

Letter from America: Biden's \$2trn infrastructure proposal focused on energy

Fereidoon Sioshansi, fsioshansi@menloenergy.com

This article originally appeared in May's edition of *EEnergy Informer*, a newsletter produced by Fereidoon Sioshansi of [Menlo Energy Economics](#) and editor of *Behind and Beyond the Meter: Digitalisation, Aggregation, Optimisation, Monetisation*.

Having passed a \$1.9trn bill to boost the US economy – with no Republican support – Biden is now focused on upgrading America's dilapidated and long neglected infrastructure. It is the first thing international visitors notice upon landing at many a US airport before they get on the roads with potholes, trains that are long past their prime and bridges that appear on their last leg. America's infrastructure is in dire shape.

Unveiling his vision at a union hall in Pittsburgh in late March 2021, Biden said: "If we act now, in 50 years people are going to look back and say: 'This was the moment that America won the future.'"

The \$2trn plan includes \$174bn to shift away from petrol powered cars to electric vehicles (EVs), \$100bn to update the country's outdated electric transmission grid to make it more resilient to climate disasters while introducing a mandatory Energy Efficiency and Clean Electricity Standard to transition the US electricity sector to 100% clean electricity by 2035 and much more.

While many Republicans object that it is too ambitious and too green, Alexandria Ocasio-Cortez, a Democratic congresswoman from New York, said: "This is not nearly enough." Clearly Biden has a tough job convincing those on the extreme left and right of both parties to agree. Moreover, he plans to pay for at least half of the bill by raising corporate taxes, not favoured by the Republicans.

To placate the vocal coal lobby and the oil and gas sector, the plan includes \$16bn to employ workers to cap oil and gas wells and reclaim old coal mines to curb methane leaks, a potent greenhouse gas.

Additionally, the Biden administration has a number of other targeted proposals including \$128mn in funding for the Department of Energy (DOE) to reduce the cost of solar generated power to 3 cents/kWh by 2025 and 2 by 2030 – from the current average of 4.6.

The new Secretary of Energy, Jennifer Granholm, said: "In many parts of the country, solar is already cheaper than coal and other fossil fuels, and with more innovation we can cut the cost again by more than half within the decade." The DOE expects solar power to account for 30-50% of the country's electricity supply by 2035.

Another sign of the change came from a joint announcement by the Secretaries of Energy, Interior and Commerce at a White House roundtable with a goal to deploy 30GW of offshore wind by 2030.

An equally dramatic change was an announcement in late Feb 2021 by the Biden administration to set the social cost carbon at \$51 per ton – an important metric used by the federal agencies in conducting regulatory and environmental decisions – a significant rise from the Trump administration's \$8 per ton.

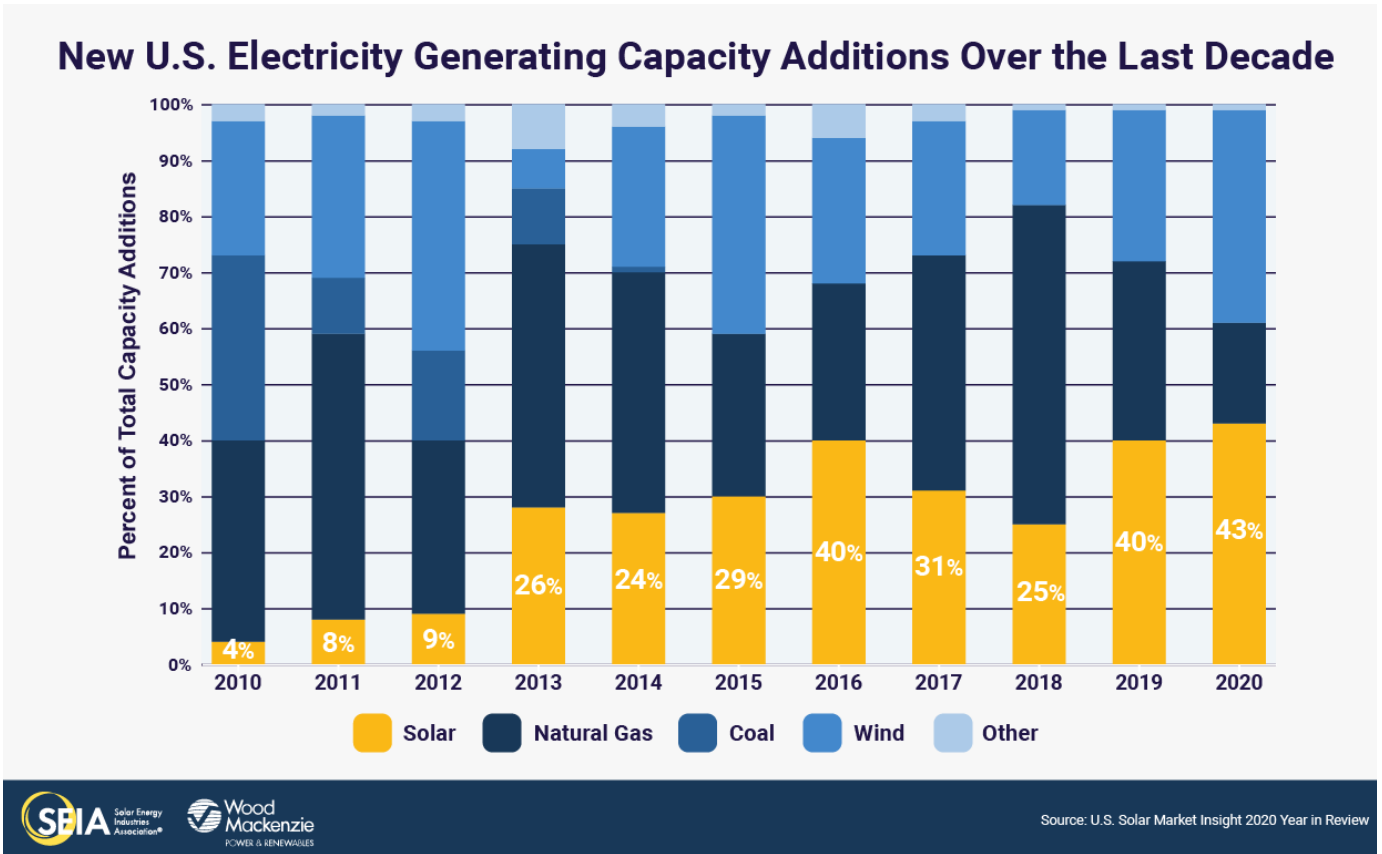
Unsurprisingly, not everyone is on board Biden's green and renewable train. On 12 March, states filed a lawsuit in the US District Court for the Eastern District of Missouri challenging the Biden administration's move. They argue that Biden does not consider the social benefits of consuming oil and gas, which they claim could be as high as \$5mn per ton.

Biden is hopeful that the significant net increase in green jobs created by the various elements of the proposal will generate sufficient support for the bill to pass. It won't be easy.

US solar booming

The US solar industry had another record year in 2020 installing 19.2GW of capacity, 43% above 2019, according to the [US Solar Market Insight 2020 Year in Review](#), released in mid-March by Solar Energy Industry Association (SEIA), a lobbying group, and Wood Mackenzie, a consultancy (Figure 1). For the second year in a row, solar led all technologies in new generating capacity added. Moreover, with President

Figure 1: US solar grew 43% in 2020



Source: US Solar Market Insight 2020 Year in Review

Biden in the White House, the industry is expected to install a cumulative 324GW of new capacity to reach a total of 419GW over the next decade.

SEIA CEO Abigail Ross Hopper noted that solar was booming in all sectors, utility-scale as well as the rooftop variety, predicting that by 2030 one in eight American homes will have solar. According to Michelle Davis, Senior Analyst at WoodMac, “The recent two-year extension of the solar investment tax credit (ITC) will drive greater solar adoption through 2025.”

California, Texas and Florida were the top three states for annual solar capacity additions for the second straight year with Virginia fourth, installing over 1GW. In 2020, 27 states installed over 100MW of new solar capacity, a new record, suggesting that they are gaining in popularity virtually everywhere.

Connected homes insight service:
Monitor competitors and understand the market landscape

Understand the strategies of those in the connected homes space and their routes to market. The report outlines market penetration and customer metrics, as well as key opportunities and challenges.

CORNWALL INSIGHT
CREATING CLARITY

T: +44 (0) 1603 542140
E: o.archer@cornwall-insight.com
W: cornwall-insight.com