

Tapping Renewable Power Sources

As traditional energy resources dwindle, countries are starting to invest in more sustainable alternatives. Here's a look at the countries that consume the most power and their investments renewable energy in 2011.

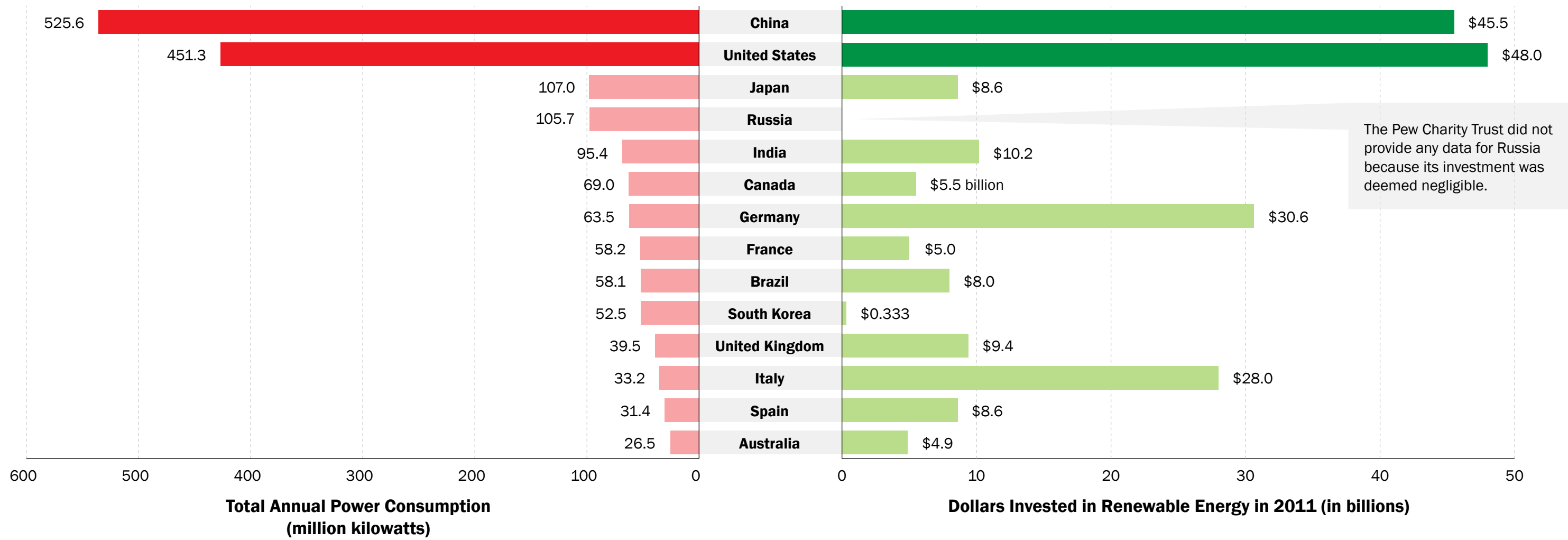


Who's Leading the Way? Who's Not Doing Enough?

It depends on which measurements you use. For example, see below how China and the United States, the two countries that consume the most power, stack up against others in four measurements.

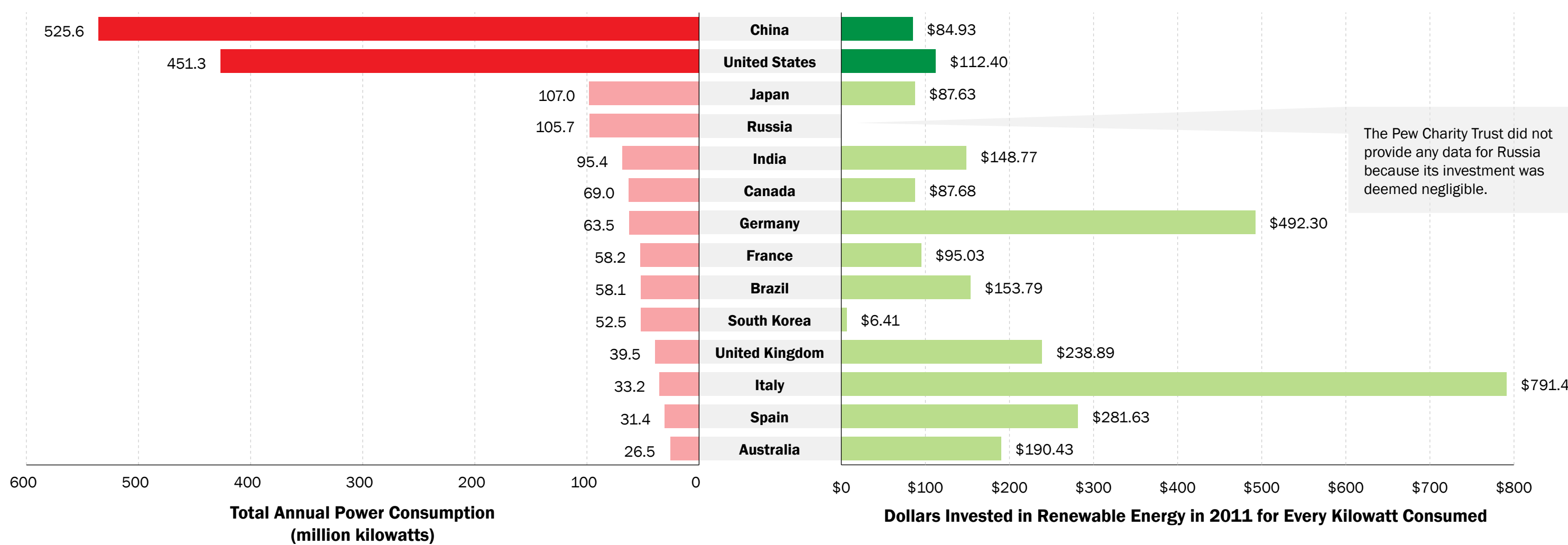
Total Dollars Invested

By this measure, China and the United States have a sizable lead over the other countries.



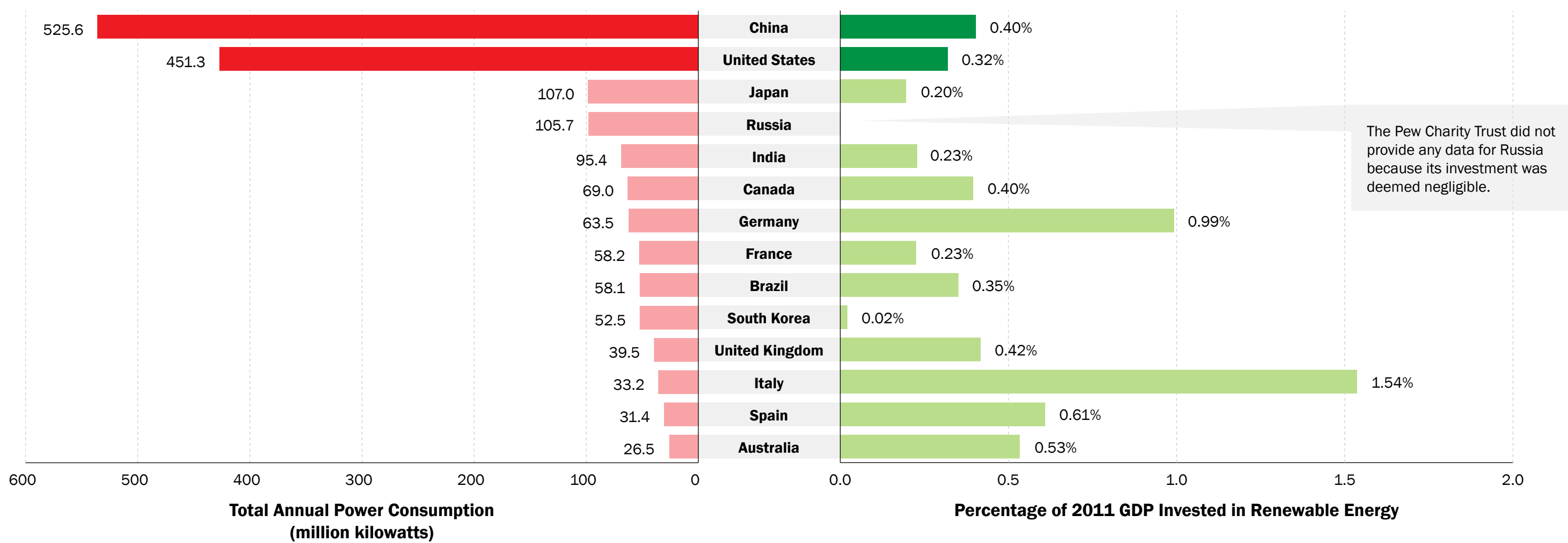
Dollars Invested for Every Kilowatt Consumed

A different picture emerges when power consumption is taken into consideration. By this measure, China and the U.S. lag far behind a number of other countries in investment.



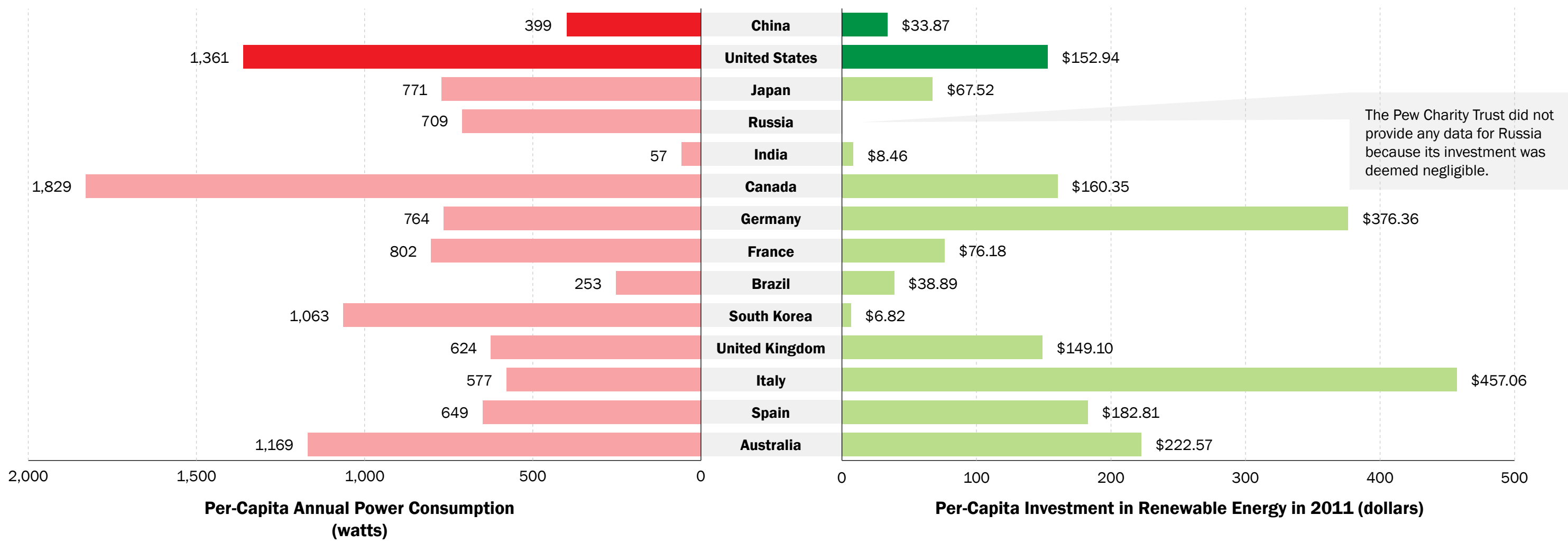
Percentage of 2011 National GDP Invested in Renewable Energy

The general pattern from the previous graph holds true by this measure as well, as smaller countries such as Italy and Germany outpace China and the U.S.



Per-Capita Dollars Invested

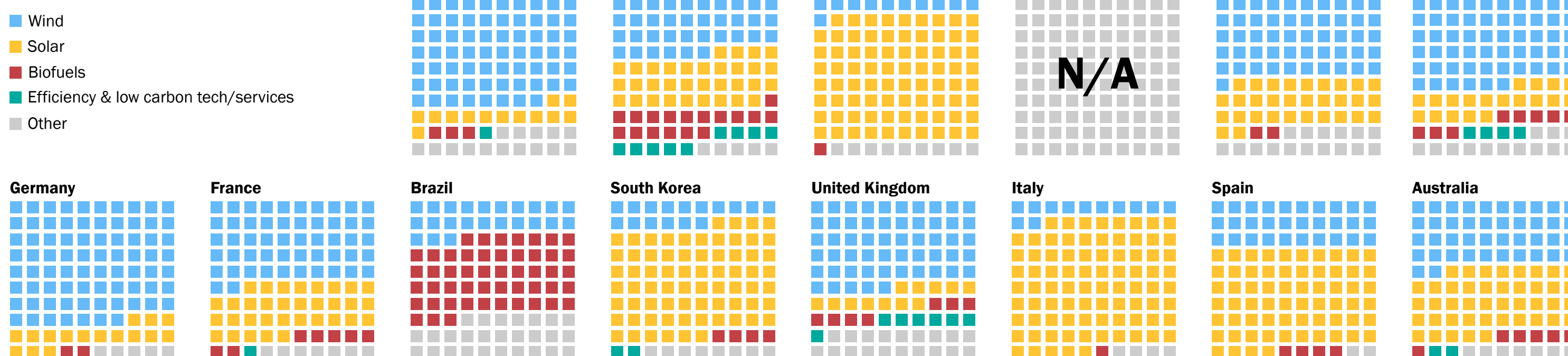
The picture changes again when you take each country's population into consideration. The investments by China and the U.S. still pale in comparison to those of a number of other nations, but the United States' investment looks more respectable than in the previous two graphs, and China's low per-capita investment is offset by its low per-capita consumption. On the other hand, Canada's investment looks less impressive in this graph when measured against its high per-capita consumption.



What Are They Investing In?

Distribution of each country's investment in renewable energy by sector

Each square = 1 percent of total investment



Renewable Capacity

Renewable-energy capacity that each country added in 2011 (in gigawatts)

China	133
United States	93
Germany	61
Spain	32
Italy	28
Japan	24
India	22.4
France	18
Brazil	15.3
United Kingdom	10.7
Canada	9.6
Australia	5.2
South Korea	1.7
Russia	N/A

How Much Power Is That?

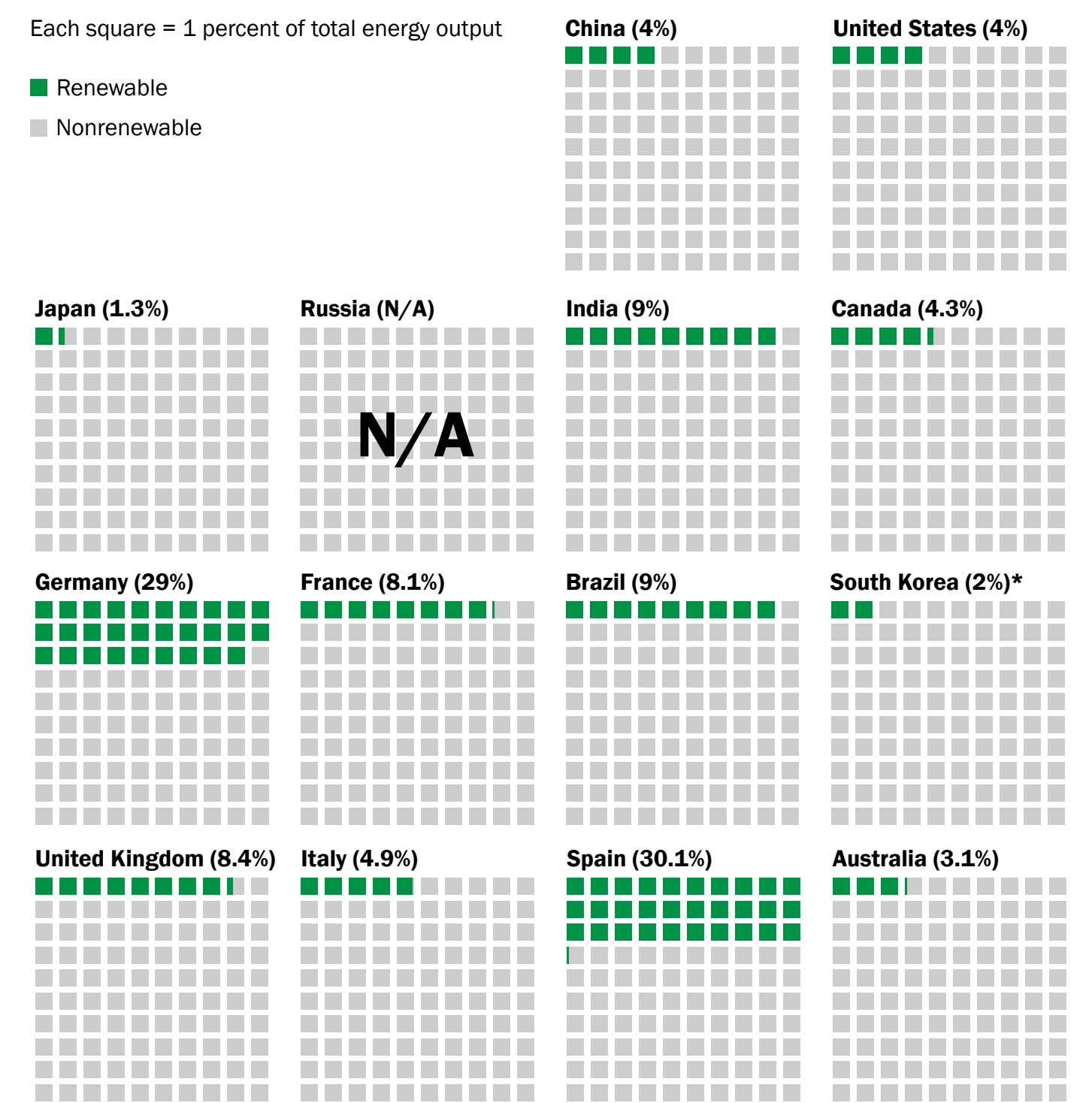
1 Gigawatt equals 1,000 Megawatts equals 1,000,000 Kilowatts equals 1,000,000,000 Watts

What Can You Do with A Gigawatt of Power?



How Much Is Renewable?

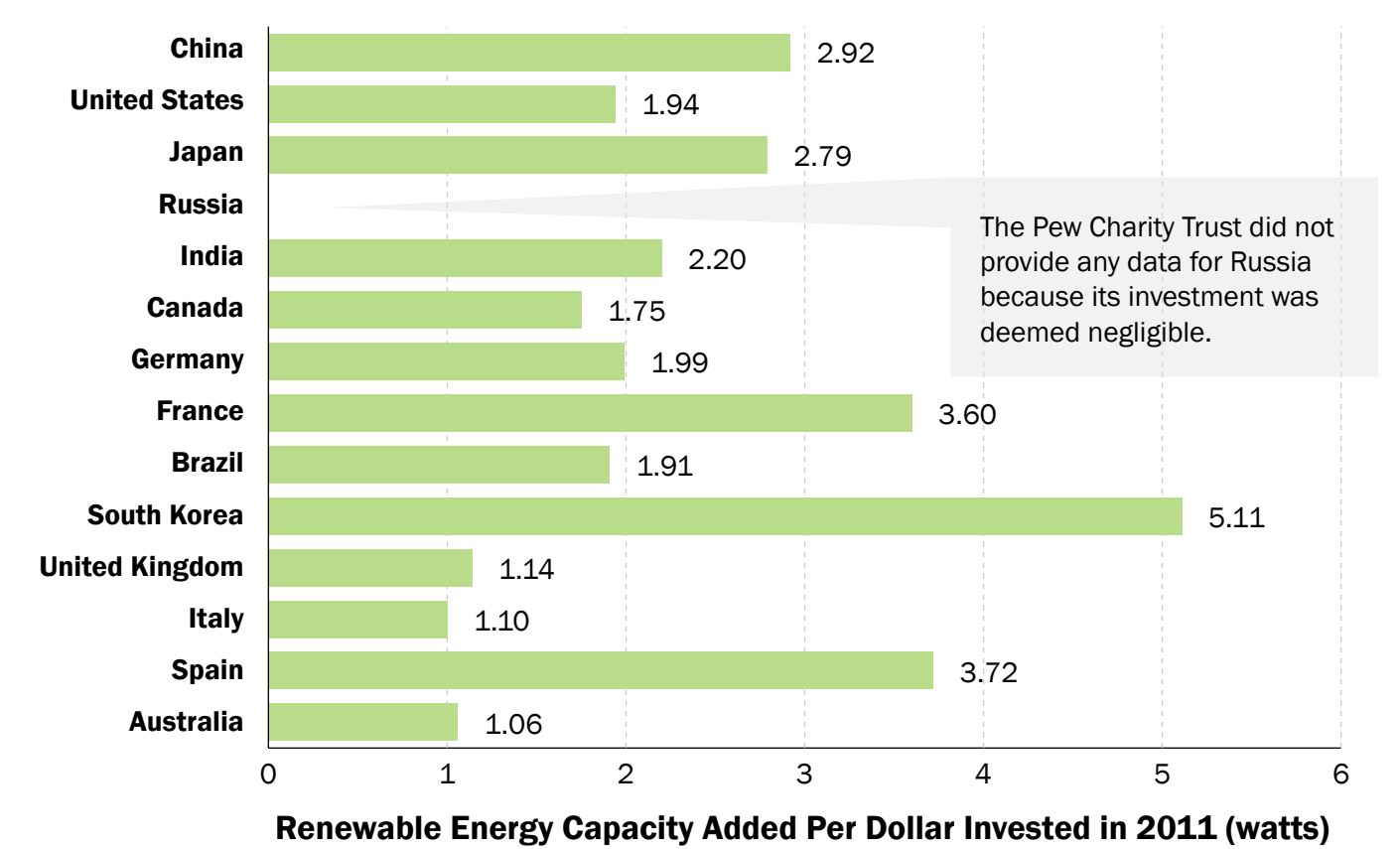
The percentage of each country's total energy production that comes from renewable resources



* - Based on reports that South Korea is planning to require its power companies to generate 2 percent of their energy from renewable sources in 2012

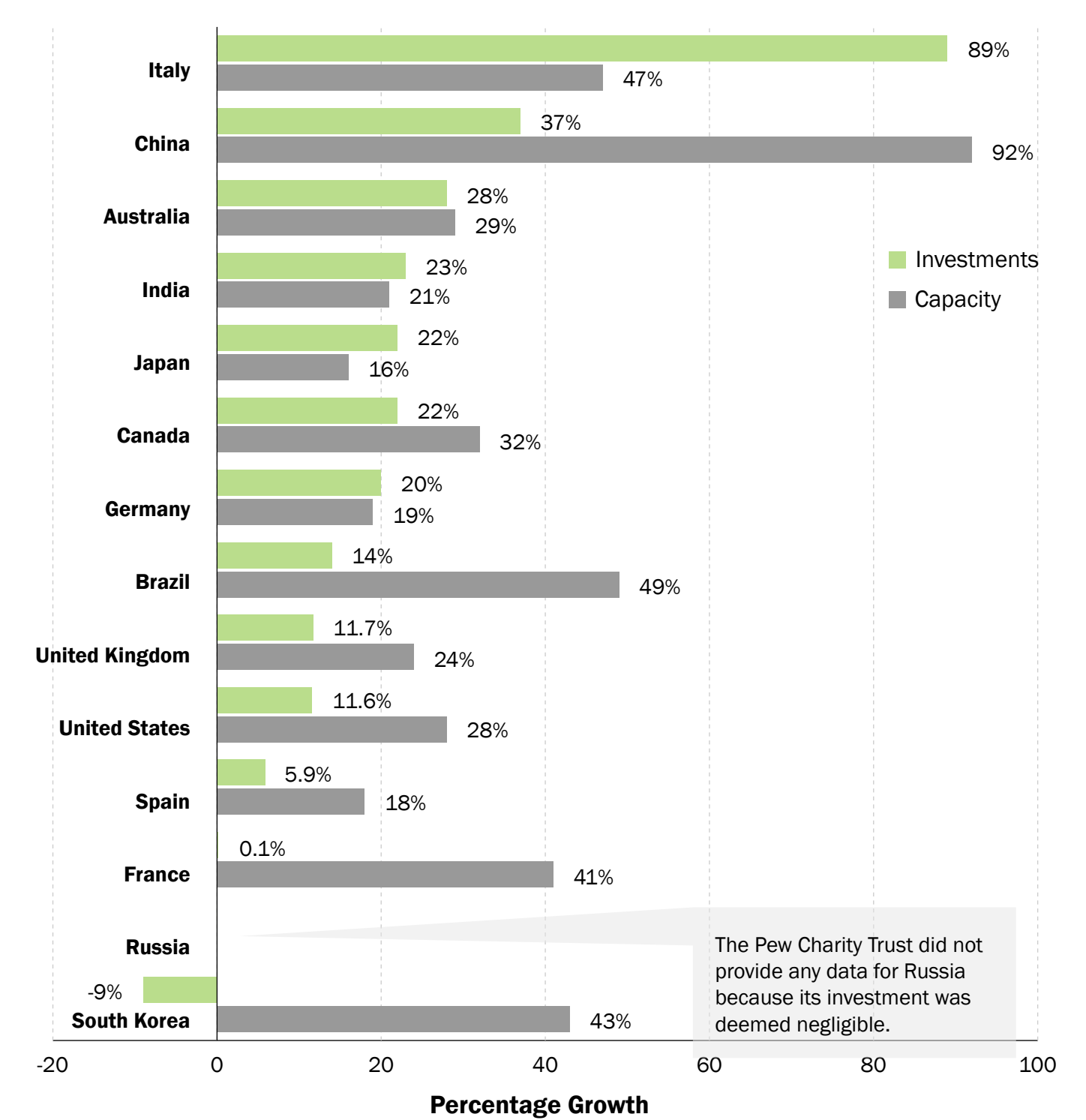
Who's Getting the Most Value?

A look at the renewable energy capacity added for every dollar invested in 2011. Note that South Korea, which made the smallest investment, got the biggest bang for its buck, whereas Italy, which made the biggest investment by several measures, saw the second lowest returns.



Investment and Capacity Trends

Five-year growth for renewable-energy investments and capacity (2007-2011)



Sources: Pew Charity Trust, CIA.gov, GOOD, energysavers.gov