Putting a price on emissions is still the best way

Despite a natural advantage, Australia is lagging the world on targeted energy policy to drive private sector investment.

Frank Jotzo, Australian Financial Review, 26 Sep 2020

When Angus Taylor hit the stage at the Press Club on Tuesday to present the government's "low emissions technology statement and investment road map", wind and solar power were producing 50 per cent of the energy in the national electricity market. The renewables share averaged 35 per cent over the preceding 24 hours, and 25 per cent over the past year.

That is where Australia's energy journey is going: cheap solar and wind energy powering most of our electricity system, and underpinning new energy export industries that are fit for a net-zero emissions world economy.

The government's road map acknowledges this country's renewables advantage but puts the emphasis on technologies that leave the door open for fossil fuels. It sidelines some of the most important issues in energy transition and blithely assumes the low emissions shift will happen without policy.

The five priorities identified are energy storage, low-carbon metals, low-emissions hydrogen, carbon capture and storage (CCS), and soil carbon. These are valid elements of a future low-carbon economy. Energy storage will be an important part of a mostly renewables-powered grid. Building up green steel and also green aluminium industries are tantalising long-term opportunities for Australia.

A hydrogen economy is promising too. However, the road map emphasises hydrogen production using gas and coal, even though the cost of green hydrogen from renewables is plummeting. CCS could reduce, not eliminate, the emissions from fossil-fuel-based hydrogen production. The main long-term role for CCS may be in some specific industry applications such as the production of cement, chemicals and gas-based fertiliser. Carbon capture and use – making usable materials from the captured carbon – could be a big opportunity but is not identified as a priority.

Including soil carbon in a clean technology road map is curious. Carbon stocks in Australia's landscapes could and should be increased, though climate change is making this harder. Soil carbon measurement, with all its inherent difficulties, is hardly a big part of the answer if the question is how to decarbonise the economy.

Why set aside the many other aspects of the positive shifts to clean technologies and energy efficiency in energy, industry, agriculture, transport and housing? How was the list of 50 potential priorities in the government's discussion paper of May this year whittled down? Why mention coal only with regard to the role in today's electricity system, not its replacement with renewables and storage?

Economic disruptions need a strategy

The road map sets "stretch goals" for future technology costs in the five areas, but suggests neither a time frame nor a plan how to achieve them.

Some news outlets reported the government had put \$18 billion on the table for clean technology but this is not right. New funding announced last week is only for a total of \$1.9 billion over 10 years, of which about \$1.4 billion is base funding for the Australian Renewable Energy Agency to continue

to run with an expanded portfolio of investments and half a billion dollars is for a range of particular initiatives.

The lion's share of the \$18 billion is simply the continuous recycling of the Clean Energy Finance Corporation's existing loans, plus an estimated \$1 billion over the decade of funding to CSIRO and universities, and \$2.9 billion previously announced for projects under the Emissions Reductions Fund.

This funding is useful, but just a drop in the ocean when the goal is a renewal of our energy, industrial and agricultural economy. What is needed is government policy to drive private sector investment. Putting a price on emissions is and will remain the best way, especially in industry. If uptake of CCS were an important goal, then strong price signals or direct regulation would be needed. CCS cannot become "competitive" without policy, because it is an additional process with extra cost purely for the sake of reducing emissions.

There is no sign the federal government intends to do any of these things. Instead, the few measures to reduce emissions in agriculture and industry are all to be by way of taxpayer-funded subsidies.

Government plans to prepare a long-term, low-emissions strategy as required by the Paris agreement on climate change process. If this was simply a rebadged road map document, it would fall short of what is required as a bona fide effort in the international arena, and what is needed to give investors some confidence.

A real low-emissions road map would tackle the question of how to deal positively with the social and regional economic disruptions that will come from the closure of coal-fired power plants, like Germany's coal exit plan does.

It would map out a transition to an all-electric transport system, like California did this week, banning sales of conventional cars from 2035. It would set a long-term net-zero national target, like China announced for itself this week. It would commit very large amounts of money to clean technologies right now, as Europe is doing with its Green Deal for COVID-19 economic recovery.

And it would put serious effort into developing Australia's future industrial advantage based on our abundant supply of cheap zero-emissions energy, starting right now.