





Synopsis

#2: G20 Bali Summit 2020 pre-briefing Progressive Economics Network Digital invite-only online session took place on 10 November, 14.00-15.00 CEST // 1.00-2.00 PM BST // 8.00-8.30 AM EDT

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Introduction

This note summarises our reflections following discussion at the second round of our Progressive Economics Network (PEN) – which was held in anticipation of the G20 meetings taking place in Bali – with a focus on energy. The meetings were taking place amidst what the International Energy Agency (IEA) calls the world's first 'global energy crisis'. The way this crisis plays out will have huge implications not only for macro-economic policy, but also for issues such as inequality and the transition to net zero emissions. Laura Cozzi (IEA's Chief Energy Modeller) led off the very stimulating discussion, which was then followed by interventions from European capitals' policy-makers. In the following, seven lessons from the roundtable are summarised.

Lesson 1: This is the first global energy crisis

- We are experiencing the first global *energy* crisis prices of all key energy inputs (gas, oil, coal and electricity) have risen starkly.
- To some extent, this makes the current moment more severe than the oil crisis in the 70s, which affected oil markets only. On the positive side, however, there are now a plethora of clean energy alternatives. This can both cushion the blow of the price shocks, but it also means that we can continue with the energy transition.

Lesson 2: The real challenge will be winter 2023

- Europe might this winter avoid the worst case scenarios of the energy crunch, escaping the need for gas rationing. Gas storage levels are still high as low demand from China has allowed more imports this year and a milder-than-usual autumn has meant lower gas consumption levels.
- However, this could change in 2023, with China looking set to end its zero-Covid policy and thus demanding more LNG, and the remaining gas supplies from Russia being potentially completely shut off. Energy prices are expected to stay high into 2024.
- In Europe, even with the vast amounts of action taken in 2022, the IEA projects a gap of 27 bcm of gas supplies in winter 2023. This is equivalent to 7 per cent of baseline demand. Further reductions in demand will be needed across the energy system, including faster decarbonisation of power generation and efficiency savings by industry and households.







Lesson 3: A scale-up of green investment can help fill the energy supply gap in 2023

• The IEA suggests that filling the energy gap in Europe in 2023 can be achieved through scaling up investment. They write:

We estimate that a total investment of around EUR 100 billion is required for the additional actions that close the remaining gap of 27 bcm in 2023. Around half of this is for efficiency improvements, primarily building retrofits, and 40% is for renewables. The remainder is for heat pump installations, biomethane, and projects to cut flaring and methane.



- In terms of policy, more could be done to get investments off the ground to fill the gap in 2023, including: (1) Further boosting home insulation schemes, including via scaling up grants and low-cost loan schemes; (2) speeding up renewables roll out and (3) electrifying heat.
- Some encouraging action has already been taken, including, at EU level, the proposal in November 2022 of temporary emergency regulation to accelerate renewables deployment.
- If green investment is sufficiently boosted, there is a chance that the energy crisis could further accelerate the transition to net zero emissions. Indeed, in IEA's previous climate transition scenarios, gas took a prominent role – now it is projected to peak much sooner and may be replaced by renewable energy instead.

Lesson 4: Continued support for households is needed. But more could be done still to encourage demand reduction

• It is essential to continue to heavily support households and firms in the energy crunch. Fiscal policy measures have managed to cushion some of the blow so far, but more is needed –







including through support for countries with limited fiscal space. Particular support should be given to the poorest households, not all of whom have been sufficiently reached by existing measures.

• At the same time, in many countries, there is still limited public messaging effort with information on how to conserve energy. The IEA finds that well targeted messages can have significant impacts, estimating that behaviour changes – driven by regulatory interventions, awareness campaigns and prices – could help to deliver an additional 5 bcm in gas savings in 2023.

Lesson 5: In the medium-term, there is still a huge clean energy investment shortfall

- There has been a lot of media coverage on the potential need for new fossil fuels exploration. But as described above, the energy supply gap can be filled with solutions that are in line with the transition to net zero emissions. Moreover, given the long lead in time for fossil fuel projects, new additional investment in fossil fuels would be of very limited value with regards to the energy crunch in 2023.
- Meanwhile, it is global clean energy investment that is receiving insufficient attention. It is considerably off track to achieve emissions reductions needed by 2030 to meet the Paris Agreement targets. To do so, investment needs to more than triple from today's levels, to \$4 trillion annually by 2030. The IEA estimates this means that by 2030 for every USD spent on fossil fuels, more than 9 USD need to be spent on clean energy. Three key areas include:
 - Scale up clean energy investment. There needs to be a huge scaling up of investment in clean technologies. Clean energy end efficiency-saving investments need to more than triple between now and 2030 to about \$6 trillion globally. About 70 per cent of this needs to come from the private sector, according to the IEA.
 - **Make more use of clean energy partnerships.** The cost of capital for clean energy projects is still 2-3 times higher than in advanced economies. If this could be lowered, a huge acceleration in the transition could be unlocked. The energy partnership with Indonesia is a first promising sign that this is possible. Continued effort should go into making these work, including putting emphasis on reflecting social justice aspects.
 - **Investment in energy flexibility**. Given the crucial near term role of the electricity sector in delivering the transition, not enough investment is going into grids, including adding battery storage capacity.
- In the European Union, Recovery and Resilience Facility (RRF) funds could be used to fill some of this gap. But likely more national and European-wide funding will be needed to match the scale of the challenge.
- Moreover, more clean energy investment should also include investment in labour supply and skills development. Indeed, more work on these aspects of supply chains is needed.

Lesson 6: New European institutional architecture is required, but solutions are highly complex

• The energy crisis has brought to the fore the need for a coordinated European solution. The now-agreed Europe-wide gas price cap has been marred in complexities, ranging from questions







about where the mechanism would be applied, what safeguards should be in place, and the level of energy price cap, to questions about cross-country distributional and supply implications. Some of these have now been agreed upon by the EU, though the complexity of the agreement means it is yet unclear how this could work in practice.

- Also agreed upon by the EU and potentially even more significant is (1) joint bargaining on world markets for gas, in which the EU could leverage its bargaining power to obtain better prices and (2) a further commitment to boosting renewables rollout, including a commitment to have solar power projects permitted within three months and heat pump projects to be rolled out within one month.
- As a result of the myriad new agreements, the EU is having to work with unprecedented speed to produce new institutional solutions to the energy crisis surrounded by significant uncertainty.
- In lockstep with this, the next chapter of institutional innovation is already being kicked off. The European heads of government are asking the European Commission to come up with an industrial policy plan in early 2023, as a response to the US Inflation Reduction Act.

Lesson 7: Green supply chains are being boosted, but there remains a very large gap

 Supply chains are beginning to ramp up towards meeting the challenge of rapid decarbonisation, but much more needs to be done to fill the investment gap. Solar energy stands out as the one area where the challenge now looks like it is being met. Lessons can be learned here, including for the areas of batteries and heat pumps.



• For 2030, the IEA expects an increase to over \$2 trillion (\$390bn in IRA alone). The US is projected to become the cheapest place in the world to produce solar, and it will also experience huge falls







in costs of hydrogen and battery production. The largest impact of the IRA is projected to be on the electricity sector, reducing emissions by 50 per cent in 2030 compared to today.

• Some of the IRA type support programmes can be paid for by making more use of windfall taxes. The IEA estimates that globally, there is a \$2 trillion energy windfall profits. Extending taxes on these could make a significant contribution to filling the clean energy investment gap.