

# London Trip Report

March 28 - 30, 2017

## ***Executive Summary***

*The business sentiment for Europe is very positive and growth is picking up across almost everywhere*

*Global growth has synchronized and appears to be steady on the one side, political risks have risen on the other side*

*The new government in France is mandated to revitalize the economy and create jobs mainly for the younger population where unemployment rates are the highest*

*The global debt problem is unsolved and the initiatives in the USA and France will not result in lower government debt any time soon*

*Opportunities in the financial and energy sectors arise in Europe with a broader recovery and an increased environmental awareness*

*The Fed will keep hiking their short-term interest rates and Europe will need to taper their bond buying program in 2018*

*Short-term USD strength is still possible, but buying EUR in weakness will be profitable medium-term*

## Energy Megatrends

We met with a few interesting energy funds on this trip. The changes in this sector are driven by regulations and technological progress. Exposure in funds, such as Alvento, Lansdowne Energy Dynamics or Northlander could be very attractive as they will be able to benefit from their long-term experience and specialised skills in energy. Below the major trends released by Bloomberg New Energy Finance (BNEF).

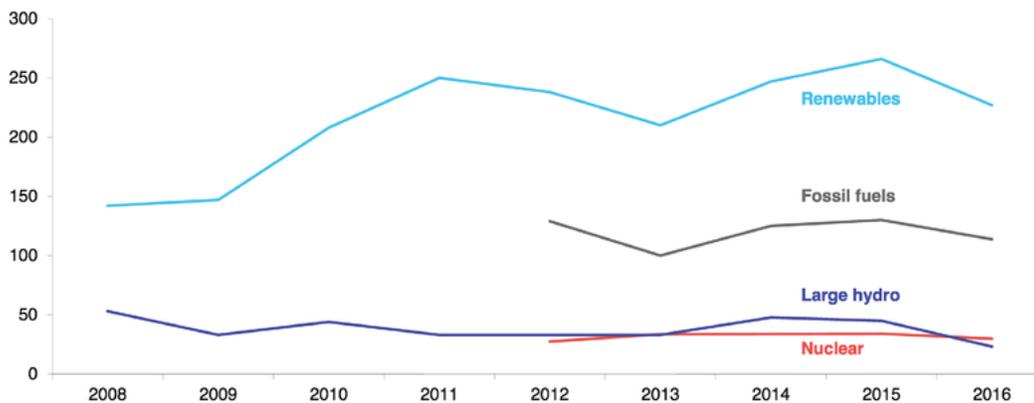
Clean energy installations broke new records worldwide in 2016, and wind and solar are seeing twice as much funding as fossil fuels. That's largely because prices continue to fall. Solar power, for the first time, is becoming the cheapest form of new electricity in the world.

Wind and solar are about to become unstoppable, natural gas and oil production are approaching their peak, and electric cars and batteries for the grid are waiting to take over.

Here's what's shaping the future of power markets:

### Renewables Are Beating Fossil Fuels Two to One

Investment in power capacity (\$ billion/year)

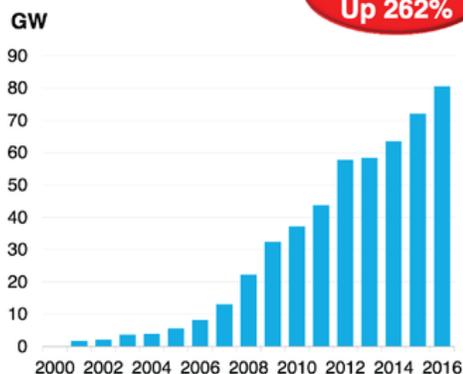


Government subsidies have helped wind and solar get a foothold in global power markets, but economies of scale are the true driver of falling prices. Unsubsidized wind and solar are beginning to outcompete coal and natural gas in an ever-widening circle of countries.

### Renewables Have Become Unstoppable

#### U.S. Wind Installations

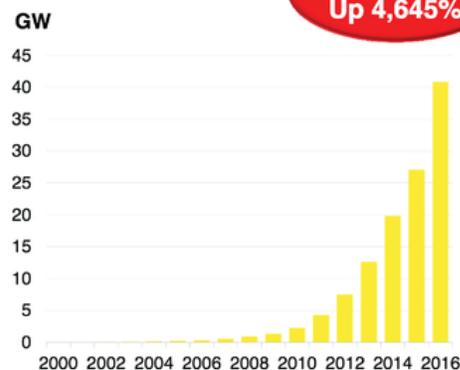
Cumulative



2008-16  
Up 262%

#### U.S. Solar Installations

Cumulative

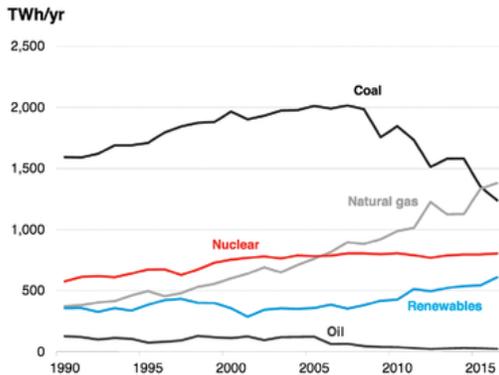


2008-16  
Up 4,645%

Electricity demand in the U.S. has been declining, largely due to increased energy efficiency in everything from light bulbs and TVs to heavy manufacturing. In such an environment, the most expensive fuel loses, and increasingly that's coal.

## Coal Is Getting Crushed—Mostly By Cheap Gas

Generation by source



Change in generation 2007-16

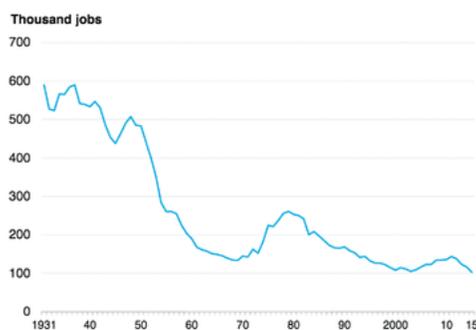


With renewables entering the mix, even the fossil-fuel plants still in operation are being used less often. When the wind is blowing and the sun is shining, the marginal cost of that electricity is essentially free, and free energy wins every time. That also means declining profits for fuel-burning power plants.

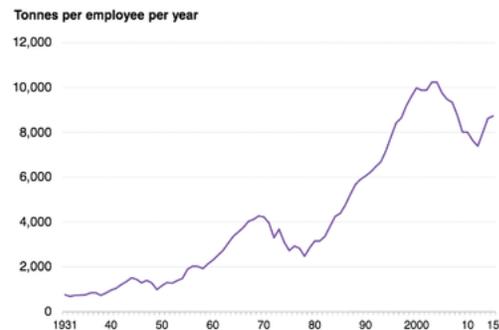
The bad news for coal miners gets even worse. U.S. mining equipment has gotten bigger and way more efficient. Perhaps the biggest killer of coal jobs is improved mining equipment. The state of California now employs more people in the solar industry than the entire country employs for coal.

## Coal Jobs Are Being Replaced By Machines

Jobs



Productivity

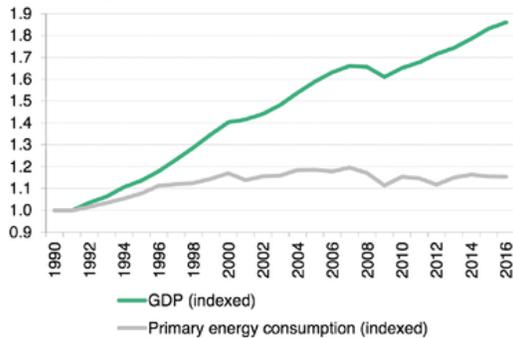


Historically, economic growth has gone hand-in-hand with increased energy consumption. Advances in efficiency are changing that, too. Call it the Great Decoupling.

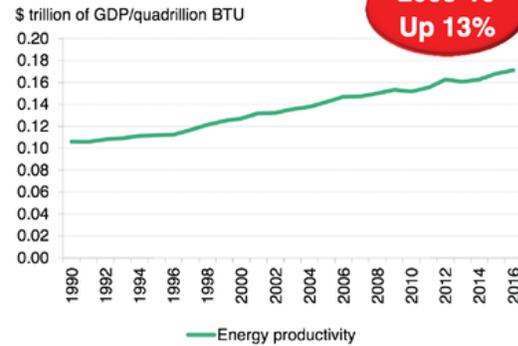
The sharpest change in U.S. energy has been driven by advances in oil and gas drilling through shale rock. This type of horizontal drilling has also seen enormous improvements in efficiency, deploying fewer workers, fewer rigs, and drilling fewer wells to produce ever-more fossil fuels. The natural gas that comes out of these wells is practically free.

## Less Energy Is Needed to Produce More Money

**US GDP and primary energy consumption**

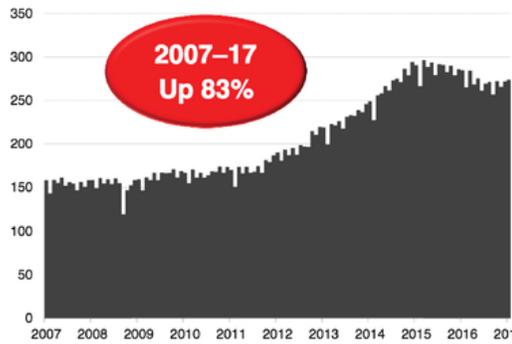


**US energy productivity**

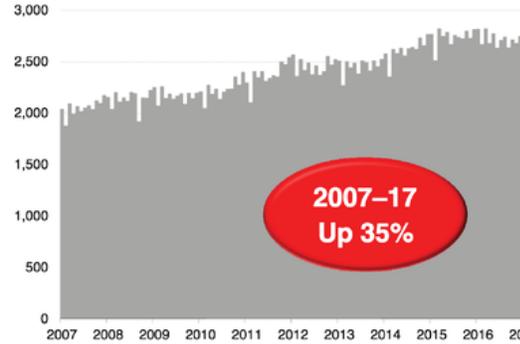


## U.S. Oil and Gas Production Have Soared

**US monthly oil production ('000 bbl/month)**

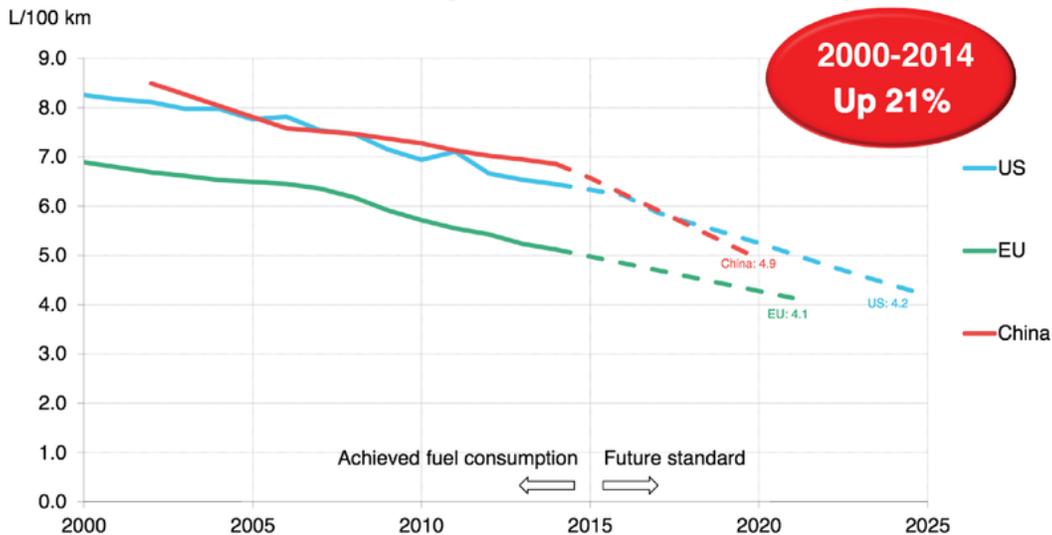


**US monthly natural gas production (mcf)**



But demand for that oil and gas may not be long for this world. The world's cars are getting wildly more efficient.

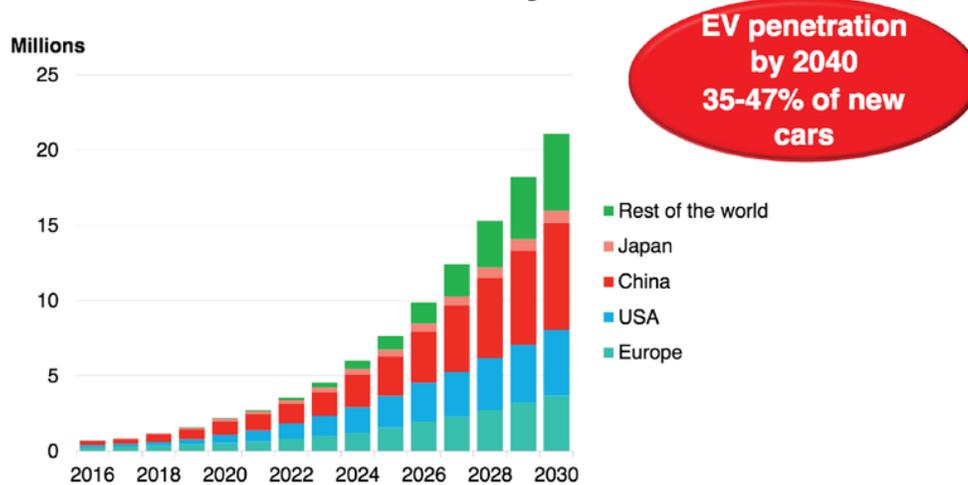
## Auto Fuel Economy Keeps Improving



And the biggest threat to oil markets - electric cars - is just getting started. Joel Couse, the chief economist for Total SA, told the BNEF conference that EVs will make up 15 percent to 30 percent of new vehicles by 2030, after which fuel “demand will flatten out,” Couse said. “Maybe even decline.”

Couse’s projection for electric cars is the highest yet by a major oil company and exceeds BNEF’s own forecast.

## Electric Cars Are Ready to Launch



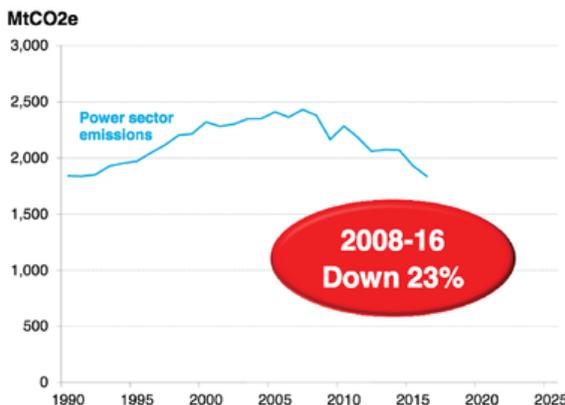
The outlook for electric cars - and for battery-backed wind and solar - is improving because the price of lithium-ion packs continues to tumble.

The shift to cleaner energy is ridding the air of local pollutants that cause heart disease, asthma, and cancer, as well as the greenhouse gas emissions responsible for climate change. Trump’s Energy Secretary, Rick Perry, told the BNEF Summit that the U.S. should remain in the Paris climate accord, but should renegotiate it to draw out stronger pledges from European countries.

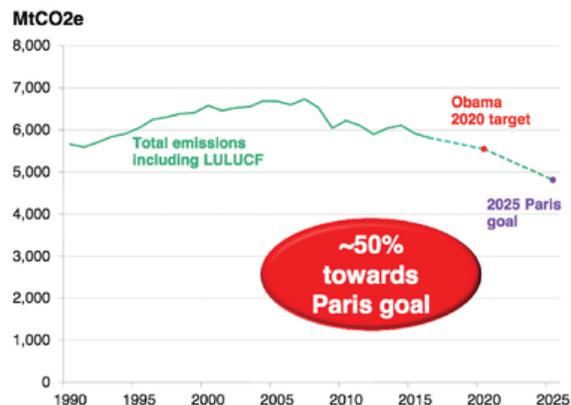
Meeting U.S. commitments made under President Barack Obama shouldn’t be too difficult. America is already half way to meeting its 2025 goal.

## U.S. Emissions Have Fallen Dramatically

### US power sector emissions



### US total emissions



And cleaning up emissions hasn't exactly burdened consumers. Personal expenditures on electricity and fuels is down significantly.

## Americans Are Spending Much Less on Energy

**Electricity & gas**



**Gasoline**

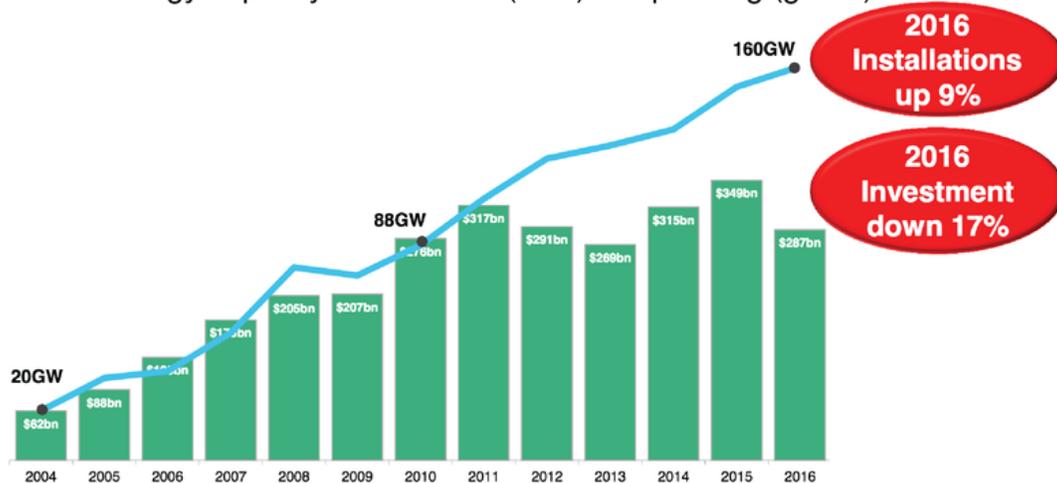


Just meeting the Paris goals for emissions reductions doesn't go far enough to fend off the catastrophe scientists anticipate from climate change. Eventually the economy will need to decarbonize completely—in energy, agriculture, construction, manufacturing, and land use. And solutions for some of the trickiest and most expensive parts of that equation are still decades away.

Fortunately, global energy markets at least seem headed in a cleaner direction.

## World Gets More While Spending Less

Clean energy capacity installations (blue) vs spending (green)



All Sources: Bloomberg New Energy Finance