The Inevitable Policy Response – Climate Policy Acceleration in the Context of the Paris Ratchet

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INEVITABLE POLICY RESPONSE

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The Inevitable Policy Response: Policy in 2021

- Following the US Presidential election and the Net Zero China 2060 target in particular the 'inevitability' of policy Response to climate change looks validated. Exactly what, when and how remains the issue. We have updated our core Forecasts and have considered potential accelerations.
- As net zero commitments accelerate across the globe, our new IPR 2021 Policy Forecasts outline the policies that are expected to be deployed by 2025 to begin meeting those targets. It offers markets the crucial next layer of detail on when, where and how these commitments will start to shift the macroeconomic context through forceful policy implementation across a range of key policy levers.
- The IPR policy maker toolbox is growing and policy makers will build on carbon pricing, coal phase outs and ICE bans and increasingly set ambition in policy to address hard to abate sectors such as industry and agriculture.
- Carbon Border Adjustment Mechanisms were core to our 2019 forecast and are now widely discussed and nearing implementation.
- Corporations themselves are creating their own "policy" or strategies around Net Zero and certain industries such as Autos are moving ahead of government policy.
- A substantial US infrastructure package favouring low carbon is likely this year.
- The run up to COP26 in Glasgow later this year will pressure countries to look for further ambition most notably the US which is expected to deliver in its NDC and China which is more uncertain but could still surprise.
- IPR has used the Paris Agreement Ratchet framework for milestones on policy announcements. COP26 is in effect the delayed 2020 Ratchet. Hence it is not expected to deliver the full IPR Forecast suite. The next significant event in the Paris process is the 2023 Global stocktake on the way to the 2025 Ratchet.

Building the Policy Forecast

Major events in late 2020 have affirmed the general thesis of an [Inevitable Policy Response] to climate change, originally set out in 2018 and 2019 through analysis commissioned by the UN-supported PRI. Chief among these are the election of President Biden and the establishment in China of a Net Zero 2060 target. Both events add impetus to the IPR forecasts of significant political action by 2025 that accelerates climate policy with associated implications for institutional investors.

Latest IPR forecasts have input from 200 policy experts

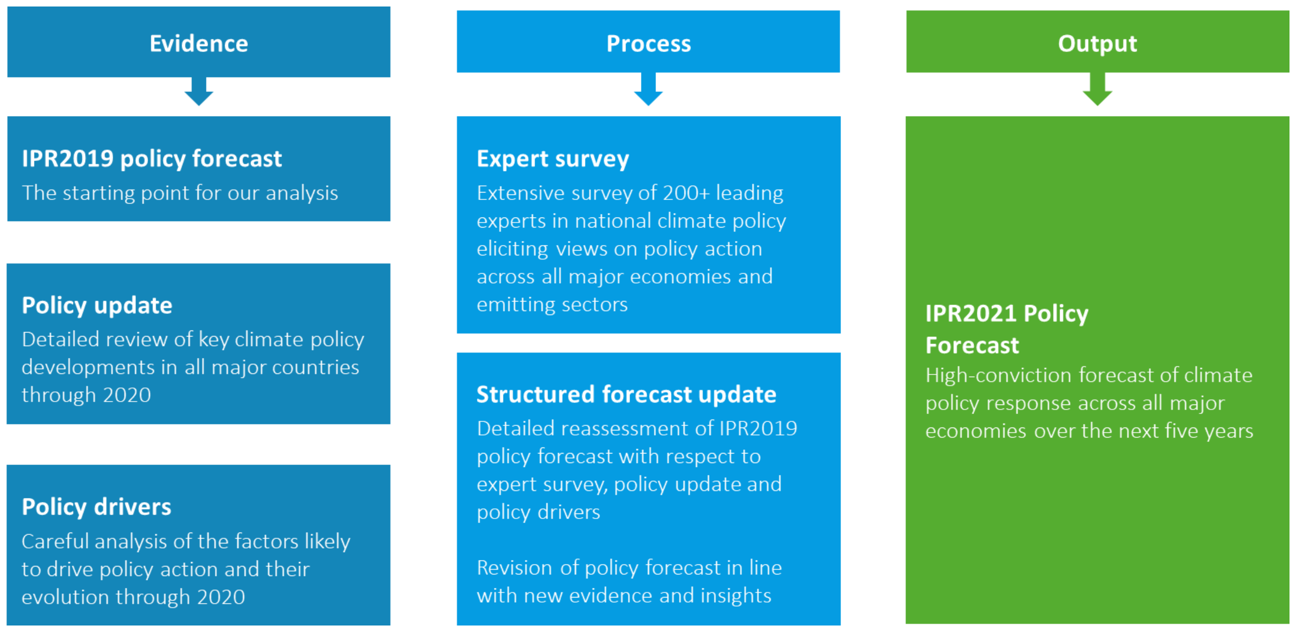
In our new paper, *The Inevitable Policy Response 2021 Policy Forecast,* we set out a methodology for updating the IPR forecasts. Incorporating the views of more than 200 policy experts, The Inevitable Policy Response 2021 Policy Forecast, is focused on expected policy moves in 21 countries which account for 77% of global emissions and 78% of global GDP.

Two elements that were considered by the experts:

1. The level of ambition of a policy; and
2. The timing of its announcement.

The survey was supplemented with confidential discussion with key policy makers in Europe, the US and East Asia which reinforced our broad conclusions. The result was a reappraisal by the IPR policy team of the *level of ambition* we forecast for policy making in the coming years. In the majority of cases, events of the past year have either confirmed our expectations or increased our expectations for levels of ambition.

Figure 1 Evidence based process for producing the IPR 2021 Policy Forecast



Source: Vivid Economics

2021 Policy Forecast key findings

In terms of the major policy levers we have looked at, our expectations remain for widespread action:

Figure 2 IPR2021 forecasts higher policy ambition across eight key policy levers

Carbon pricing
- Carbon taxes
- Emissions trading systems
- Border carbon adjustments

Coal phase-out
- Prohibiting regulations
- Emissions performance standards
- Electricity market reforms

100% clean power
- 100% clean power targets
- Renewables capacity auctions and other support policies

Zero emission vehicles
- 100% zero emission vehicle (ZEV) sales legislation
- Manufacturer ZEV obligations
- ZEV consumer subsidies

Low-carbon buildings
- Prohibiting regulations for fossil heating systems
- Purchase subsidies for low-carbon heating systems
- Thermal efficiency regulations for new build and retrofit
- Minimum energy performance standards for new appliances

Clean industry
- Emissions performance standards for industrial plant
- Subsidy for new or retrofit clean industrial process

Low-emissions agriculture
- Methane or nitrous oxide emissions tax or cap-and-trade system
- Subsidy for low-emissions agricultural practices and technologies
- Farmer education and technical assistance programmes

Forestry
- Strong policy action against deforestation, such as monitoring and penalties, supported by consumer pressure
- Incentives for reforestation and afforestation via domestic action and carbon markets

'Just Transition' lens to ensure social and political feasibility

Source: Vivid Economics and Energy Transition Advisers

Looking at our most impactful policy forecasts we see that some might remain controversial in any time frame. This includes Carbon Border Adjustment Mechanisms, and an end to new coal fired power stations in China by 2025. We also expect all major industrial economies including the US, Germany, Japan and China to ultimately require all new industrial capex, led by the steel and cement sectors, to be low-carbon based.

Table 1 IPR 2021: Top 10 policy forecasts

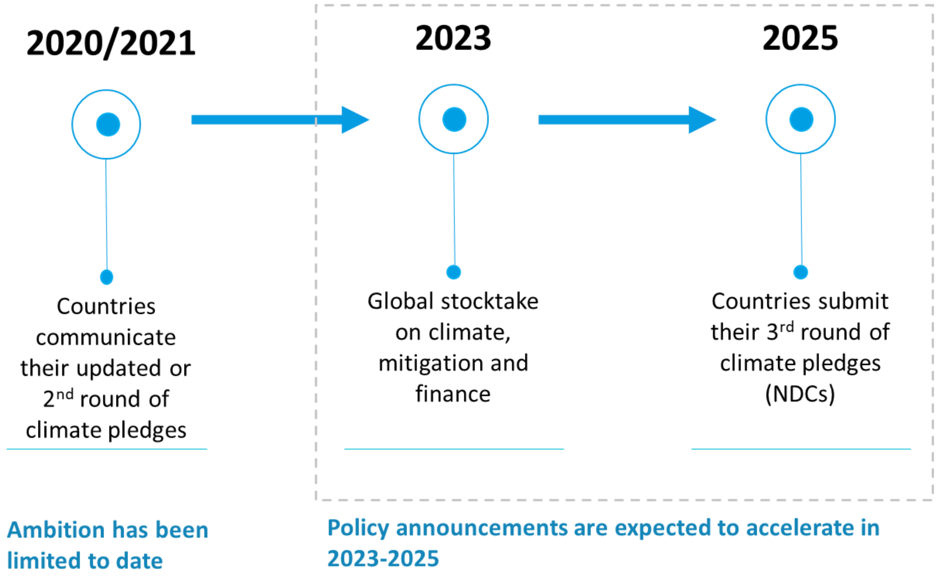
Carbon Pricing	1.	Carbon Border Adjustments Mechanisms (CBAMs) for carbon will become increasingly a policy option. This could lead the United States to announce a national carbon pricing system as early as 2023, and we forecast by 2025, and signal a strong carbon price path to reach a backstop of $65 by 2030.
	2.	The European Union's evolving commitments will deliver substantial carbon prices. By 2030, we expect EU policy to backstop an EU ETS carbon price of $75/tCO2 to ensure long-term action toward decarbonization in heavy emitting sectors.
Coal	3.	In India, rapidly evolving Indian policy and prospects for market reforms and pricing has already ended further investment in new coal.
	4.	China will end construction of new coal fired power production after 2025, driven by new policies to facilitate its 2060 net zero target and ongoing market liberalisation.
	5.	The United States will end all coal-fired power generation by 2030, through a combination of emission performance standards and carbon pricing at the Federal and State levels, combined with market forces.
Clean Power	6.	The United States will implement a binding and credible 100% clean power standard for 2040, ending unabated fossil electricity generation.
Zero Emission Vehicles	7.	China, France, Germany, Italy and Korea will end the sale of fossil fuel cars and vans in 2035. Jointly these large markets will accelerate the auto industry transition to electric drive, and precipitate further policy action internationally.
Industry	8.	All major industrial economies including the US, Germany, Japan and China will require all new industrial plants, led by steel and cement, to be low-carbon by 2040, through a combination of emissions performance standards and carbon pricing.
Agriculture	9.	The US, Canada, Australia and other major agricultural producers will have comprehensive mitigation policy in place by 2025 to reduce emissions from production of crops and livestock.
Land Use	10.	Major tropical forest countries will end deforestation by 2030, with domestic policy responding to international climate finance and corporate supply chain pressures.

Source: Vivid Economics and Energy Transition Advisers

As a result, the question arises as to when these forecasted policies will be announced? This is crucial for markets, institutional investors and economic planners.

IPR has been based around the timing laid out in the Paris Agreement for periodic ratchets in commitment by countries. These ratchets are when countries are expected to increase the ambition of their NDCs. The 2020 Ratchet (the first envisaged by the Paris Accord) has been delayed to COP26 in Glasgow in November 2021. NDCs so far have been variable, some very ambitious, others not at all, and the aggregate impact on overall emission is very modest; but the big emitters' NDCs are yet to be announced, hence more ambition is expected, albeit not enough to put the world on track for temperature goals. A further global emissions stocktake is due in 2023 which will trigger a further round of NDC pledges by 2025.

Figure 3 Timing: Paris Ratchet process triggers a cumulating policy response by 2025



Source: Vivid Economics and Energy Transition Advisers

Our surveys endorsed the general thesis of a forceful policy response coming in the 2020s with the IPR core premise of substantial announcements being made by the second Paris Agreement Ratchet in 2025. As would be expected, some respondents felt IPR's forecast was too early on some policy announcements, or not early enough on others.

Glasgow and the gap in trajectories

The outcome of COP26 in Glasgow will probably show some narrowing of the 'Gap' to trajectories compatible with climate goals (well below 2/1.5 degrees), but will also recognise that this is not nearly sufficient; and will aim to give renewed momentum to top down Governmental and bottom-up business led coalitions for raising ambition further.

On the positive side, President Biden has made it clear he wants higher international ambition on climate, therefore, we expect him to be vigorously advocating for stronger outcomes. At COP26 Boris Johnson will be looking to emphasise UK progress in having made an impact and keen to put forward "surprise" announcements to build on the NDCs.

The Chinese 5 Year Plan does not appear to add new positive dimensions. Chinas' NDC is still to come. However, the level of their ambition remains uncertain.

Potential acceleration surprises

While not incorporated into our main expectations there are a number of policy options, particularly on timing that could prove positive.

1. **A US infrastructure bill as large as $2-4 trillion with heavy bias toward clean energy and climate issues could well emerge through budget reconciliation** requiring only 51 senate votes. This could include a Clean Energy Standard (CES). Addressing transition in hard to abate sectors may also feature. Likely to be floated at the Biden summit along with the US NDC, CES does require the $1.9 trillion Covid-19 stimulus passage to progress reasonably smoothly for the Democrats to do this. We expect green stimulus and recovery to come back onto the agenda at the G7 and G20.
2. **Diplomatic agreement in the US-EU-China to cooperate around climate issues.** This could be the area where a positive tone on collaboration could be taken. An alternative model might see the US and China competing to demonstrate greater climate leadership.
3. **In this context, a major surprise could be that China** does scale up its 2030 target in its NDC. We believe the Chinese technocrats are seriously exploring options. However, it remains uncertain this occurs.
4. **More details on 2030 interim targets emerge.** Already the EU has tightened up its 2030 target. We can expect pressure from the US and others to lead to higher 2030 targets for Japan, Korea, Canada, Australia and probably India. Brazil and Indonesia may be harder.
5. **More big economies set Net Zero targets: India announces a Net Zero 2050-60 target and Australia at least a qualified Net Zero 2050 target.** Reasons are mounting in both countries to participate in Net Zero targets. India can look realistically to achieve this outcome while Australia is under pressure from the global community to firm up its position.
6. **Carbon Border Adjustments Mechanisms (CBAM) in carbon markets will get more attention** Some EU officials are considering beginning phasing in the CBAM from 2023. It is likely that the EU will move cautiously so as to avoid a trade war. They are in discussion with China, and an agreement with them would be a game changer. IPR has called for an EU-US-China carbon club emerging during the 2020s where CBAMs play a role. There has been discussion in US policy making circles about CBAMs and a US carbon market would almost certainly feature a CBAM.
7. **Led by CBAMs US carbon markets enter the policy mix and are even announced by end of 2023.** One of the more controversial forecasts in IPR is that of a US carbon market before 2025. While a regulatory approach via the EPA is not impossible, legislation in Congress would be by far the preferable route. Even with the 51-50 Democratic majority this would face the filibuster hurdle of 60 votes. Therefore a bipartisan approach would be crucial. The mid-term elections in November 2022, in many aspects, might hold the key – if Democrats improve their majority then Republicans may support carbon pricing to head off costly piecemeal regulation. A CAP and Dividend structure is often discussed and by 2023 most governments will be looking to repair fiscal deficits – carbon taxes must be an obvious option.
8. **Forestry and nature-based solutions will emerge at the COP26 as an even more urgent issue.** Rapid reductions in deforestation and complementary increases in reforestation and afforestation remain a significant set of forecasts for IPR. Preliminary indications suggest that the UK will seek to elevate this in the COP26 including with enhanced public finance and supply chain agreements. If China and even India were to partner with the EU/UK on working with forest countries on sustainable tropical producers, action would accelerate sharply.

9. **Ending coal fired power production will remain crucial and encouraging its acceleration will continue.** The UK has been focused on reducing financing of coal plants in Asia, with early positive signs of movement already in Japan, with perhaps Korea and possibly China following suit.
10. **We will also likely see coalition of countries, cities, states and companies committed to bring forward dates for ICE phase outs.** Covid-19 has highlighted the need for tackling air pollution urgently.
11. **Additional Just Transition initiatives can be expected.** The COVID crisis has confirmed the critical importance of connecting climate policy with job creation and reducing inequality. Leading countries are now incorporating Just Transition elements into their strategic responses, notably the EU and now the USA. The focus is twofold: first, ensuring high-carbon workers and regions are not 'left behind'; and second, ensuring the net-zero economy delivers quality jobs and thriving communities. An increasing focus will be on making the just transition a reality in major emerging economies where core development needs have still to be met. The just transition is already a national priority in South Africa and international cooperation is set to intensify, notably around the role of development banks in managing the transition so that it delivers climate and socio-economic goals simultaneously.
12. **The role of mobilising the Financial System will again be emphasised.** The work of Mark Carney and the TCFD, Investor Alliances are all likely to feature prominently as will the work of the NGFS and the newly resuscitated G20 Sustainable Finance Study Group, (SFSG) Co-Chaired by the US and China.
13. **Corporations are also creating "policy" in terms of their strategic announcements.** Where significant, IPR will capture these under "Corporate Policy" announcements. Examples are global auto makers setting phase-out dates for ICE. We expect further announcements regarding developments in ending coal power and increasing renewable energy deployment in the lead up to the COP.

Baseline remains - a ramp up by 2025

Our baseline IPR forecast for announcements remains by 2025 with an increasing focus on the 2023-2025 timeframe driven in part by the results of the global emissions stocktake in 2023.

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