated 4% of global fuel for road transport in 2015. This seems to be a result of improved infrastructure and accessibility, particularly in Europe.

Policy Development

Moreover, there are now 66 countries with renewable energy transport obligations. Out of the whole, only 11 countries are new to the list, this meaning that they added policies between 2013 and 2015.

In 2015, nearly all policies adopted in the renewable transport sector were in support of promoting the production and use of biofuels. As of the end of 2015, biofuel blend mandates were in place in 34 countries, with 32 national-level mandates and 27 state/provincial mandates. Furthermore, new policy development now seems to focus on promoting second-generation, advanced biofuels rather than first-generation biofuels, even if most policies adopted to date focus on the latter.

Liquid Biofuels

In 2015, the country produced the most biodiesel was the United States, followed by Brazil and then Germany. Similarly, the country that produced the most fuel ethanol was the United States, followed by Brazil and then China, all of which reached record production levels. In total, ethanol production increased by 4% globally, but global production of biodiesel fell slightly due to constrained production in some Asian markets. It is thought that the blend mandates (mentioned above) sheltered demand for biofuels from falling fossil fuel prices.

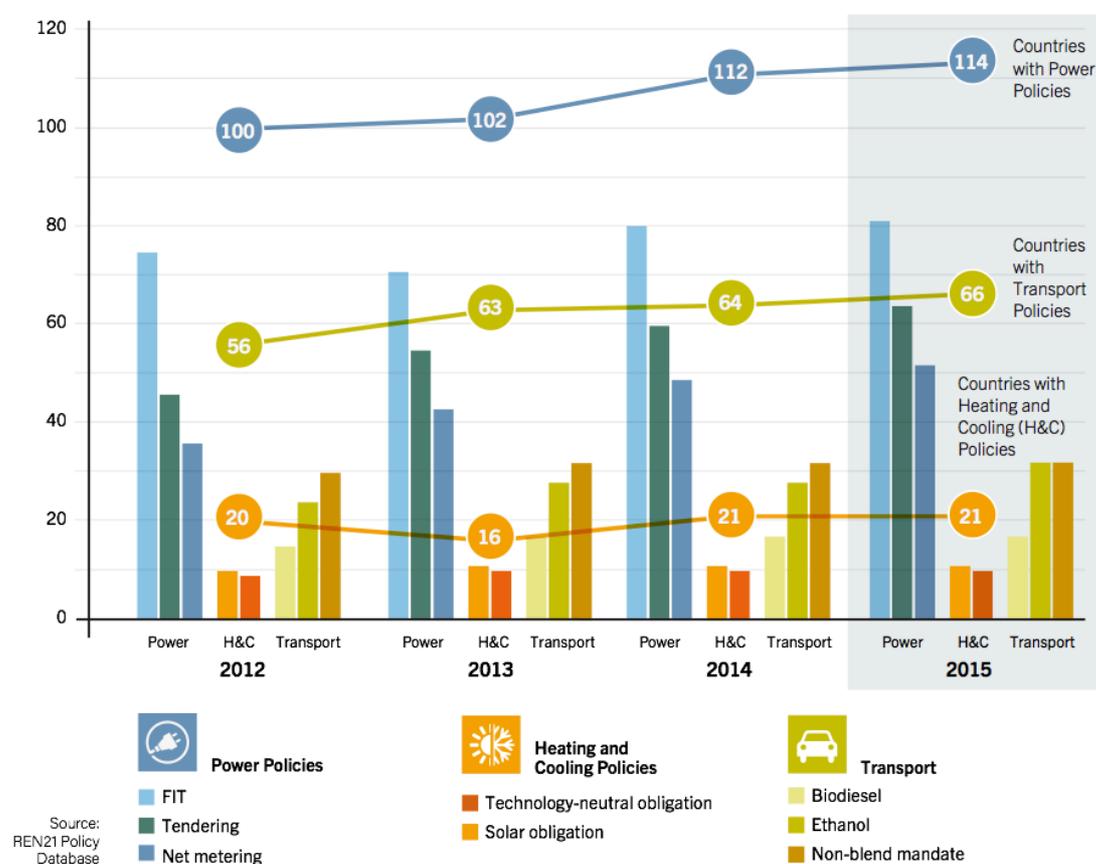
Additionally, in 2015, the liquid biofuel industry employed 1,678 thousand people worldwide. Brazil had the largest amount of people employed in this sector, with 821 thousand jobs; followed by the United States, with 277 thousand jobs; then China with 71 thousand jobs.

Criticisms

The report criticizes that current policy support for renewable energy in the transport sector is not enough to drive the transition away from fossil fuels, at least compared to the efforts that are currently being made in other sectors towards achieving this goal. It states the transport sector should attempt to push forward more policies that focus on the integration of renewable energy and electric vehicles, as well as the use of renewables in aviation, rail or shipping.

Annex:

Number of Renewable Energy Policies and of Countries with Renewable Energy Policies, by Type, 2012–2015



Note: Figure does not show all policy types in use. Countries are considered to have policies when at least one national or state/provincial-level policy is in place. Some transport policies include both biodiesel and ethanol; in this case, the policy is counted once in each category (biodiesel and ethanol).

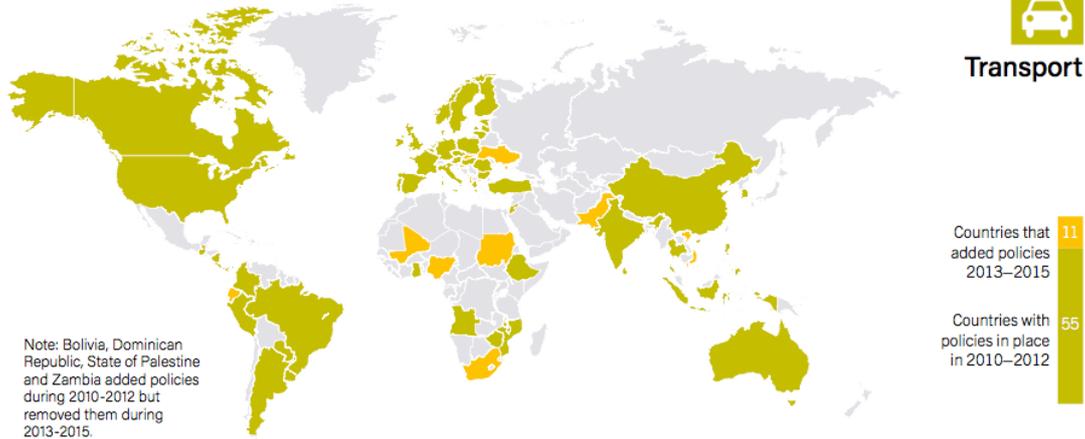
Annual investment / net capacity additions / biofuel production in 2015

	1	2	3	4	5
Investment in renewable power and fuels (not including hydro > 50 MW)	China	United States	Japan	United Kingdom	India
Investment in renewable power and fuels per unit GDP ¹	Mauritania	Honduras	Uruguay	Morocco	Jamaica
Geothermal power capacity	Turkey	United States	Mexico	Kenya	Germany/Japan
Hydropower capacity	China	Brazil	Turkey	India	Vietnam
Solar PV capacity	China	Japan	United States	United Kingdom	India
Concentrating solar thermal power (CSP) capacity ²	Morocco	South Africa	United States	–	–
Wind power capacity	China	United States	Germany	Brazil	India
Solar water heating capacity	China	Turkey	Brazil	India	United States
Biodiesel production	United States	Brazil	Germany	Argentina	France
Fuel ethanol production	United States	Brazil	China	Canada	Thailand

Estimated Direct and Indirect Jobs in Renewable Energy Worldwide, by Industry

	World	China	Brazil	United States	India	Japan	Bangladesh	European Union ⁱ		
								Germany	France	Rest of EU
THOUSAND JOBS										
☀️ Solar PV	2,772	1,652	4	194	103	377	127	38	21	84
🔥 Liquid biofuels	1,678	71	821 ^c	277 ⁱ	35	3		23	35	47
🌬️ Wind power	1,081	507	41	88	48	5	0.1	149	20	162
☀️ Solar heating / cooling	939	743	41 ^d	10	75	0.7		10	6	19
🔥 Solid biomass ^{a,g}	822	241		152 ^e	58			49	48	214
🔥 Biogas	382	209			85		9	48	4	14
💧 Hydropower (small) ^b	204	100	12	8	12		5	12	4	31
🌋 Geothermal energy ^d	160			35		2		17	31	55
☀️ CSP	14			4				0.7		5
Total	8,079^h	3,523	918	769	416	388	141	355^j	170	644^k

Countries with Renewable Energy Transport Obligations, 2010–2015



Note: Countries are considered to have policies when at least one national or state/provincial-level policy is in place.