## **CALL TO ACTION**

7 AFFORDABLE AND CLEAN ENERGY



24/7 Carbon-free Energy Compact to Accelerate the Decarbonization of Electricity Grids

In order to avoid the most catastrophic impacts of climate change, the world must cut carbon dioxide emissions by 50% from 2010 levels by 2030, then achieve net-zero emissions economies by 2050.¹ Electricity accounts for approximately 25% of the world's greenhouse gas emissions. Two sectors with large potential to be electrified - transportation and buildings together account for another 21%.² Thus, full decarbonization of electricity systems is the linchpin to mitigating climate change, with the potential to eliminate nearly 50% of greenhouse gas emissions globally.

Full-scale electricity decarbonization fundamentally means that every kilowatthour of electricity demand is served by carbon-free electricity sources, every hour of every day, everywhere. Consumers of electricity - from companies to cities to governments across the world - can hasten the creation of a decarbonized electricity future by committing to **24/7 Carbon-Free Energy (CFE)** to fully decarbonize their own electricity consumption.

24/7 CFE is based on the following principles:

- 1 Time-matched procurement: matching hourly electricity consumption with carbon-free electricity generation. Hourly matching helps connect clean energy purchasing to underlying electricity consumption.
- **2** Local procurement: purchasing clean energy on the local/ regional electricity grids where electricity consumption occurs. This is the only way to drive the electricity-related emissions that a consumer is directly responsible for to zero.
- **Technology-inclusive:** recognizing the need to create zero-carbon electricity systems as quickly as possible. All Carbon-Free Energy technologies can play a role in creating this future.
- 4 Enable new generation: focusing on delivering additional Carbon-Free Energy to drive the rapid decarbonization of electricity systems.
- **Maximizing system impact:** addressing the dirtiest hours of electricity consumption where the most fossil fuel is used in generation.

Every energy consumer can take steps to progress toward 24/7 CFE, including purchasing clean energy based on the above principles; supporting the commercialization of advanced carbon-free energy technologies; and advocating for policies that accelerate the decarbonization of electricity systems.

## JOIN THE MOVEMENT

Joining the 24/7 Carbon-Free Energy Compact means your organization will become part of a growing global movement to meet all global electricity demand with Carbon-Free Energy sources. Signatories are actively collaborating to accelerate technologies, policies, tools, ideas and advocacy approaches aimed at unlocking 24/7 Carbon-Free Energy for all. To formally submit your application to join the 24/7 Carbon-Free Energy Compact, please click here. Please email energycompact@seforall.org for any queries.



 $<sup>^1\,</sup>IPCC,\,2018:\,https://www.ipcc.ch/site/assets/uploads/sites/2/2019/06/SR15\_Full\_Report\_Low\_Res.pdf$ 

<sup>&</sup>lt;sup>2</sup> IPCC, 2014: https://www.ipcc.ch/site/assets/uploads/2018/02/ipcc\_wg3\_ar5\_full.pdf