

# Environment and Engineering

A composite image of Earth from space, showing the planet's curvature, blue oceans, and green continents. A large, detailed tree trunk is superimposed on the right side of the planet, appearing to grow from the surface. The moon is visible in the upper right corner of the black space background.

Remember,  
There is NO  
Planet 'B'.

*Tax Brackets for* BILL MOOSE CAFE

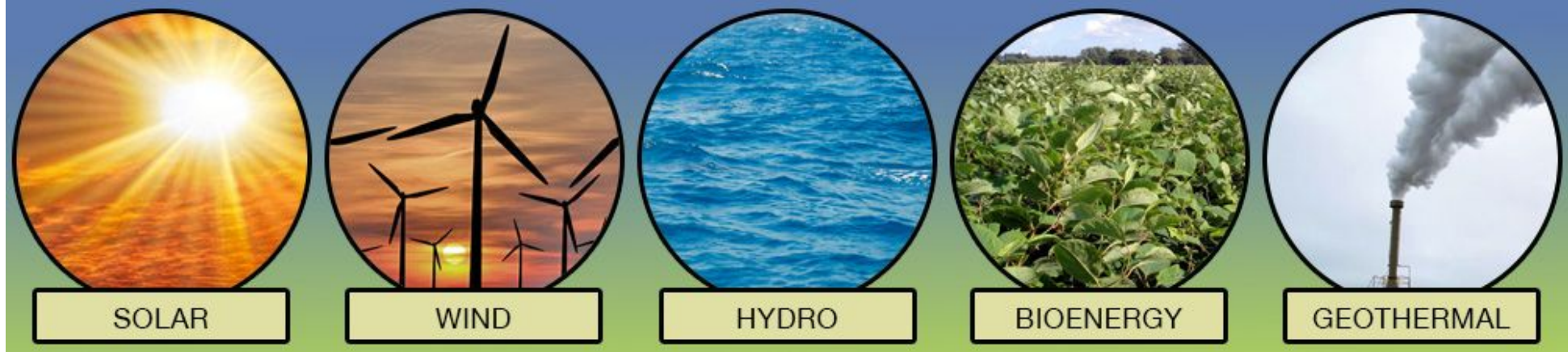
A photograph of a massive, ancient tree trunk with deeply textured, reddish-brown bark. A small child in a green shirt is climbing the trunk near the bottom. The background shows a dense forest of tall, thin trees under bright sunlight.

I DON'T WANT TO  
PROTECT THE ENVIRONMENT.  
I WANT TO CREATE A WORLD  
WHERE THE ENVIRONMENT  
DOESN'T NEED PROTECTING.



**Issues**













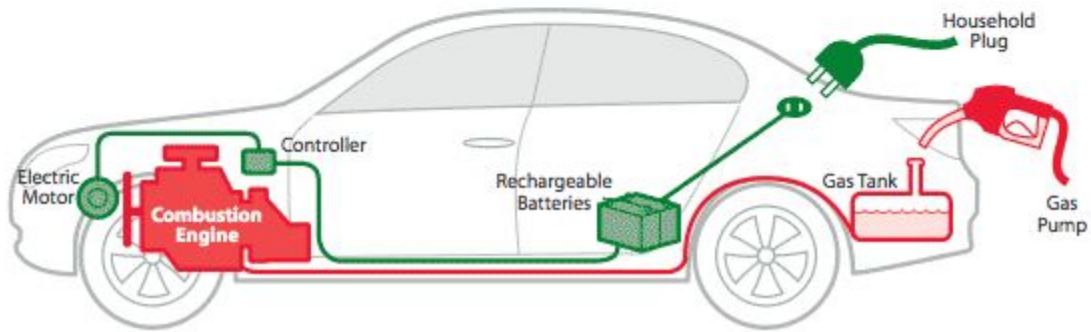


- **renewable energy**
- **Water and waste management**



# Electric vs. Gasoline

No Tailpipe Emissions 	 Greenhouse Gases/Pollution
Utility Company 	 OPEC
100+/- Mile Range 	 300+ Mile Range
Hours to Recharge 	 Minutes to Refuel
2 cents per mile 	 12 cents+ per mile



- Alternative transport
- Geoengineering





### Major index movements

Current rank and positions moved in 2015

India	3	▲ 3
Chile	9	▲ 3
Morocco	23	▲ 4
UK	11	▼ 4
Australia	13	▼ 3
Spain	25	▼ 4

# 437

### major multinationals are now applying internal carbon pricing

↑ 30% on 2014

(plus additional 583+ to incorporate within two years)



**\$161b** solar (including \$67b in small distributed capacity)



# \$41.8b

### labeled green bonds issued

46% proceeds to renewable energy  
20% proceeds to energy efficiency

**\$41b** in smart, digital and storage technologies

Record  
**\$329b**  
new clean energy investment

**\$109b** in wind (including \$23b offshore)

Top 15 markets (\$b)

### Wind and solar represented around

# 50%

of all new generating capacity added in 2015 (including conventional power)



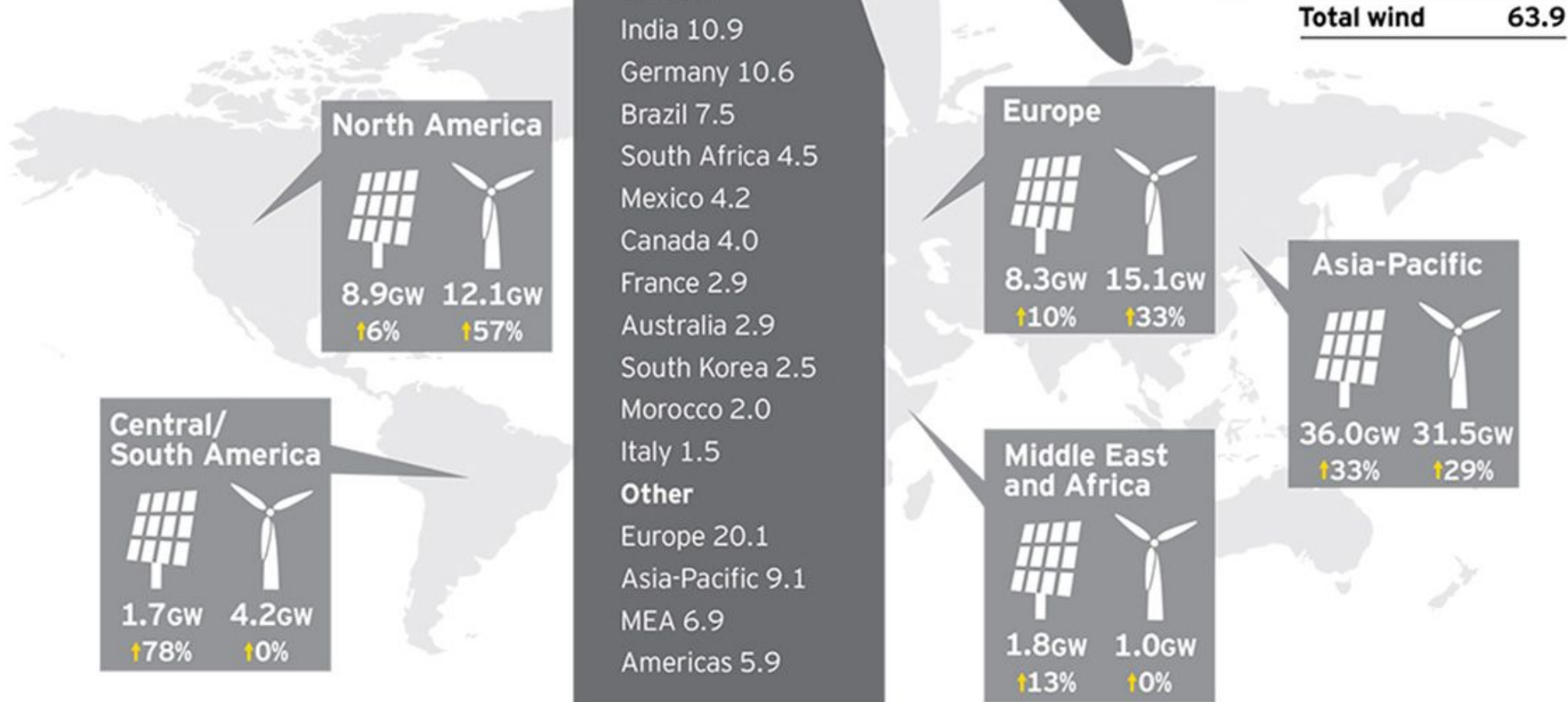
New 2015	GW
Utility PV	33.0
Commercial PV	15.2
Residential PV	8.3
CSP	0.3
<b>Total solar</b>	<b>56.8</b>

# 50%

of all new generating capacity added in 2015 (including conventional power)

## New wind and solar capacity installed in 2015 by region

(including % change on 2014 additions)



## Top 15 markets (\$b)

China	110.5
US	56.0
Japan	43.6
UK	23.4
India	10.9
Germany	10.6
Brazil	7.5
South Africa	4.5
Mexico	4.2
Canada	4.0
France	2.9
Australia	2.9
South Korea	2.5
Morocco	2.0
Italy	1.5
<b>Other</b>	
Europe	20.1
Asia-Pacific	9.1
MEA	6.9
Americas	5.9

109b in wind (including \$23b offshore)

New 2015 GW

Utility PV	33.0
Commercial PV	15.2
Residential PV	8.3
CSP	0.3
<b>Total solar</b>	<b>56.8</b>

Onshore	59.5
Offshore	4.4
<b>Total wind</b>	<b>63.9</b>

**The End**

**In the trees, in the breeze...  
seek Nature's peace and bliss.**