

Watt's Happening? #138

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Energy: good news, bad news



This is the large solar array recently installed by Peace Energy Co-op on the Hudson's Hope District Shop, producing all the power this building needs for the next 50 years. We can easily power the world many times over with the inexpensive, clean energies from sun and wind. Why aren't we doing it? Well, we are, sort of . . .

The global energy scene is changing quickly. Depending on where you look, there is both good and not-so-good news, especially when it comes to climate change.

IEA REPORT

The International Energy Agency's World Energy Outlook 2017 report, released late last year, shows how even though investment in clean energies (mostly solar and wind) are continuing to outpace investment in

fossil fuels, it is still not enough to avoid the most severe impacts of climate change.

"Solar is forging ahead in global power markets as it becomes the cheapest source of electricity generation in many places, including China and India, but it is far too early to write the obituary of oil."

Over the next few decades, the US will become the undisputed leader for oil and gas production, including the world's largest LNG exporter, "challenging incumbent

suppliers (ed: like Canada) and provoking a major reorientation of global trade flows."

Driven by increased demand for shipping, aviation and petrochemicals, global oil demand is expected to slowly increase to about 2040. Carbon emissions, according to the report, will also continue to slowly increase, which is bad news for the climate. And for life as we know it.

The report makes it clear that these are projections, not inevitabilities. It is still possible to

meet the Paris climate goals, stabilize climate, reduce air pollution and meet increasing energy demand if investment shifts more rapidly to renewable energy sources.

Are you listening Canada?

DEFYING TRUMP

A growing number of US states, cities and businesses are joining together to make “America’s Pledge” to combat global warming in direct opposition to the Trump administration’s climate policies.

More than 20 US states (including California, Connecticut, Massachusetts, Minnesota, New Hampshire, New York State, Oregon, Rhode Island, Vermont and Washington), more than 50 of the largest cities and 60 of the largest businesses have committed to strong emission reduction goals.

Added together, they have the economic power of some \$10 trillion, which places them behind only the US as a whole (\$18 trillion) and China (\$11 trillion) in terms of gross domestic product.

This group has now joined the Under2 Coalition, which brings together 39 countries, committed to direct action in support of the Paris Climate Agreement’s goal of keeping global warming below 2 degrees C. This group now represents over 1.2 billion people and 39% of the global economy (\$US 29 trillion).

UK ENTERS TOP TEN

Putting a price on carbon actually works to reduce emissions without destroying the economy. The UK is living proof.

Britain’s electricity is now officially among the cleanest in the world. Their carbon emissions from electricity went down by 47% between 2012 and 2016, more than twice as fast as any other major economy.

Researchers at the Imperial College of London attribute the UK government’s high price on carbon dioxide emissions (about \$40 Can. per tonne) as the major driver for their rapid uptake of renewables and shift away from coal.

The researches compare the UK’s success in driving down carbon emissions with the Netherlands, where coal-fired electricity output has actually risen by 40% over the same period because generators only have to pay the much lower European carbon price of just \$8.50 Can. per tonne.

POWERWALLS IN NOVA SCOTIA

Nova Scotia Power has launched a pilot project to learn more about how battery storage can help it deliver “cleaner, affordable and more reliable power to Nova Scotians.”

The pilot has given 10 homes in Elmsdale residential energy storage batteries (Tesla Powerwalls) and one large grid-sized battery (Tesla Powerpack) at a nearby substation.

These batteries are connected to an electrical line powered in part by the nearby Hardwood Lands wind farm.

Sensors will gather data on local system activity and feed it to Nova Scotia Power’s control centre for analysis. The 10 homes will get to keep their Powerwalls.

“Solar-plus-storage” is expected to reach cost and reliability parity with all other sources of grid electricity by 2020 according to the US National Renewable Energy Laboratory.

The fate of the world is not written in stone. It’s under our control. As philosopher/comedian Bill Hicks so perfectly put it: “We can change it any time we want. It’s only a choice between fear and love.”



This solar array, another Peace Energy Cooperative project, powers the Hudson’s Hope sewage treatment facility with clean, low-cost solar electricity.