THE CHANGING CLIMATE FOR RENEWABLE INVESTMENTS

Key take-aways before a new international agreement on climate change[i]

KEY POINTS

- International negotiations on climate change have been ramping up. It is looking increasingly likely that a new global treaty on climate change will be concluded by the end of the year in Paris.
- Based on the current state of negotiations and information recently released, there is an estimated $13.5 trillion in opportunities over the next 15 years for global investment in energy efficiency, low-carbon and carbon-neutral energy technologies.
- Many businesses are, or should soon consider the commercial implications which flow from a new climate change treaty to assess risks, opportunities and strategies.

Current climate change negotiations can give businesses an indication of where low-carbon investment opportunities may exist in the coming decade. Even prior to the upcoming climate negotiations in Paris, businesses can draw some strong indications from current negotiating texts arising from the intersessional Bonn conferences. This is in part, due to significant changes in the core content of the proposed international agreement compared to its predecessor, the *Kyoto Protocol* (**Kyoto**).

This article provides an update on the state of current climate negotiations and examines some of these opportunities particularly in the Asia-Pacific region.

NEGOTIATIONS TO DATE AND UPCOMING COP21

Each year since 1995, a Conference of the Parties (**COP**) has been held under the United Nations Framework Convention on Climate Change (**UNFCCC**) to facilitate international negotiation and cooperation on climate change.

Over the course of these negotiations, it has been recognised that average global temperature rise should be limited between 1.5 to 2° Celsius above pre-industrial levels. Operating under this overarching goal, the UNFCCC has evolved into the world's most complex negotiating forum with 196 parties aiming to reach consensus, whilst representing disparate national and regional development interests. The inability of the UNFCCC to reach a new international agreement post Kyoto has had a subsequent effect on global business, creating uncertainty and a lack of reliable guidance from international governance.

This year's upcoming COP (**COP21**) is particularly significant, as it is anticipated that after years of post-Kyoto negotiations (and failures), a new international treaty on climate change will be agreed under the Durban Mandate.

The Durban Mandate was produced at the 2012 COP, specifically deciding that "a protocol, another legal instrument or an agreed outcome with legal force" under the UNFCCC will be concluded no later than 2015 and implemented from 2020. A failure to reach agreement will be a failure under the mandate.

Therefore in December this year, the world will be looking to Paris to see if COP21 will be able to produce a new international treaty on climate change (**Paris Agreement**).

Although much of any final treaty text will only be concluded in the final days of COP21, in following the progress of negotiations over the last year, several opportunities can be identified for businesses, particularly for the energy and renewables sector.

Notably:

- iterations of the negotiating text indicate a general trend towards nationally driven plans consistent with increases in renewable energy uptake in the coming decade; and
- specific national submissions, as part of the current negotiation process, will provide indications for the level of implementation of renewable projects in domestic localities.

THE PARIS AGREEMENT - EVOLUTION FROM "KYOTO"

Several iterations of a draft of the Paris Agreement have already been released by the UNFCCC throughout this year. The last two rounds of intersessional negotiations in Bonn saw a drastic reduction and subsequent expansion of the official "Geneva" negotiating text. As a result, the most recently released negotiating text saw a major revision to earlier drafts. Significant changes to the negotiating text will no doubt continue to be made rapidly, particularly as we head towards COP21.

Previously under Kyoto, the objectives of the UNFCCC were achieved through market mechanisms and legally binding emissions reductions for "developed" nations. The current negotiating texts make a clear shift away from this "top-down" approach towards a "bottom-up" nationally driven process, requiring participation by all negotiating parties through the submission of domestic mitigation and adaptation measures.

Since the Lima round of negotiations in 2014 (**COP20**), each party to the UNFCCC have been requested to submit an "Intended Nationally Determined Contribution" (**INDC**), comprised of both proposed national mitigation and adaptation measures to be adopted post 2020. The decision from COP20 calls for all countries to communicate INDCs which are "fair and ambitious, in light of its national circumstances" towards achieving the objective of the UNFCCC.

So far, iterations of every draft Paris Agreement feature INDCs prominently within the core agreement. INDCs will therefore likely play a key role over the long-term. Despite uncertainty around the exact legal status of INDCs, what is clear is that the majority of countries have already engaged with the process, with 128 INDCs (representing 156 countries) having been submitted to date, prior to the commencement of COP21. The submitted INDCs also cover the majority of the world's greenhouse gas emissions with almost half explicitly outlining domestic energy sector targets.

Additionally, there has also been much discussion (and contention) at the international negotiations around the inclusion of:

- a reference to long-term "decarbonisation" and achieving "net-zero emissions";
- a "ratchet mechanism" whereby the ambition of INDCs are reviewed and increased in cycles over the long-term;
- a transparency framework to govern the INDC process; and
- a "global stocktaking" mechanism to monitor and track INDCs and global progress towards transitioning to a decarbonised global economy.

Recent analysis released by the International Energy Agency show that if the INDCs released to date are implemented fully:

- fossil-fuel demand growth will slow down considerably with growth only predicted for natural gas and decline in coal and oil;
- low-carbon fuels will increase to a quarter of the global energy mix by 2030 (from less than 20% today); and
- the energy sector will invest $13.5 trillion in energy efficiency and low-carbon technologies from 2015 to 2030 of which $4 trillion will be for renewable capacity.

What businesses can take away at this stage of the negotiations is that draft Paris Agreements have aimed to guide low-carbon or no-carbon investments through the implementation of country driven INDCs. This is a clear shift from the mentality of "emissions reductions" per Kyoto. In addition to the general direction of a potential Paris Agreement, project proponents and investors may also be interested in the specific contents of submitted INDCs.

RENEWABLES OPPORTUNITIES UNDER INDCS - WHAT CAN BUSINESSES TAKE FROM THESE PLEDGES?

INDCs are able to provide businesses a snapshot of where governments envisage low-emission investments.

The INDCs which have been submitted to date are only consistent to the extent that they generally all address domestic mitigation and adaptation measures. What differs significantly is how countries plan on decarbonising within their domestic boundaries. For example, INDCs from the European Union feature the continued use of emissions trading across the region,

whilst many developing nations feature the installation of renewable generation and capacity.

Our review of the INDCs found that there is, in part, a focus on increasing renewable generation within the Asia-Pacific region. These INDCs therefore can be used as a comparative and predictive tool around where investments could be made.

A summary of select INDCs from the Asia-Pacific regions can be found below.

Country	Renewable plans detailed under submitted INDC
India	▪ India makes clear in its INDC that it is still a developing country and access to energy remains an issue which needs to be addressed domestically. ▪ As part of their INDC, India has announced ambitiously that it is "running one of the largest renewable capacity expansion programs in the world". ▪ An overall target of 175GWs of renewable generation by 2022. This is to be comprised of: – 100GWs of solar generation (currently 4.06GWs); – 60GWs of wind generation (including offshore) (currently 23.76GWs); – 10GWs of biomass generation (currently 4.4GWs); and – 5GWs of small scale hydro (currently 4.1GWs). ▪ Focus will also be placed on installing nuclear and large scale hydro.
Laos	▪ Laos intends to transition from "Least Developed Country" status to a "middle income" country. ▪ Current large scale electricity generation in Laos is almost 100% hydro based. Laos intends to export hydroelectricity to neighbouring nations including Cambodia, Vietnam, Thailand and Singapore. ▪ Implementation of a small scale energy strategy to increase small scale renewable energy to 30% of total energy consumption by 2030.
Papua New Guinea	▪ Papua New Guinea sees their main mitigation opportunity to be within the electricity supply sector. ▪ Overall target of 100% renewable energy by 2030, contingent on funding availability. ▪ Potential for renewables include: – additional hydro power (in addition to the existing 200MWs present); – geothermal potential of up to 22TWh/annum; – biomass; and – solar PV.
Myanmar	▪ Myanmar is a country still in the process of determining what their energy mix should be, but plans to consider their energy policy in light of climate change. ▪ Opportunities have been suggested within the INDC to include: – hydro (with an indicative goal of 9.4GWs by 2030); and – rural electrification to be comprised of 30% renewable generation through mini-hydro, biomass, solar, solar mini-grid and wind.
Indonesia	▪ Implementation of a mixed energy use policy, with at least 23% from new and renewable energy by 2025.
Thailand	▪ Thailand has flagged limitations on grid connection, poor transmission, lack of technical expertise and lack of support by financial institutions as key barriers to further renewable installation. ▪ There is an overall target of 20% renewable generation by 2036, as well as a target of 30% share of renewable energy in total final energy consumption by 2036.
China	▪ As part of their INDC, China has notably announced the peaking of carbon dioxide emissions around 2030.

China (continued)	▪ Specific to renewable projects, China has set a target to increase the share of non-fossil fuels in primary energy consumption to around 20% by 2030. ▪ Although no specific numbers are given, China has indicated that as part of building a low-carbon energy system, they will: – proactively promote development of hydro; – develop nuclear power in a safe and efficient manner; – scale up the development of wind power; – accelerate the development of solar power; – proactively develop geothermal energy, bio-energy and maritime energy; and – achieve the installed capacity of wind power reaching 200GWs and solar power reaching around 100GWs and thermal energy reaching 50 million coal equivalent by 2020.
Australia	▪ It is anticipated that under the Renewable Energy Target, over 23% of electricity will come from renewable sources by 2020.

CONCLUSIONS

While much uncertainty remains around the final text of a Paris Agreement, INDCs which have been submitted to date are able to provide a roadmap for the private sector to identify where investments may be made in the next decade. Asia-Pacific INDCs reveal that there are plenty of opportunities for renewable investment within the region given the political will to drive renewable investments.

Additionally, if the Paris Agreement is concluded in line with the trajectory set by the iterations of negotiating text, it is clear that INDCs (or an equivalent mechanism), will likely be adopted as a crucial means through which long-term objectives of the UNFCCC are to be achieved. We expect businesses will continue to closely examine these as a guide to identify where prospective investment opportunities may exist.

If you would like further information on the information in this article, please contact Stephen Webb, Dan Brown or Joanna Zhou. We are also able to provide further information on national INDCs not covered in this article, including those outside the Asia-Pacific region.

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[i] **DLA Piper will have a team based in Paris attending the Paris negotiations representing several countries and interest groups on a pro-bono basis.**