



EMBARGOED UNTIL 10pm PDT, August 21, 2017

FOR IMMEDIATE RELEASE
August 22, 2017

Contact: Sage Welch, Cater Communications
415.453.0430

**Ninth annual Green Innovation Index finds top global emitters neck-in-neck
in clean economy rankings**

*California enters partnerships with leading global economies
as Washington steps back from climate leadership*

SAN FRANCISCO— France is the least carbon-intensive major economy in the world. China emits more greenhouse gases than any other nation, yet is also the world's third highest producer of renewable energy. And California has become the planet's most energy-productive major economy as it strives to alert allies that it will continue its climate leadership in the face of discouraging developments in Washington.

These are some of the findings in the ninth annual *[California Green Innovation Index](#)*, released by the nonpartisan, nonprofit group Next 10 and prepared by Beacon Economics. The *Index* ranks the globe's 50 highest greenhouse gas emitters on a range of economic and environmental indicators based on the latest available data, to reveal how countries compare in the lead-up to implementation of the Paris Climate Accord.

In the wake of President Trump's announced plans to pull the U.S. out of the Paris Accord, California has redoubled its efforts at international cooperation, signing agreements and signaling partnership with China, Germany, France and other nations and regions around the world. At the same time, California has moved up two spots to become the globe's 18th largest emitter of greenhouse gases (GHGs).

"California has experienced tremendous success implementing policies that incentivize innovation in business, technology and carbon reduction. So it's no wonder that the state has chosen to continue on this path, expanding sub-national partnerships with important economies including France, Germany and China as it faces pivotal next steps on climate policies," said F. Noel Perry, businessman and founder of [Next 10](#).

The *Index* finds that France, China and Germany – three countries active on climate change – rival California and the U.S. as a whole, across key indicators.



"Today's clean economy rankings could be a determiner for which nations might become the most prosperous in the world several decades from now as we shift toward low-carbon and carbon-free economies," said Adam Fowler, economist at Beacon Economics. "The *Green Innovation Index* finds California highly competitive with European economies and nations focusing on reducing emissions, such as China. Only time will tell if the U.S. decision to pull focus away from climate policy will hamper California's efforts to decouple GHG emissions from economic growth."

Highlights from the International scorecard section of the *Index* include:

France

France's new president Emmanuel Macron has called on Californian climate scientists to join him to "make our planet great again" as his country competes with other European economies on various clean tech indicators. While France is the least carbon-intensive major economy in the world, it ranks far lower in electricity generation from renewables than other European economies.

- France has maintained its spot as the least carbon-intensive major economy in the world according to 2014 data, the latest available, and is the world's 20th largest greenhouse gas emitter.
- The country leads Europe as one of the most emissions-efficient developed economies in the world, ranking 18th on emissions per capita, where a number one ranking is the least emissions per capita.
- However, the nation ranks as the sixth most energy productive economy in the world, outpaced by Germany, Japan, the UK, Italy and California.
- France was the 12th largest generator of renewable electricity in the world in 2014, but ranks 18th globally in a measure of the share of electricity generated from renewable sources, far behind other European countries including Spain, Germany, Italy and the United Kingdom, which took the four top spots.

China

In June, Gov. Jerry Brown traveled to China in a trip focused on promoting clean energy. While there, Gov. Brown [signed a climate agreement](#) to boost clean technology. China has also looked to California's model in the development of clean technology policies for electric vehicles and cap-and-trade programs.

Though China is said to be stepping up as an [unlikely leader](#) on climate change policy, the country continues to emit more greenhouse gases than any other nation in the world. The United States trails as a distant second, emitting 60 percent of the CO₂ that China does. However, China ranks 24th on GHG emissions per capita, 10



spots ahead of California and 20 spots ahead of the United States, and is one of the world's largest producers of renewable energy.

- China is the third largest generator of renewable energy in the world – behind the European Union and the United States. But China's share of electricity from renewables falls in the middle of the pack, ranking 25th.
- China trails in a global ranking of energy productivity, ranking 39th while California and other European economies hold the top spots. However, China far surpasses many European and the U.S. and California economies in energy use per capita, ranking 18th.
- China is one of the most carbon-intensive economies of the top 50 emitters, ranking 41st in 2014 in a measure of the ratio between CO₂ emitted and GDP produced (MTCO2e/US\$10,000 GDP). The United States, by contrast, ranks 17th and California holds the number 2 spot.

Germany

In the wake of the Trump administration's decision to pull out of the Paris agreement, German Chancellor Angela Merkel and California Governor Jerry Brown have agreed to continue to support the work of the "Under 2 Coalition," which includes cities, regional governments and states. Gov. Brown has stated that California and Germany, Europe's biggest economy, will continue to work together to unite world leaders on the fight against climate change.

The *Green Innovation Index* finds the two economies highly competitive in clean economic rankings.

- Germany was the 7th largest emitter of CO₂, according to 2014 data, the same ranking it held in 2013. While it ranks well below the United States, this makes Germany the highest emitting country in Europe, compared to Italy at 19th and France at 20th.
- Germany is the fourth largest renewable electricity generator, ranking behind only the European Union, the United States and China.
- Germany tracks closely with California on both electricity per capita and GHG emissions per capita. Germany ranks 37th in electricity per capita, compared to California's 38th. California and Germany hold the 34th and 33rd spots for GHG emissions per capita, respectively.
- Germany ranks fifth in energy productivity, trailing California, Italy, the UK and Japan.

The United States



America's decision to withdraw from the Paris Climate Accord was a blow to the country's global standing, but it's too early to tell what the impact will be on the nation's clean energy economy. Much of that will depend how aggressively states, cities, companies and communities step up on climate action. The country remains a leader in renewable electricity generation, ranking second, behind the EU. Other rankings range from middle of the pack to trailing, including:

- The U.S. is the world's second largest emitter, behind China, and ranks 44th in GHG emissions per capita.
- The U.S. ranks 16th in share of electricity from renewables, behind 9 European countries, California, and the EU as a whole.
- The U.S. comes in at the bottom of electricity use per capita, ranking 46th on the list of 50, signifying high levels of electricity consumption. The four countries below the U.S. are Canada, Qatar, UAE and Kuwait.
- The country ranks 18th in energy productivity – a category where California tops the list.

Taken together, the data tells a story of nations and subnational economies around the world vying to capitalize on the clean energy economy and reduce emissions, an imperative to meeting the Paris Climate Accord and ensuring a safe climate future.

###

About Next 10

Next 10 is an independent, nonpartisan, nonprofit organization that educates, engages and empowers Californians to improve the state's future. With a focus on the intersection of the economy, the environment, and quality of life, Next 10 employs research from leading experts on complex state issues and creates a portfolio of nonpartisan educational materials to foster a deeper understanding of the critical issues affecting our state.

About Beacon Economics

Beacon Economics is one of California's leading economic research and consulting firms, specializing in economic and revenue forecasting, economic impact analysis, economic policy analysis, and regional economic analysis. Known for delivering independent and rigorous research, the firm provides its clients with economic trend and data analysis that strengthens strategic decision-making about investment, revenue, and policy.