ECONOMIC CONSULTING ASSOCIATES

Viewpoint

Locking down – the energy sector and coronavirus

May 2020

Lockdown measures in countries affected by the novel coronavirus have become near-universal. The economic impacts are devastating, particularly for the poorest. Lost jobs, eroded savings and continued restrictions mean many will continue to suffer even after the harshest measures are relaxed. Governments are not washing their hands of these challenges. In this article, we look at where the energy sector fits into this picture, helping alleviate the impacts and contributing to a future recovery.

Management

Governments worldwide have turned to the energy sector as a means to help individuals and businesses. However, there is a clear divide between the approaches taken in countries with state ownership over their energy sectors and those with privatised industries that require a "hands-off" response.

With privately-owned utilities and competitive markets, governments have made arrangements to ensure the continuation of energy services to all households and to protect the cash flow of businesses.

In the UK, for example, thousands of at-risk individuals are advised not to leave their homes. Some have pre-payment meters, meaning they must typically leave their home to top up their meter key. To address this problem, emergency laws now enable funds to be added automatically to some meters, and firms have pledged to send staff out to top up prepayment meters for the vulnerable. There is also a ban on disconnecting customers lacking the ability to pay.[1]

Similar protective measures have been adopted in other economies in Europe and North America. In France, bills are suspended for businesses' gas and electricity bills.[2] In Germany, small businesses may delay payment for energy supply, and utilities have pledged not to cut off households during the crisis.[3] In Canada, the winter ban on electricity disconnections has been extended to the end of July.[4]

Alleviation

Where public ownership reigns, governments have made greater use of utilities to mitigate impacts. They have returned customer deposits and slashed energy tariffs, which is both quicker and simpler than increasing welfare payments. The approach bears a resemblance to "helicopter money".

As an example, the Government of Thailand has reduced public utility bills by 3%, and electricity authorities are returning cash deposits to customers.[5] The government-owned electricity utility of Indonesia, PLN, will supply 24 million households in the smallest tariff category with free electricity for three months. The second-most vulnerable customers, across seven million households, get a 50% discount.[6] Malaysia pledged a 50% discount for basic consumption of 200 kWh per month, with diminishing discounts for further consumption, for six months.[7] These measures demonstrate an advantage of using electricity bills to deliver income support—by linking discounts to consumption levels, a rough targeting of benefits to the lowest-income households can be created without the need for complex application and verification procedures.

Such measures are, in theory, temporary in nature. The short-term financial costs imposed on utilities should be recovered in future years through compensating payments from

[1] BBC News, Coronavirus: Energy bill help for vulnerable amid outbreak
[2] The Guardian, Coronavirus: France imposes lockdown as EU calls for 30-day travel ban
[3] Clean Energy Wire, German utilities support coronavirus rescue package but warn of growing impacts
[4] Global News, Coronavirus: Power rates in Canada not being cut despite orders to work from home
[5] The Diplomat, Thailand enacts new coronavirus shutdown
[6] The Jakarta Post, Free electricity, discounts for households hit by COVID-19
[7] The Rakyat Post, This is how you can get up to 50% off your electricity bill during MCO

government budgets and from higher tariffs. Economic recovery requires a different solution.

Recovery

The economic crisis provoked by worldwide Covid-19 lockdowns is, predictably, resulting in bankruptcies, mass unemployment and a workforce being paid from government budgets to stay at home. Worldwide, attention is already turning to how to begin the process of recovery.

Investment in infrastructure is an obvious approach. Interest rates are at record-low levels in many countries, making it cheap to borrow to invest. Infrastructure construction creates jobs directly but also delivers large indirect benefits through improved productivity as a result of reducing supply-side constraints and through its linkages to manufacturing and services.

Focusing this investment on expanding clean energy offers a potential win-win outcome. A global energy transformation will require a massive expansion of infrastructure. The International Renewable Energy Agency (IRENA) estimates that a doubling of annual renewable energy investment from $343 billion under current plans to $662 billion per year will be needed to achieve this transformation by 2050.[8]

A time of low funding costs and a large unemployed workforce is ideal to accelerate these clean energy investments. Besides the well-known environmental benefits, such an acceleration is also an effective and rapid means to create new jobs.

Estimates from IRENA[9] are that a major investment programme in renewables could result in the net creation of seven million jobs by 2050. An earlier IRENA report estimated that doubling the share of renewables in the global energy mix would create 24 million direct and indirect jobs by 2030.[10]

Economic stimulus packages for the Great Recession have already demonstrated the potential for clean energy to create growth and jobs. In the American Recovery and Reinvestment Act of 2009, clean energy was among the biggest recipients. One building block of the investment—the retrofitting of 650,000 low-income homes—resulted in an average reduction of energy bills by $437 per year, meaning this money could instead be spent in the economy.[11] Similarly, the German Government invested in large-scale building rehabilitation programmes during this period. Even in conservative scenarios, studies consistently find that programmes strengthened demand for labour-intensive construction services, leading to a decline in unemployment.[12] The programme cost was less than the revenue it generated through taxes (corporate tax, VAT on products, etc), implying a net positive effect on the public purse.

The new jobs created by investment in clean energy far outstrip those from investment in fossil fuel technologies. The UK's Energy Research Centre estimates that every GWh generated by renewables creates one more job than the equivalent from fossil fuels,[13] a finding echoed in other recent research.[14,15] For the UK, for example, this would translate to over 150,000 jobs from completing the energy transition.[16]

Key messages

Governments have turned to utilities as a means to help households and business in a time of crisis. With privatised utilities, this has been limited to marginal measures. With publicly owned utilities, utility bills have been used for rapidly getting cash to households.

In the long term, investment in clean energy can form a core element of economic recovery. It offers a means to address climate change while taking advantage of low financing costs to get people back to work.

[8] IRENA, 2019. Investment needs
[9] IRENA, 2020. Global renewables outlook
[10] IRENA, 2016. Renewable energy benefits: Measuring the economics
[11] Eisenbger, 2010. Weatherization assistance program
[12] Kronenberg et al, 2010. Macroeconomic effects of the German Government's building rehabilitation program
[13] UKERC, 2014. Low carbon jobs: The evidence for net job creation from policy support for energy efficiency and renewable energy
[14] EUEI, 2017. The employment effects of renewable energy development assistance
[15] Wei et al, 2010. How many jobs can the clean energy industry generate in the US?
[16] In 2018, generation from fossil fuels totalled 153,030 GWh. BEIS, 2019. Digest of UK Energy Statistics

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