



**United
Nations**



HIGH-LEVEL DIALOGUE ON
ENERGY
UNITED NATIONS, NEW YORK, SEPTEMBER 2021

24/7 Carbon-Free Energy Compact

Workshop for national and local governments



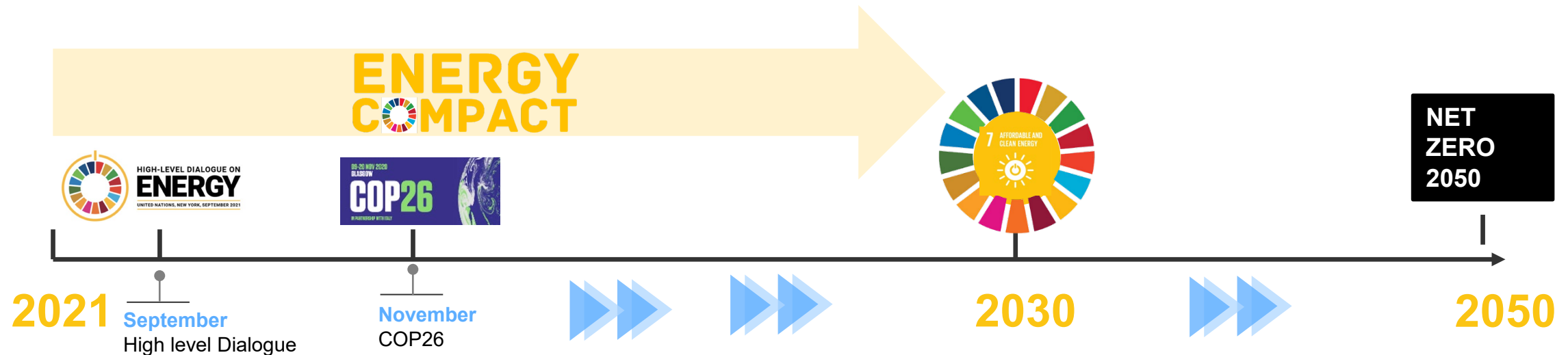
Agenda

- ▶ **Energy Compacts**
- ▶ **Overview of 24/7 Carbon-free Energy Compact**
- ▶ **How to join and next steps**
- ▶ **Q&A**

Achieving SDG7 by 2030 and net zero emissions by 2050



- **High-level Dialogue on Energy** – first General Assembly mandated summit on energy in over 40 years, held in September 2021
- **Energy Compacts**, a key outcome of the HLD, are voluntary commitments and actions by all stakeholders to achieve SDG7 by 2030 and net-zero emissions by 2050



The Energy Compacts are voluntary commitments to drive bolder action towards SDG7

Energy Compacts will be the most **inclusive** umbrella dedicated to bring together **voluntary commitments** on all SDG7 targets in support of achieving all SDGs by 2030 and net zero emissions by 2050.

WHAT

Voluntary commitments on the following themes to advance SDG7 by 2030 and net zero by 2050.



Energy Access

Innovation,
technology and
data

Energy
Transition

Finance and
Investment

Enabling SDGs
through inclusive
and just transition

WHO

Energy Compacts will be **inclusive** and available for voluntary commitments from all stakeholders in the global movement on SDG7



Governments

International
organizations

Business

Multi-
stakeholders
including youth
and academia

Civil society

HOW

Aligned with existing commitments covering ambitious actions, policies, finance and investment, etc. commitments on SDG7.

















































NDCs

SDGs


Energy
Transition Plans

Political support in the run up to the High-Level Dialogue

THEME	GLOBAL THEME CHAMPIONS	TWG CO-LEADS ORGANIZATIONS
1. Energy Access	 CHINA  EUROPEAN UNION  JAPAN  KENYA  MALAWI  NETHERLANDS  RUSSIAN FEDERATION  SAUDI ARABIA	 UNITED NATIONS DEVELOPMENT PROGRAMME  UN OFFICE FOR LEAST DEVELOPED, LANDLOCKED AND SMALL ISLAND DEVELOPING STATES  THE WORLD BANK
2. Energy Transition	 BRZIL  CHILE  COLOMBIA  DENMARK  GERMANY  INDIA  NIGERIA  POLAND  SPAIN  UNITED KINGDOM	 INTERNATIONAL RENEWABLE ENERGY AGENCY  UN ECONOMIC AND SOCIAL COMMISSION FOR ASIA AND THE PACIFIC  UN ENVIRONMENT PROGRAMME
3. Enabling SDGs through inclusive, just energy transitions	 EUROPEAN UNION ²  HONDURAS  ICELAND  NAURU  PANAMA  PORTUGAL  UNITED ARAB EMIRATES	 UN DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS  UN ECONOMIC AND SOCIAL COMMISSION FOR WESTERN ASIA  WORLD HEALTH ORGANIZATION
4. Innovation, technology and data	 FINLAND  MAURITIUS  MOROCCO  RUSSIAN FEDERATION ²	 FOOD AND AGRICULTURE ORGANIZATION OF THE UN  UN HUMAN SETTLEMENTS PROGRAMME  UN INDUSTRIAL DEVELOPMENT ORGANIZATION
5. Finance and investment	 DOMINICAN REPUBLIC  ITALY  NETHERLANDS ²  PAKISTAN  SAUDI ARABIA ²	 EUROPEAN INVESTMENT BANK  INTERNATIONAL ENERGY AGENCY  INTERNATIONAL FINANCE CORPORATION  UN ECONOMIC COMMISSION FOR AFRICA

Leadership on SDG7 – Overview of Commitments announced during the HLD

- More than **US\$400 billion** in new finance and investment was committed by governments and the private sector
- More than **160 Energy Compacts** from national and local governments, businesses, foundations and international, civil society and youth organizations from every region were submitted for the Dialogue

 7 AFFORDABLE AND CLEAN ENERGY	Finance and investment (USD)*	Enhanced electricity access (number of people)	Enhanced clean cooking access (number of people)	Additional renewable energy capacity to be deployed	Energy savings to be achieved	New jobs to be created	New electric vehicles to be deployed	New charging stations to be installed	GHG emissions to be avoided
Government commitments	60 billion	166 million	27 million	242 GW	7190 GWh	2.91 million	1.75 million [#]	150	1,112 million tons
Private sector commitments	336 billion	202 million	15,000	530 GW	-	2.21 million ^{**}	141,165	2.86 million	1372 million tons
Catalytic partnerships (leveraged outcomes)	> 200 billion	-	~ 200 million	> 3500 GW	> 1TWh	-	-	-	> 2 gigatons






24/7 CFE Compact was also launched during the HLD with the following initial signatories



Commitment Types *

Stakeholders are invited to register their own Energy Compacts (samples seen below 1) or commit to a specific topic and outline their commitments based on their targets (sample seen below 2)

1

	MEMBER STATE	<ul style="list-style-type: none">• Declares a moratorium on unabated coal-fired generation by xx• Commits to expanding access to improved energy cooking services to XX% of the population by XX
	LOCAL GOVERNMENT	Commits to develop a buildings sector strategy that includes 2030 targets for renewable energy integration and energy efficiency that are consistent with SDG 7 and the goals of the Paris Agreement
	BUSINESS	<ul style="list-style-type: none">• Commits to (%) renewable energy share in total final energy consumption by XX• Commits to expanding access to affordable, reliable, and modern energy to XX% of population by XX
	Civil Society Organizations	Commits to leading or supporting efforts to enhance data transparency and capacity building for data collection to monitor progress on SDG7
	MULTI-STAKEHOLDER	Commits to deliver green investment that supports commitments to energy access and the energy transition, including incentives to achieve renewable energy and energy efficiency commitments by XX

2

SPECIFIC TOPIC COMMITMENTS OPEN TO ALL ACTORS ON SDG7 MOVEMENT

Multi-stakeholder that join together to work together on a specific topic. e.g. **24/7 Carbon-Free Energy Compact*** based on [24/7 CFE principles](#)

For a list of other topics please visit this [link](#)

* Illustrative and non-exhaustive

Registration of Compacts with the UN



SUBMISSION OF COMPACT

- Please visit this [link](#) for submission guidelines including template for Compacts



REVIEW OF SUBMISSIONS

by UN-Energy based on a set
of [Guiding Principles](#)



REGISTRATION OF ENERGY COMPACTS

[online-dashboard](#)

- **UN-Energy will engage iteratively** to ensure specific ambitions, advantages and plans of each stakeholder will be reflected in their Energy Compact
- **Compacts will also be living documents that can be updated** with additional commitments over time

* In case of queries and for further information on the Energy Compacts submission process, please contact un-energycompact@un.org (copy to energycompact@seforall.org).

Energy Compacts will be assessed against five guiding principles for quality assurance



Stepping up ambition and accelerating action

Increase contribution of and accelerate the implementation of the SDG7 targets in support of the 2030 Agenda for Sustainable Development for Paris Agreement

Alignment with the 2030 agenda on Sustainable Development Goals

Ensure coherence and alignment with SDG implementation plans and strategies by 2030 as well as national development plans and priorities

Alignment with Paris Agreement and net-zero by 2050

Ensure coherence and alignment with the Nationally Determined Contributions, long-term net zero emission strategies

Leaving no one behind, strengthening inclusion, interlinkages and synergies

Enabling the achievement of SDGs and just transition by reflecting interlinkages with other SDGs

Feasibility and Robustness

Commitments and measures are technically sound, feasible, and verifiable based a set of objectives with specific performance indicators, baselines, targets and data sources as needed

Bringing the Energy Compacts to life

Matchmaking opportunities for Energy Compacts



- Connecting Energy Compacts with resources
- Facilitating knowledge exchange



Sub-
national



Business



Multi-
Stakeholder



Member
State

- UN-Energy will facilitate connecting Energy Compact commitments with requests for support in specific areas on SDG7 targets that have been elaborated

▶ 24/7 Carbon-Free Energy (CFE) Compact

24/7 CFE Compact was launched during the UN High-level Dialogue on Energy with the following initial signatories

aes



Government of Iceland
Ministry for Foreign Affairs

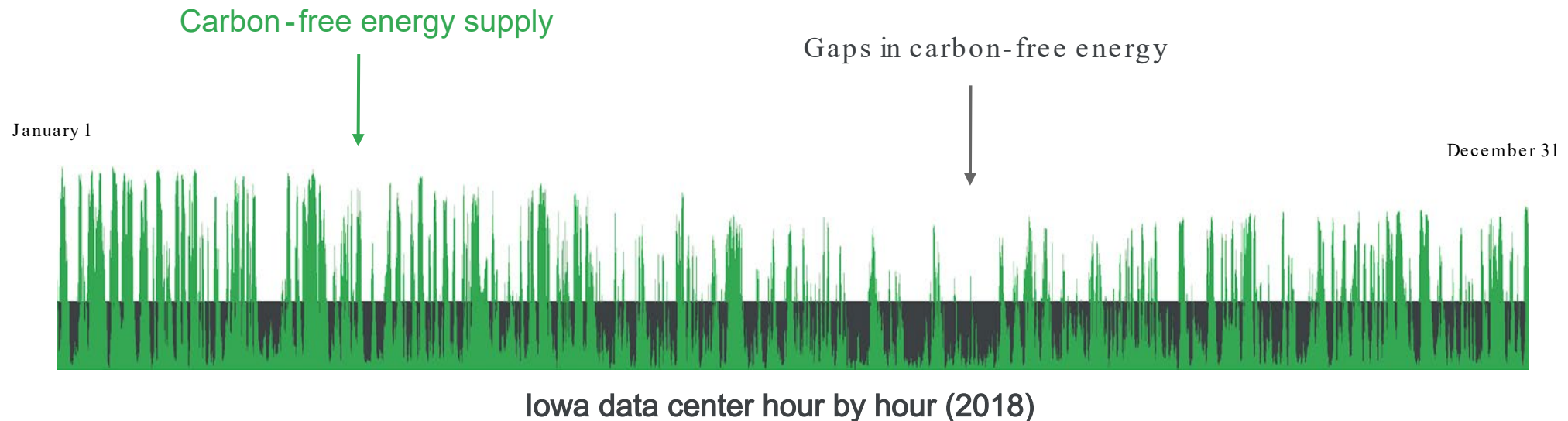


What is 24/7 Carbon-free Energy (CFE)?

Definition: Every kilowatt-hour of electricity consumption is met with carbon-free electricity sources, every hour of every day, everywhere.

24/7 CFE is both the end state of a fully decarbonized electricity system, and a **transformative approach** to energy procurement, supply, and policy design that is critical to accelerating its arrival.

100% Renewable Energy does not mean 24/7 Carbon-free



Why 24/7 Carbon-free Energy?

24/7 CFE is about driving electricity grids to zero-carbon, faster.

1

Greater Emissions Reductions

2

Reducing Financial Risks

3

Grid Resilience

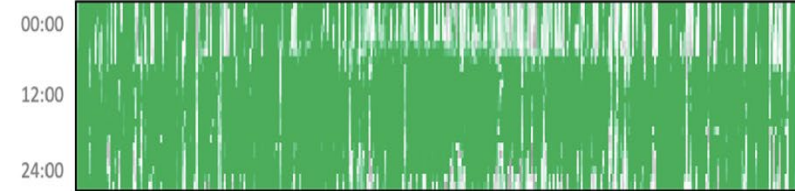
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Driving Innovation

5

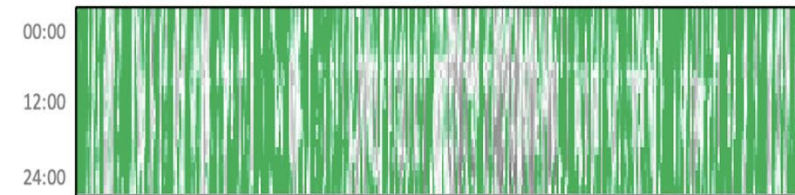
Focusing Policy Advocacy

24/7 carbon-free
energy portfolio
of solar, wind and
energy storage



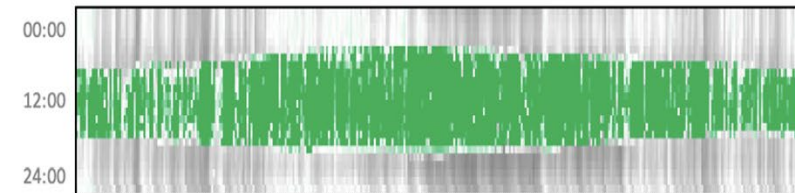
91% CFE
4.7 million
tons CO₂ reduction

100% wind



77% CFE
3.3 million
tons CO₂ reduction

100% solar



65% CFE
2.2 million
tons CO₂ reduction

100% CFE 50% CFE 0% CFE

Source: AES

Assumptions: PJM grid (United States). Assumes flat 100 MW load profile. CO₂ reduction is cumulative over a 10-year period.

How do we achieve 24/7 CFE for All?

The [24/7 CFE Compact](#) is set of principles and actions that stakeholders across the energy ecosystem can commit to in order to drive systemic change and advance 24/7 CFE and electricity system decarbonization.

To advance 24/7 CFE for all, we will need progress and innovation in a number of areas, including:

- Reorienting clean energy purchasing to drive decarbonization of hourly electricity demand
- Creating new products and services that enable around-the-clock clean energy to be delivered to consumers
- Development and commercialization of advanced carbon-free energy and demand optimization technologies
- Policy shifts to enable access to 24/7 CFE and accelerate broader electricity grid decarbonization
- Access to granular energy data to inform and enable higher-impact decarbonization strategies

24/7 CFE Compact Commitments

Commitments (and which stakeholders each example could apply to):

- Adopting, *over time*, purchasing approaches that match hourly electricity demand on local/regional electricity grids where consumption occurs (energy consumer)
- Developing energy supply solutions that provide greater access to 24/7 CFE for consumers (energy suppliers)
- Publicly advocate and support energy policies that accelerate the decarbonization of electricity grids (all stakeholders, policymakers, governments)
- Developing new carbon-free energy hardware or software technologies that advance 24/7 CFE (technology providers)
- Advocate and support widespread access to energy data required to enable all consumers to set 24/7 CFE goals and maximize decarbonization impact. (All stakeholders)

How Governments Can Advance 24/7 CFE

There are a number of ways governments could advance 24/7 CFE as part of the Compact:

- Committing to enact policies to accelerate electricity system decarbonization
- Set target dates and clear trajectories for the complete decarbonization of electricity systems
- Commit to moving towards 24/7 carbon-free energy in public procurement of electricity (examples: US Federal government; City of Des Moines, Iowa).
- Require transparency in energy data to enable 24/7 procurement and supply options by others

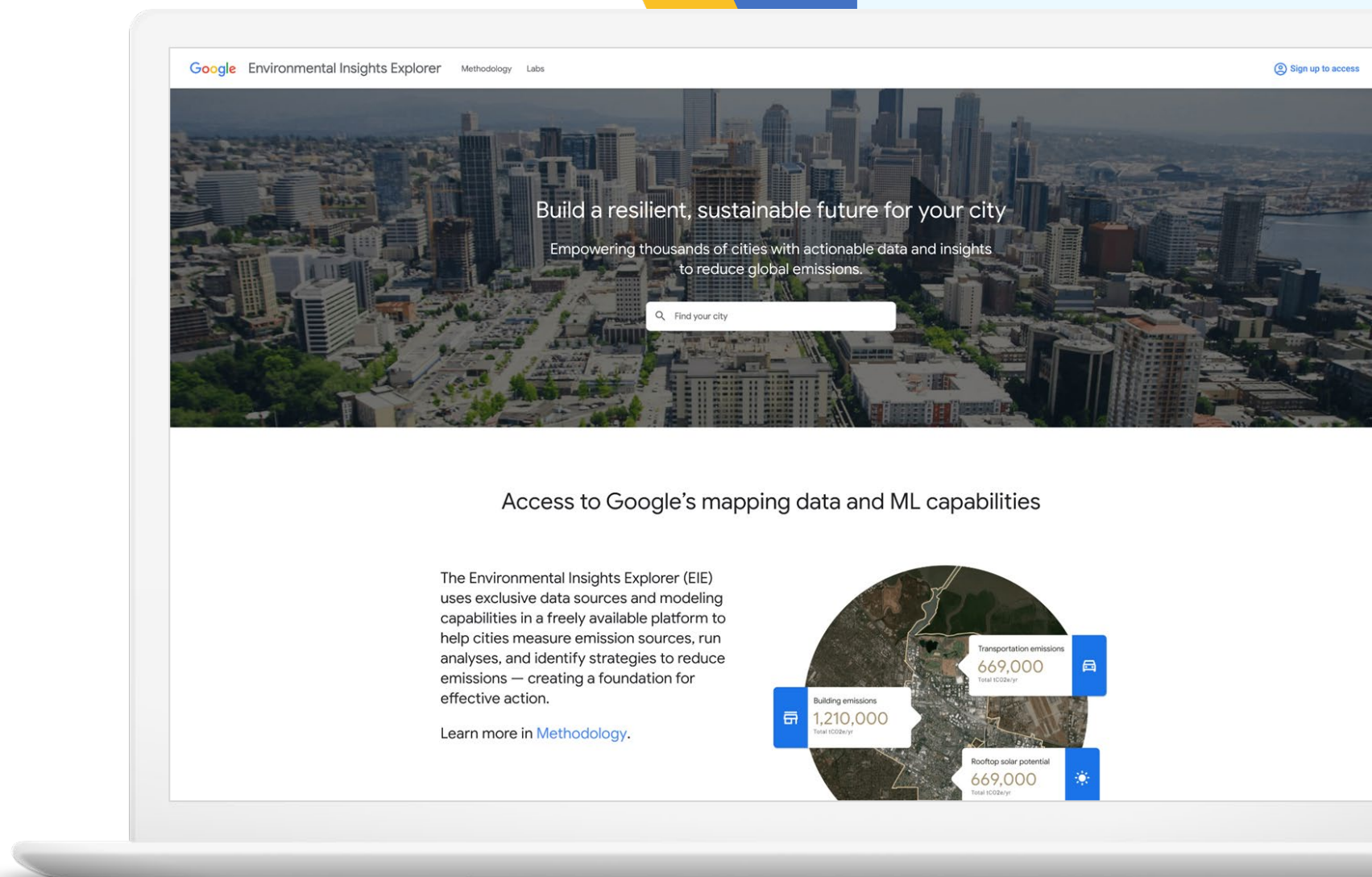
The Environmental Insights Explorer

Providing trustworthy, timely insights to accelerate climate action through data-driven decisions.

Help over 500 cities or local governments reduce

1 gigaton

of carbon emissions annually by 2030 and beyond.



The Environmental Insights Explorer enables faster climate action in cities

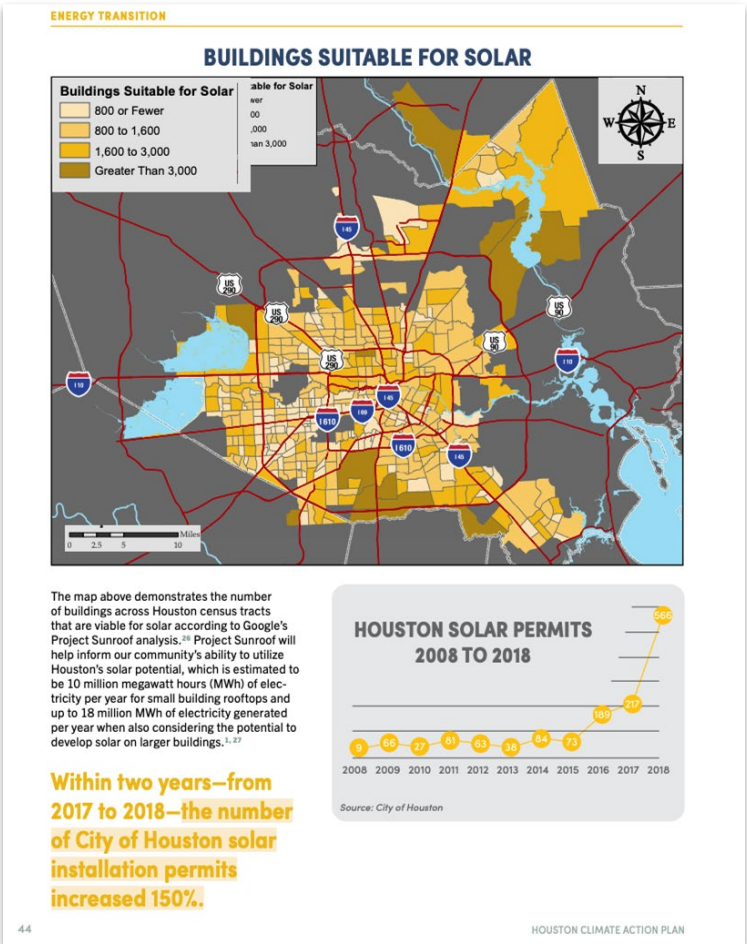
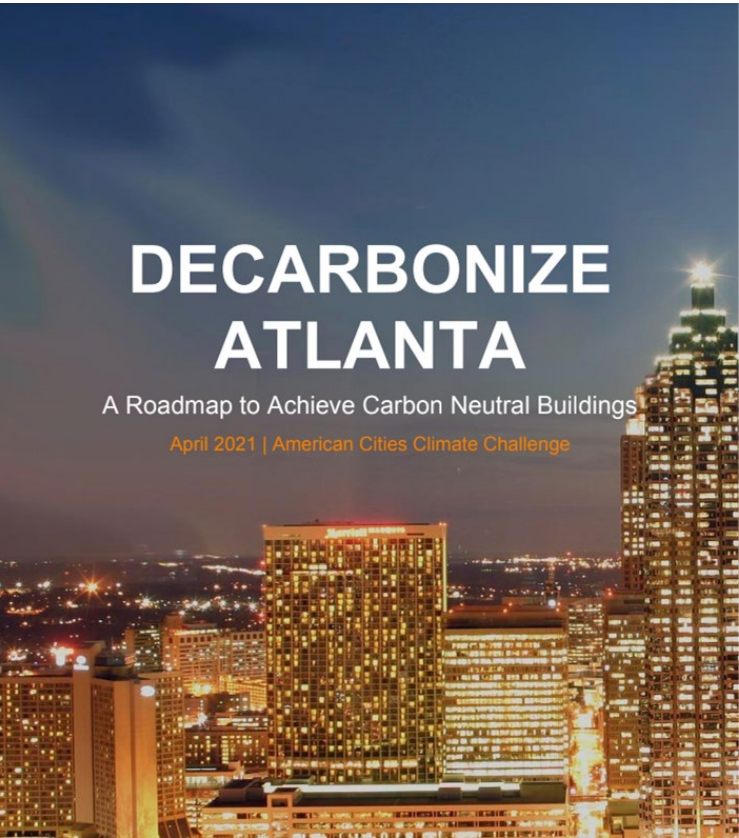


Figure 4-1: 2020 Solar suitability of residential and commercial buildings near the lakefront (left) and Cleveland City Hall (right)³³



How to join and Next Steps

SUPPORTED BY



IN PARTNERSHIP WITH



- » The 24/7 CFE Compact will be launched with a broader set of signatories during the COP26 and we invite all interested parties that want to join the launch, to review the Compact (available on the UN High-level Dialogue website, link will also be shared with all participants) and write to energycompact@seforall.org before **27 October**, providing logo or seal for inclusion on the list of signatories.
- » Additionally, signatories to 24/7 CFE are also encouraged to work with the UN-Energy to submit their actions and commitments on SDG7 in form of an Energy Compact, after the COP26.
- » Please also sign up to join the 24/7 CFE movement and receive updates at 24-7cfe.com
- » This presentation will be shared with all participants

2030

SUSTAINABLE DEVELOPMENT

Toward the Future We Want



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Resources:

- <https://www.un.org/en/conferences/energy2021>
- 24-7cfe.com