

**Program Partner** 



### CLIMATE GROUP Asia Action Summit



**Breakout Agenda** 

Getting Granular: advancing power system decarbonisation through data

### Foreword

By Sam Kimmins, Director of Energy, Climate Group

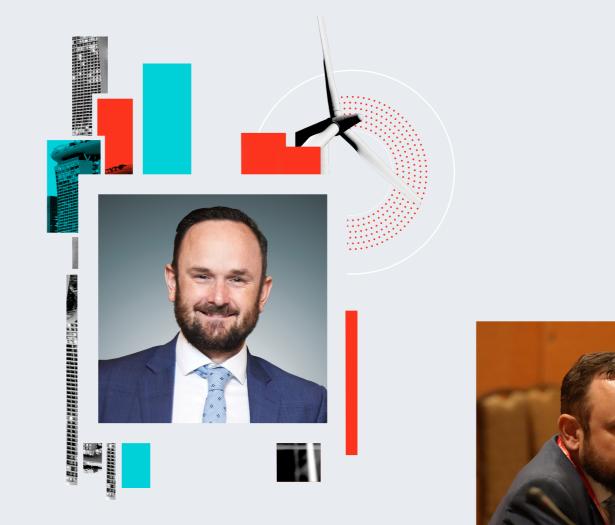
Climate Group was delighted to co-host with Google this important discussion on the data requirements for development of a 24/7 clean energy system.

For the APAC region, where credible annual tracking of renewable electricity is still under development in many countries, 24/7 data requirements represent a challenge but also an opportunity to leapfrog directly to 24/7-ready grids.

The discussion centered on key electricity data needs - access, quality, and granularity - and highlighted the benefits of being able to easily and securely access granular data, which is bolstered by standardisation across jurisdictions.

Alongside the 'what', the discussion explored 'how' these outcomes might be achieved, with policymakers seen as playing a pivotal role, and the need to identify and engage responsible parties for developing data standards and data repositories that align across jurisdictions.

Evident through the discussion, complexity of the topic area presents a barrier to communication and action, with multiple stakeholders each having numerous, specific, detailed, and sometimes contradictory data needs. Furthermore, a variety of professional languages are used to describe those needs. A systematic mapping of key stakeholders and their needs, and development of a common language around requirements, would be a critical enabler, not only to prioritise action, but to effectively engage and communicate the variety of data needs to policymakers and other technical and non-technical enablers.





# Summary

The Getting Granular: advancing power system decarbonisation through data roundtable took place at Climate Group Asia Action Summit as part of the day's Breakout Agenda.

The session was co-hosted by Sophie Ribas (APAC Energy Policy & Markets Lead, Google), Hallie Cramer (Program Manager Data & Software Climate Solutions, Google) and Sam Kimmins (Director of Energy, Climate Group). Enrique Gutierrez (Energy Analyst, Renewable Integration and Secure Electricity, International Energy Agency) moderated the session.

The roundtable brought together key stakeholders such as energy producers, consumers, data solution providers, research institutes, and government, to explore the current status of energy data accessibility, quality, and granularity in markets across the APAC region. They came together to consider the opportunities and challenges, and to develop key insights for decision makers to democratise access to high-quality, granular data, which can support voluntary corporate clean energy actions, enable time-based Energy Attribute Certificates (EACs), and support decarbonisation at large.

The discussion was guided by Roble Poe Velasco-Rosenheim, Director, Global Partnership and APAC at IREC, who presented the results of a short pre-roundtable survey. Hallie Cramer presented on energy data needs for impactful key use cases including buyside actions, cross-border power exchanges and new technologies.





#### Aims & objectives:

- Describe the current situation for energy data in APAC
- Establish needs and requirements for energy data in APAC
- Call attention to key challenges and actions decision makers can take to democratise access to high quality granular energy data

## Partner reflections

By Hallie Cramer, Program Manager Data & Software Climate Solutions, and Sophie Ribas, APAC Energy Policy & Markets Lead, Google

Google was honored to co-host the roundtable on democratising access to high-quality, granular energy data to advance power system decarbonisation.

It was a fruitful discussion amongst various ecosystem stakeholders on the current situation, opportunities, and practical challenges faced in accessing this data in the APAC region. Our three key takeaways were:

### Enhanced electricity data is critical to deliver on the solutions we need to transition towards carbon-free power systems in APAC

Enabling access to high-quality, hourly electricity data helps electricity end-users better understand their footprint and adopt high-impact actions that can support electricity system operators as they decarbonise, through the development of clean firm technologies (e.g. 24/7 CFE matching) and grid flexibility solutions (e.g. demand response). Data transparency and standardisation also supports compliance with global standards, like the Greenhouse Gas Protocol, by enabling scalable traceability, and potential trading, of clean electricity across regions in a way that builds credibility, trust, and exclusivity into claims. Finally, high quality, granular data can be used to improve grid planning through modeling decarbonisation pathways and to verify how clean new technologies, like hydrogen or battery storage, really are once those solutions are deployed.



### Access to electricity data, in a standardised way, is a key challenge across stakeholders and jurisdictions

Access to data is lacking and the biggest challenge when considering electricity consumption, generation, and power systems data in the region. Availability of data via a centralised digital access point, and standardisation of data in terms of both format and collection, are important issues from the perspective of end customers and thirdparty data services providers. Centralised access and standardisation of all types of data allows for better reporting, transparency, and comparability across jurisdictions. Consumers are often limited by lack of consistency regarding the granularity and format of their data as it depends on the regulator or utility's standards in each jurisdiction. On the other hand, whilst producers have access to generation data, it is unclear if and how they can grant access to 3rd party solution providers due to privacy concerns.

#### Policymakers can play an important role to develop policies which enable access to high-quality granular data to support power system decarbonisation

Unlocking this data requires consumers to communicate to governments what "good" looks like, including a standard format, secure and streamlined process, and centralised digital data interface, developed by a legally appointed responsible party. Regulations requiring utilities to implement data access and sharing protocols to authorized third parties can also enhance access to customer electricity data. Additionally, accelerating the deployment of advanced metering infrastructure (AMI) through mandates or incentives is another important lever to access better generation and consumption data.

We would like to take the opportunity to thank Climate Group for bringing us together, and all of the participants for joining us to share their perspectives on this important topic.





Access is the biggest challenge when considering electricity consumption, generation and power systems data in the region. For third party data services and end customers, the development of a centralised digital access point, and standardisation of all types of data would allow for better reporting, transparency and comparability across jurisdictions.

**Enhanced access to high-quality and granular electricity data** is a foundational building block. There is a demand for enhanced access to high-quality and granular electricity data in APAC from across the ecosystem to help electricity end-users better understand their emissions and adopt actions that can support electricity system operators as they decarbonise, through the development of clean firm technologies and grid flexibility solutions. Data transparency and standardisation also supports compliance with global standards, like the Greenhouse Gas Protocol, by enabling traceability and tradability of clean energy across regions.

**Policymakers can play** an important role in the development of policies which enable access to high-quality granular data to support power system decarbonisation. For instance, policies can establish a legally responsible party to manage access to customer electricity data in a centralised and secure way via a digital data interface. Greater electricity data quality and granularity can also be enabled by government mandates or incentives to accelerate the deployment of advanced metering infrastructure (AMI).

To support communication and enable action in the topic area, a systematic mapping of key stakeholders and their needs, and development of a common standard around requirements, would be a critical enabler, not only to prioritize action, but to effectively engage and communicate the variety of data needs to policymakers and other technical and non-technical enablers.



Key breakout discussion points

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