

RE100

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RE100 & the Global Electricity Transition

16 February 2021
Ross Mitchell, RE100 Project Manager

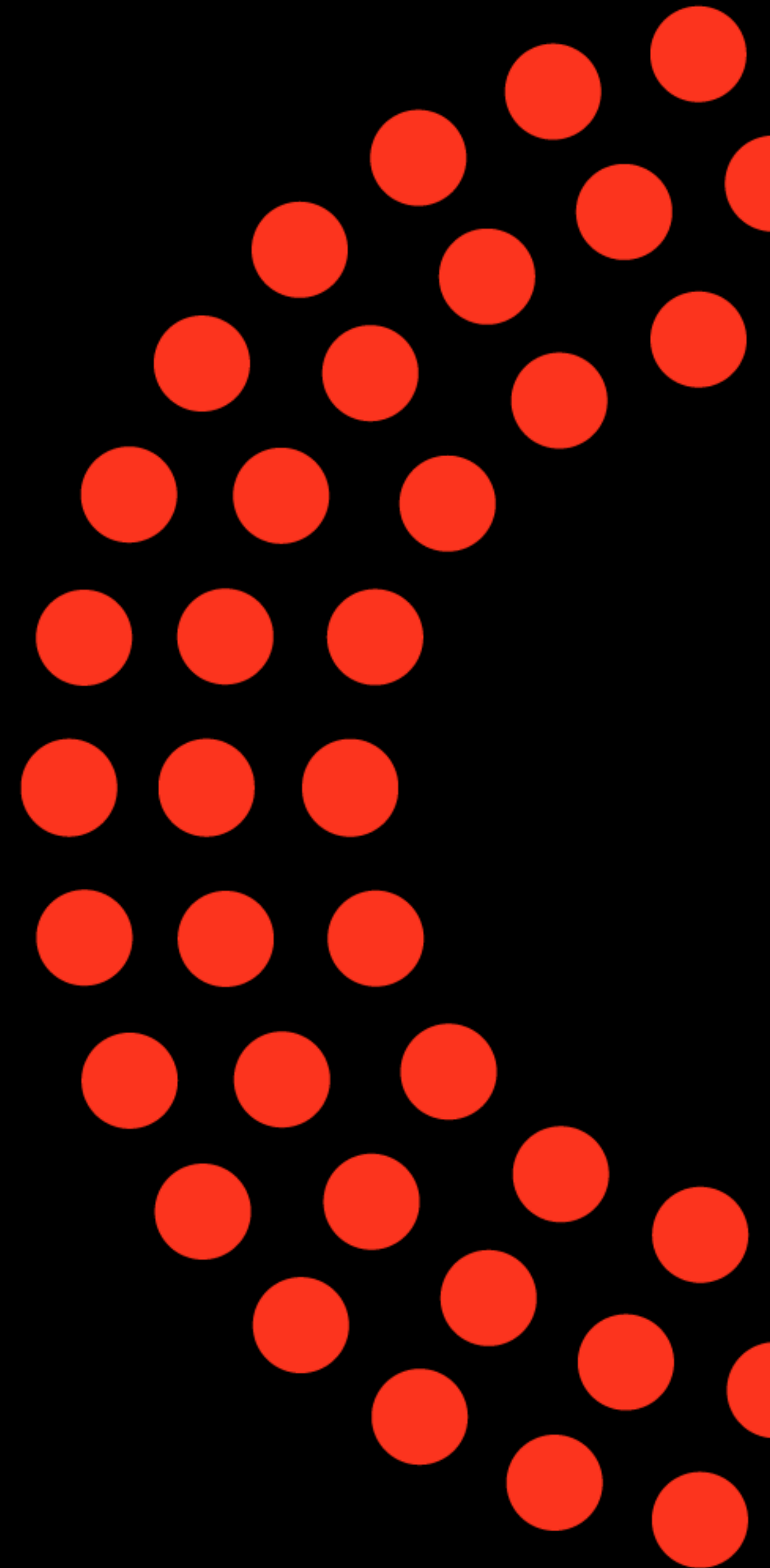


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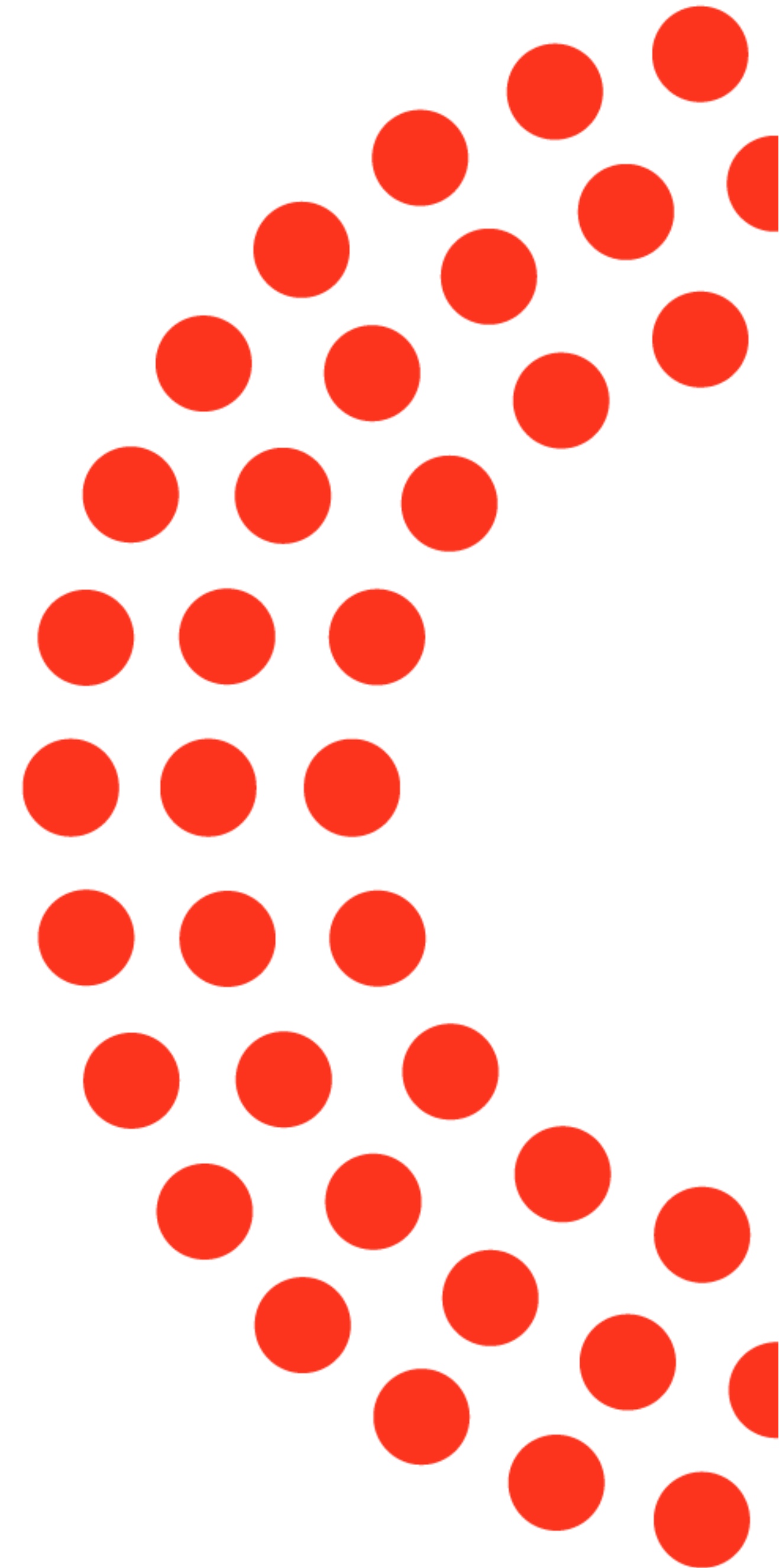
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1. How did we get here?
2. What is the transition and why is it needed?
3. What is RE100 and how does it support this transition?
4. What do we need to achieve and by when to align with the Paris Agreement?



How did we get here?

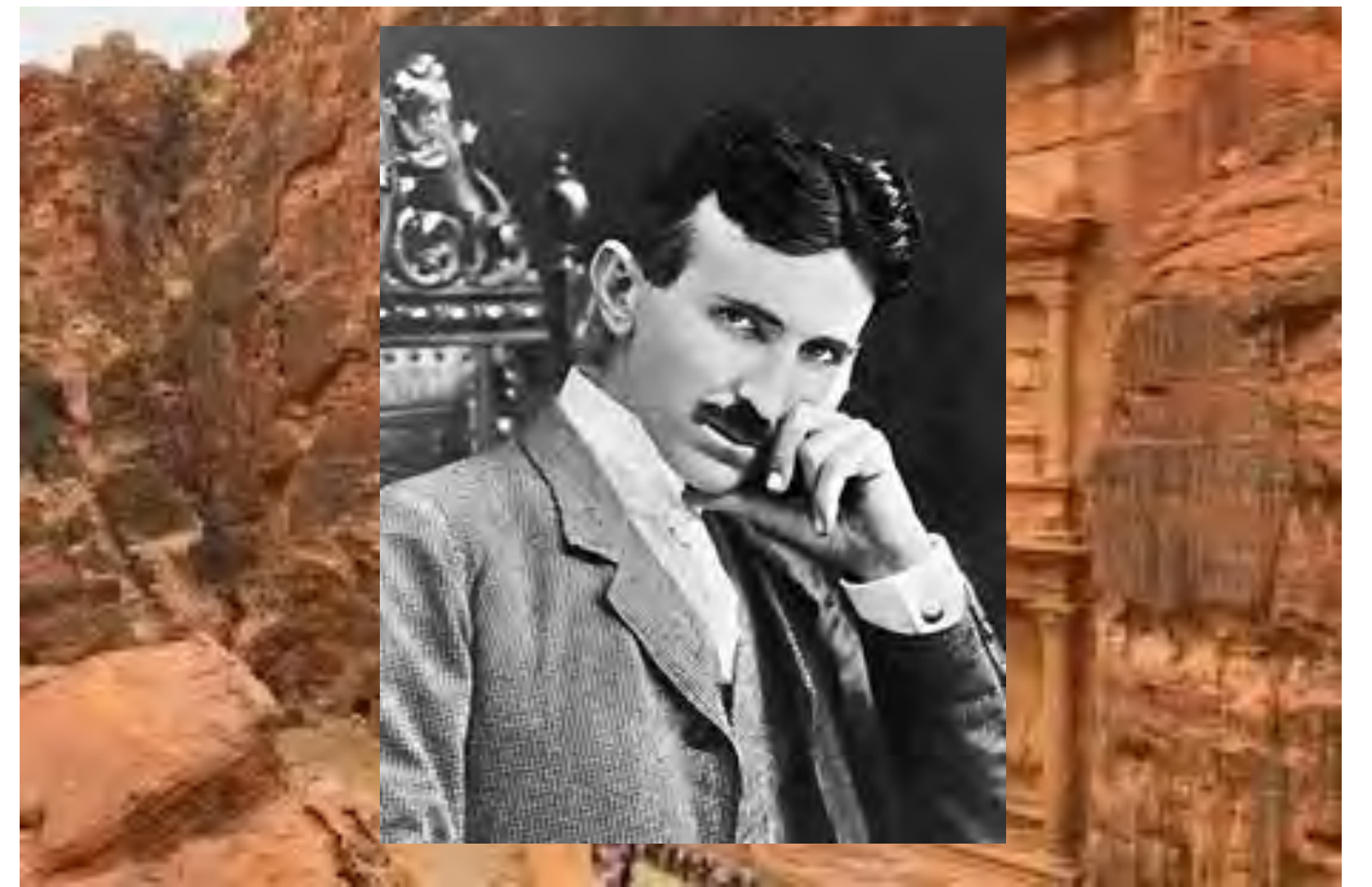
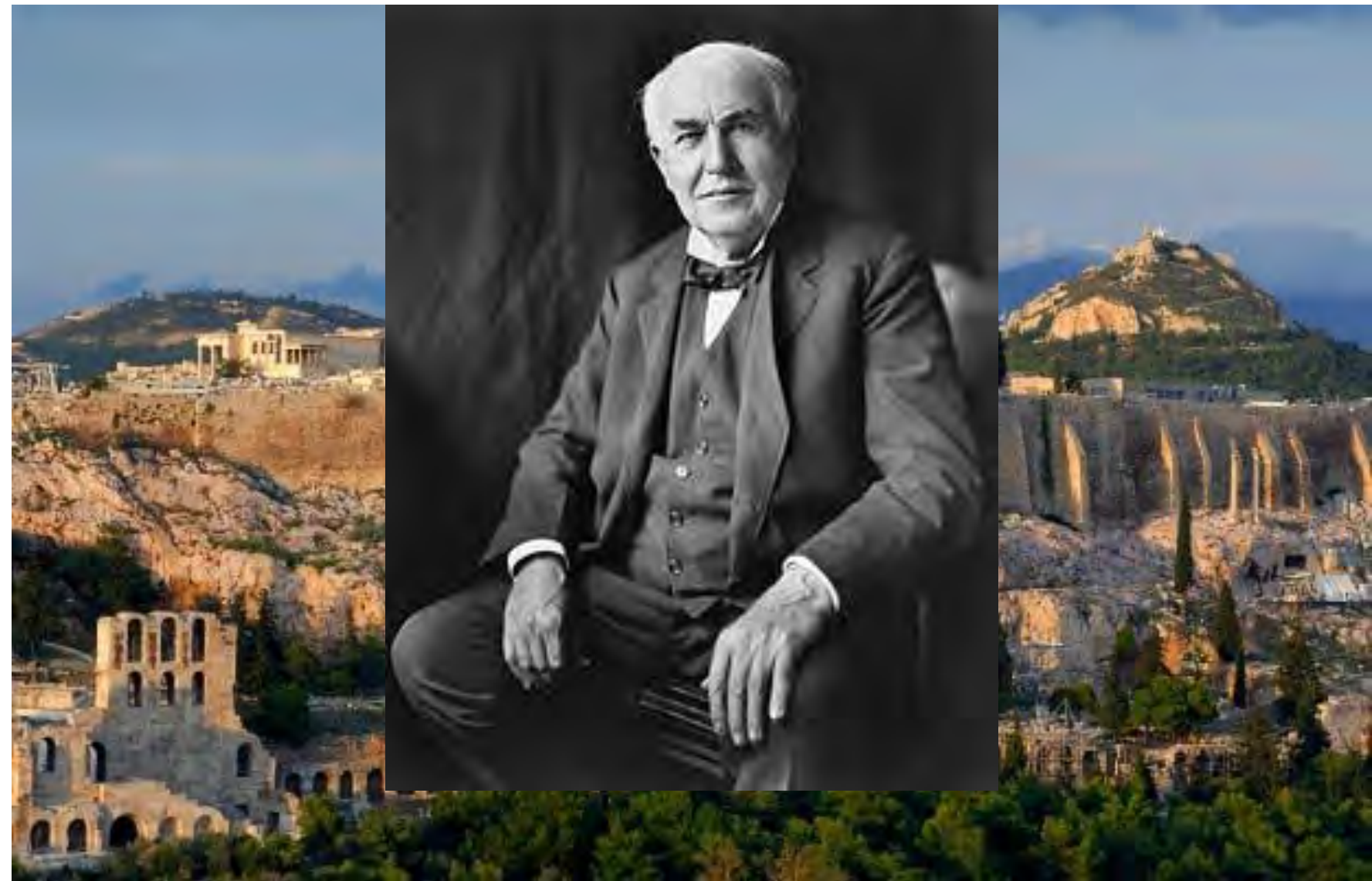
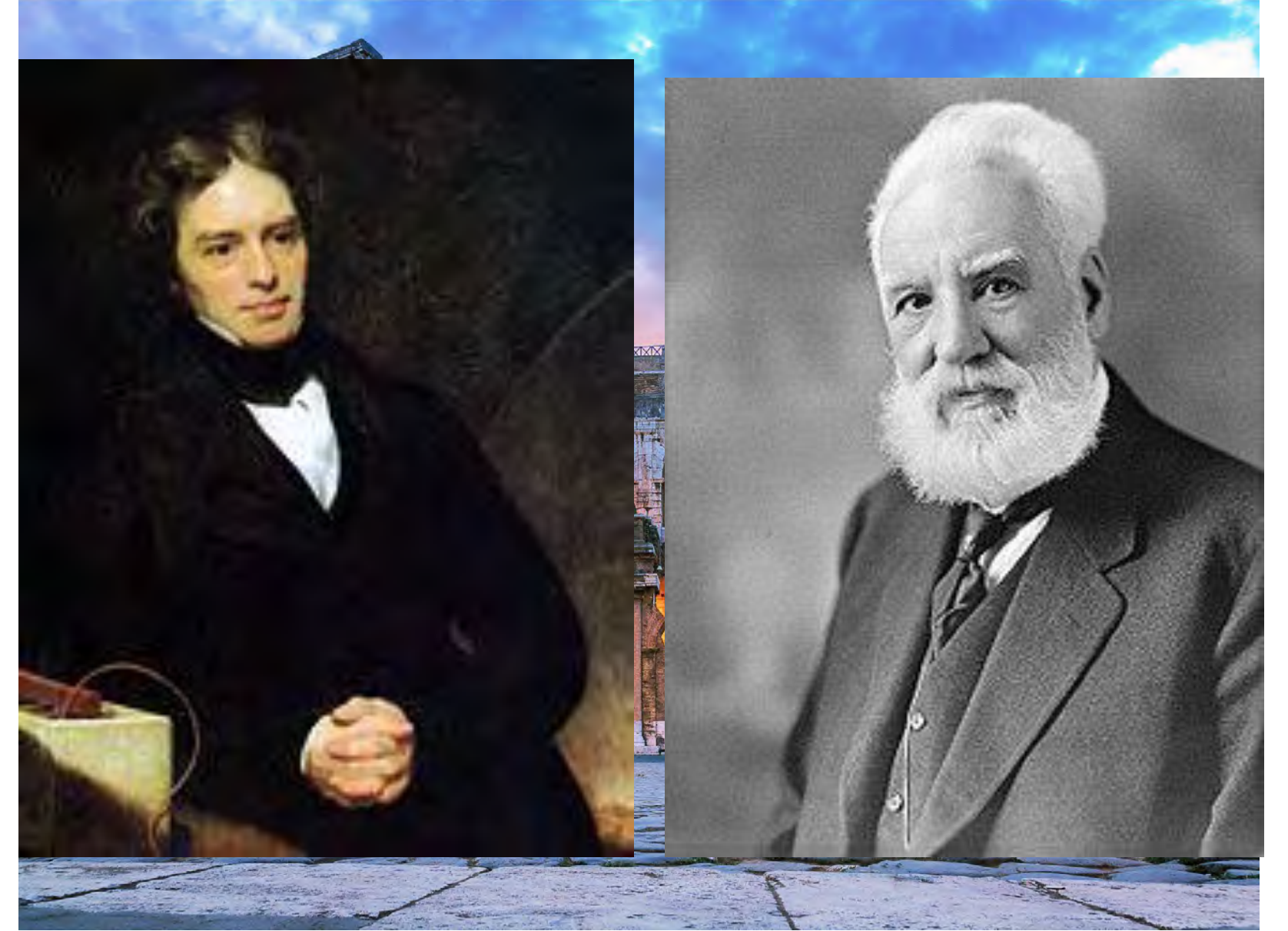


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Electricity – a brief history...

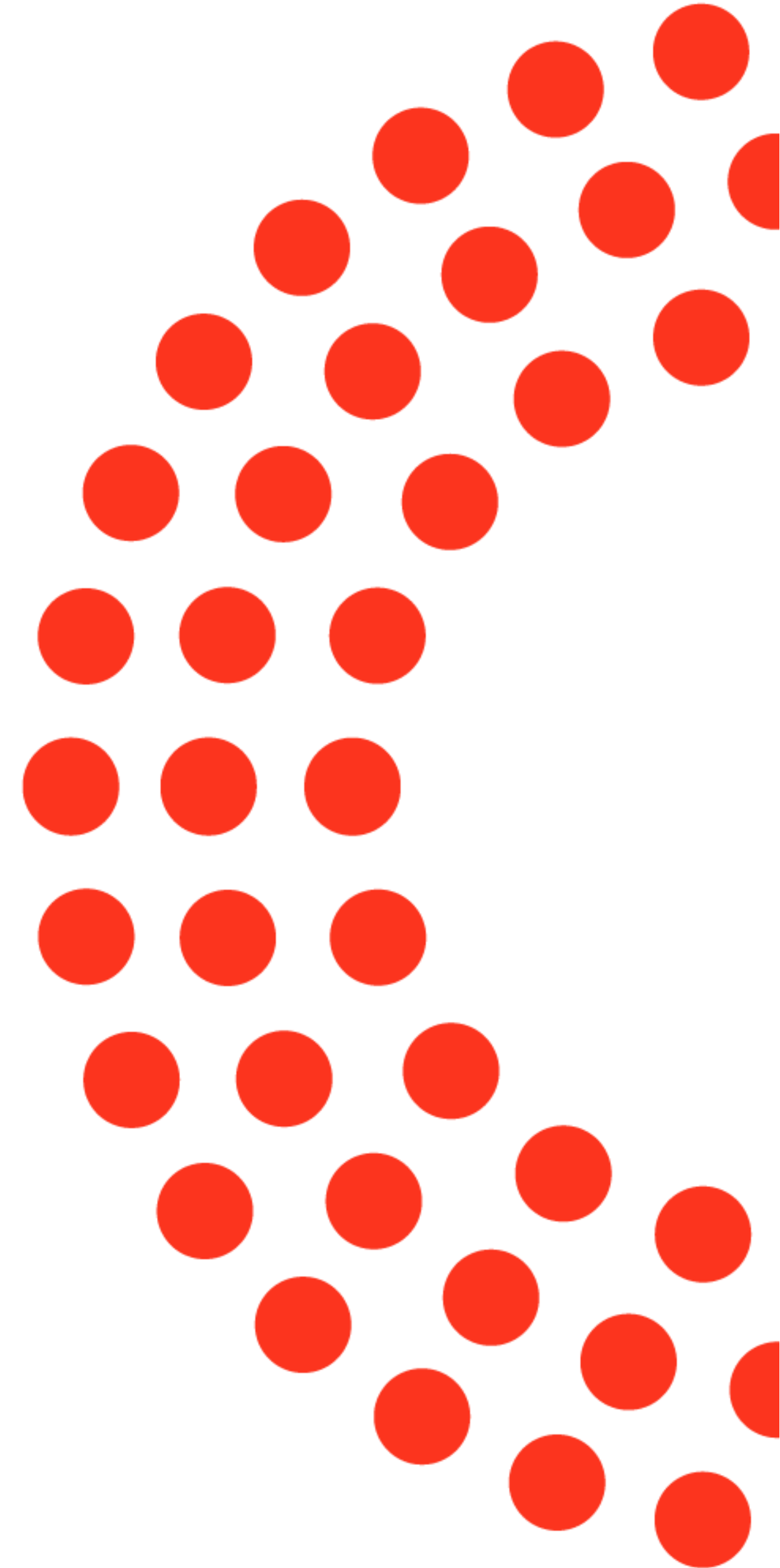


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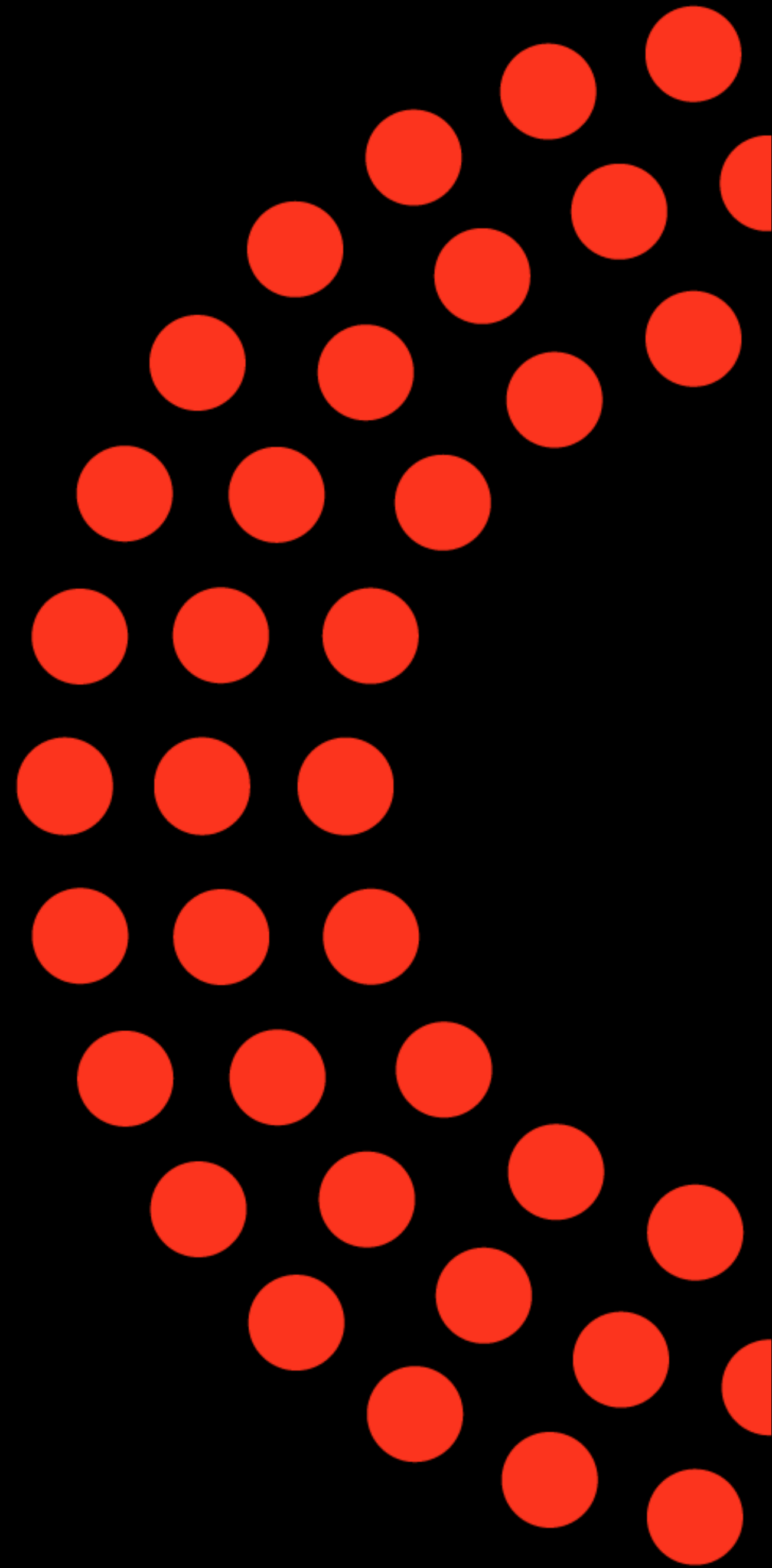


What is the transition and why is it needed?



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Brainstorm: What can we electrify to decarbonise?

What functions of everyday life/sectors can you think of that we can electrify with renewable electricity?

sli.do #RE100

slido

What can we electrify to decarbonise?

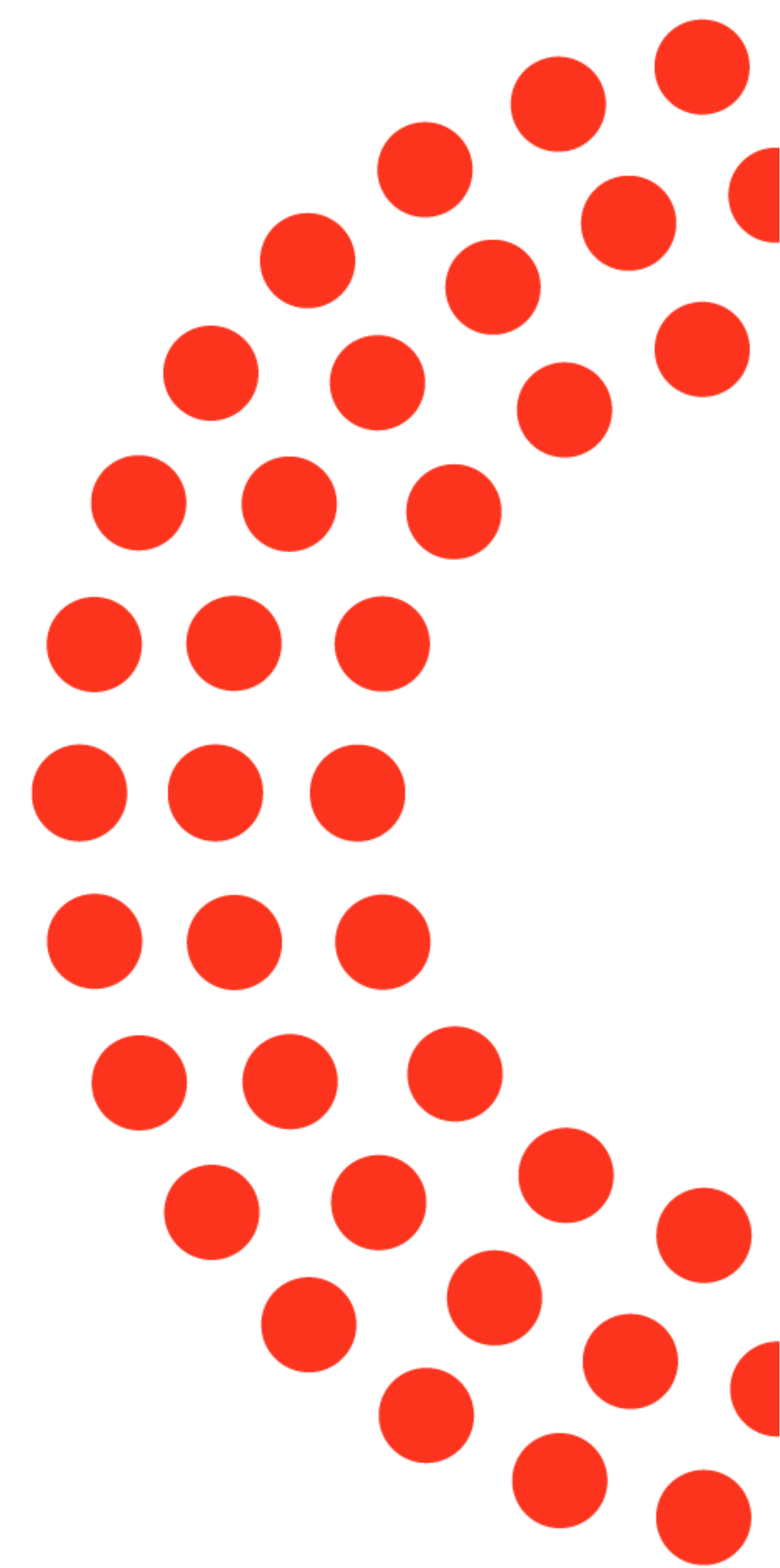
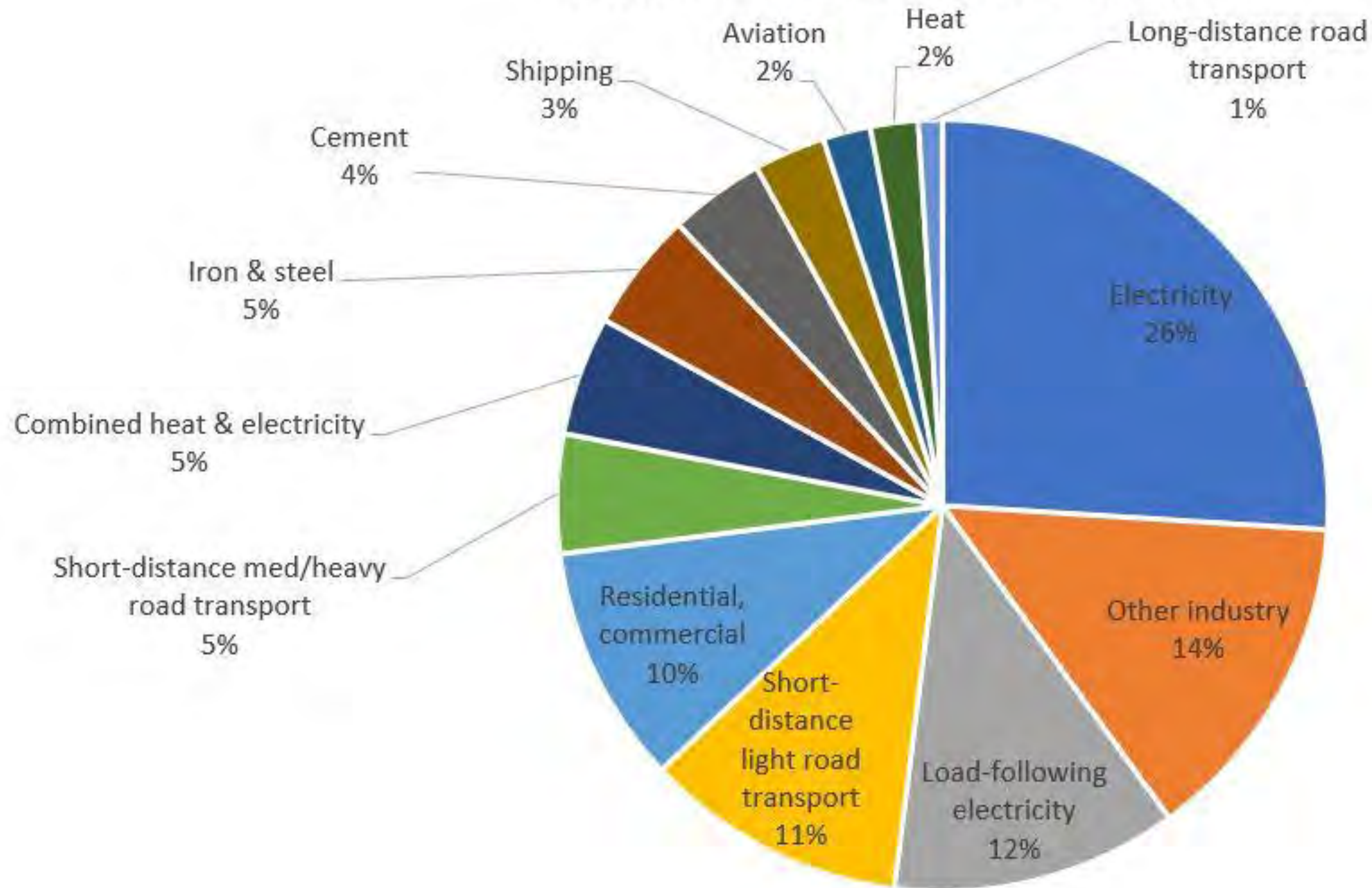
ⓘ Start presenting to display the poll results on this slide.

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Global Emissions Source Breakdown

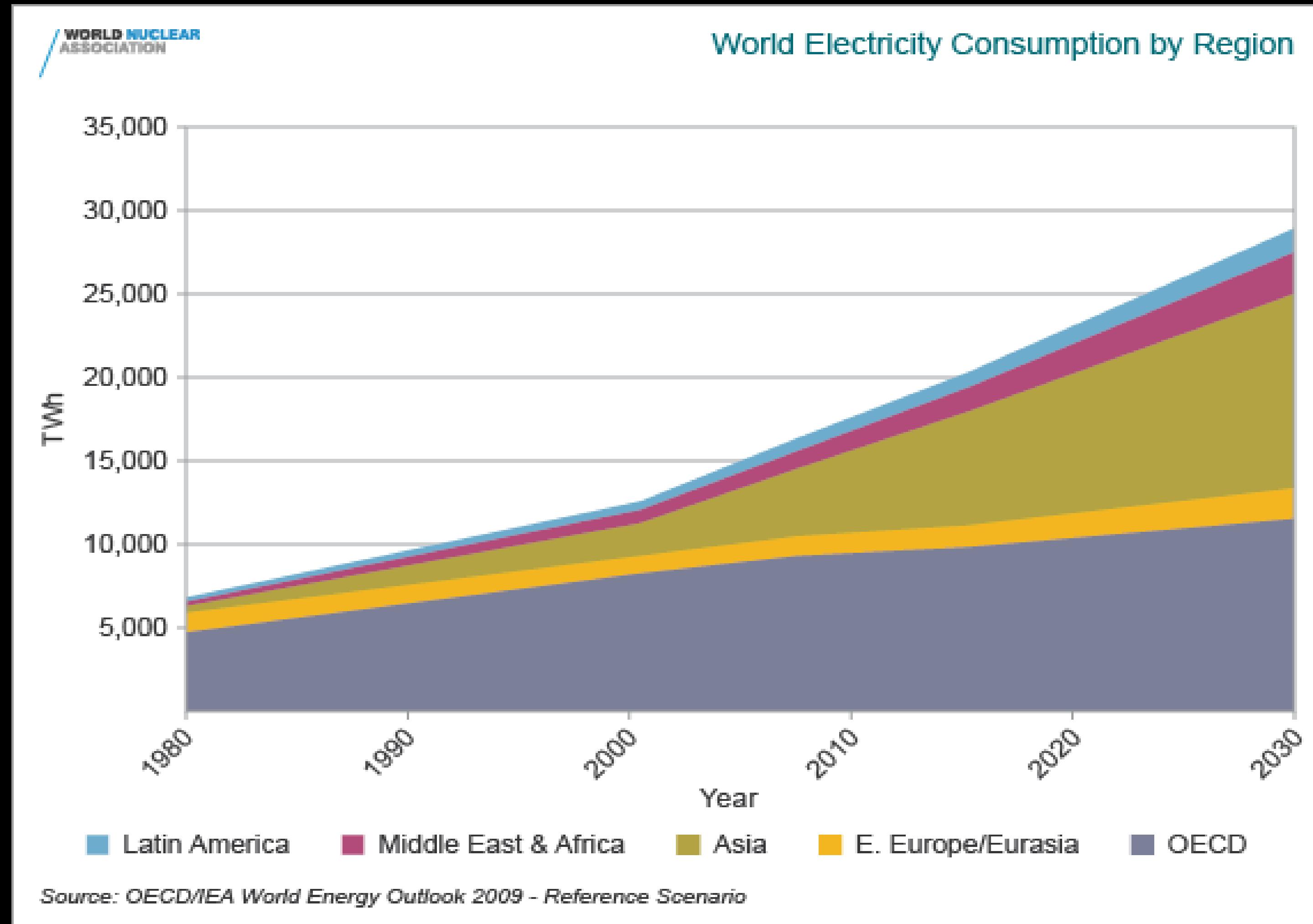
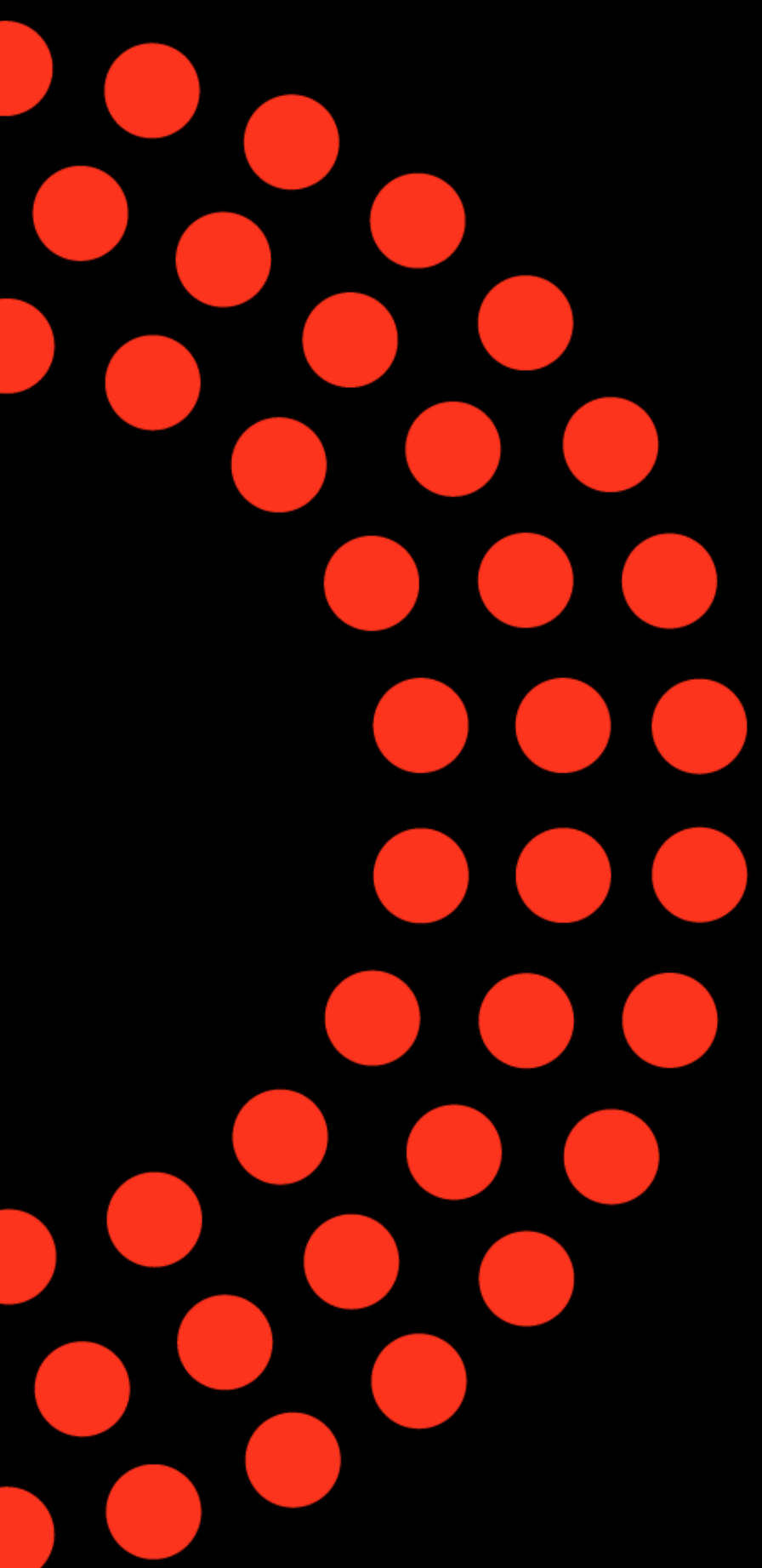


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Electricity consumption increasing



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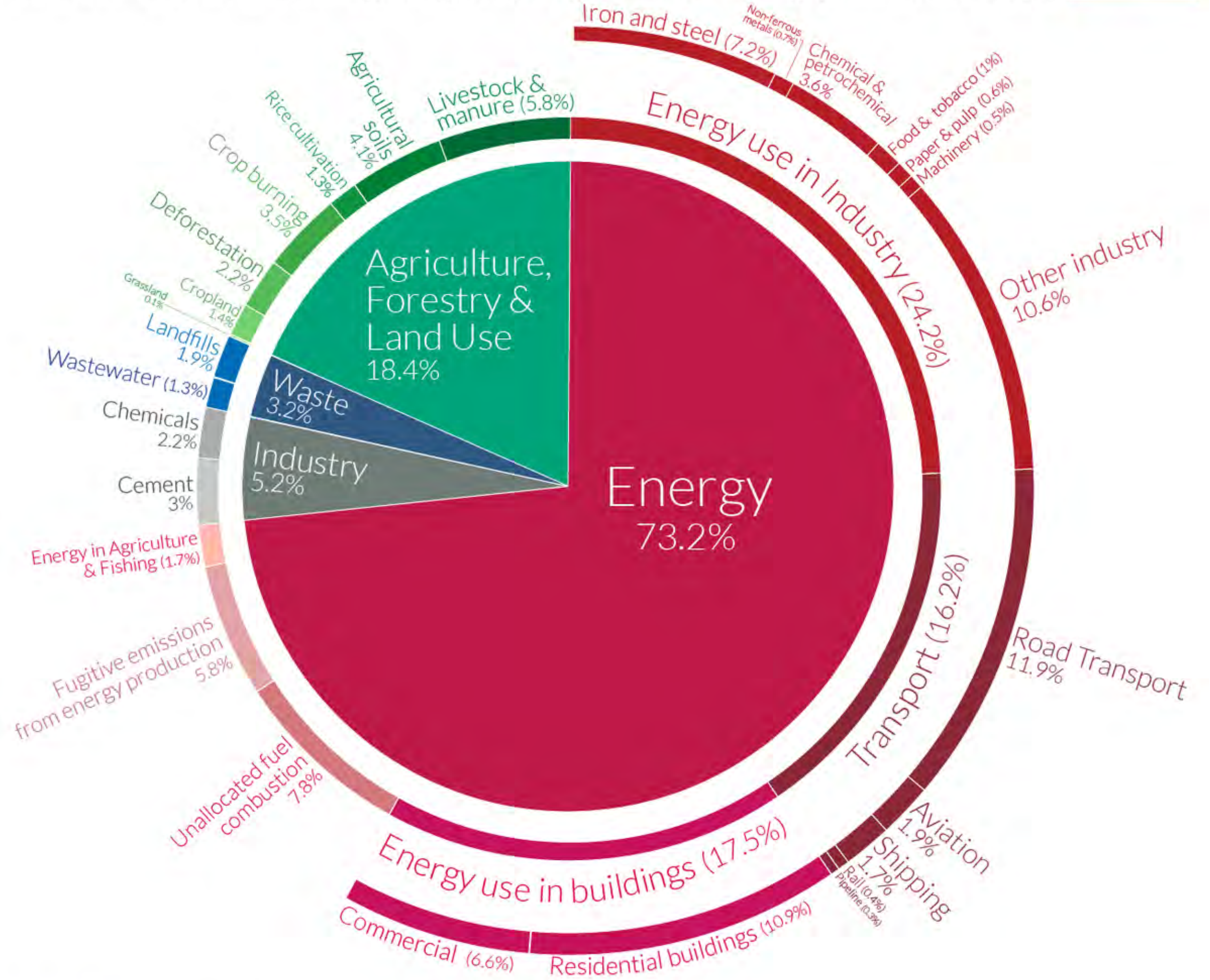


Global greenhouse gas emissions by sector

This is shown for the year 2016 – global greenhouse gas emissions were 49.4 billion tonnes CO₂eq.

Our World in Data

Energy Transition
→ Electrification



OurWorldinData.org – Research and data to make progress against the world's largest problems.

Source: Climate Watch, the World Resources Institute (2020).

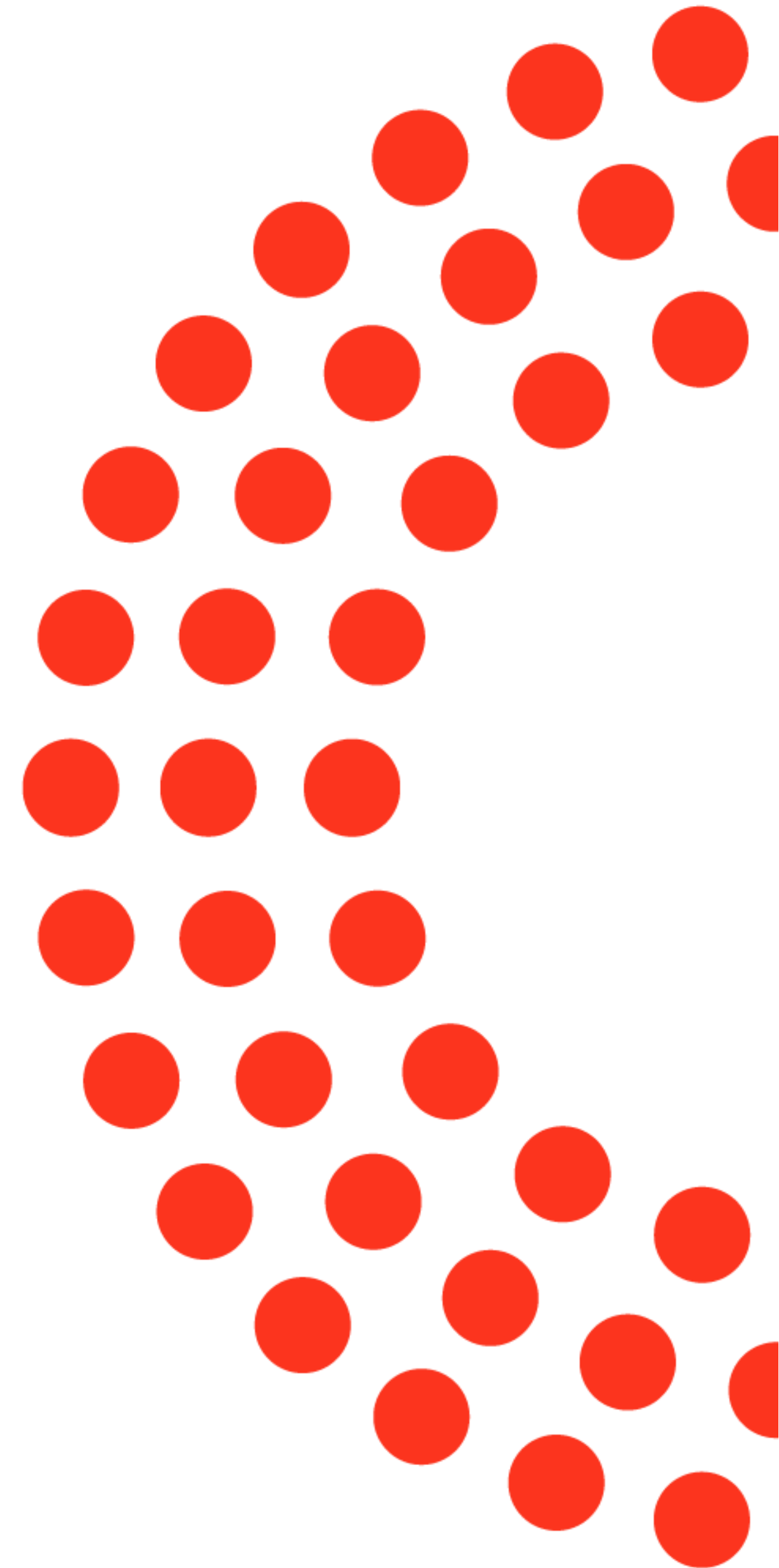
Licensed under CC-BY by the author Hannah Ritchie (2020).

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**What is RE100 and
how does it support
the transition?**



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About the Climate Group

The Climate Group is an international NGO with a mission to drive climate action. Fast. Our goal is a world of net zero carbon emissions by 2050, with greater prosperity for all.

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- RE100, in partnership with CDP is the global corporate renewable energy initiative bringing together hundreds of large and ambitious businesses committed to 100% renewable electricity

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EP100

- EP100, in partnership with the Alliance to Save Energy, brings together a growing group of energy-smart companies committed to improving their energy productivity

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EV100

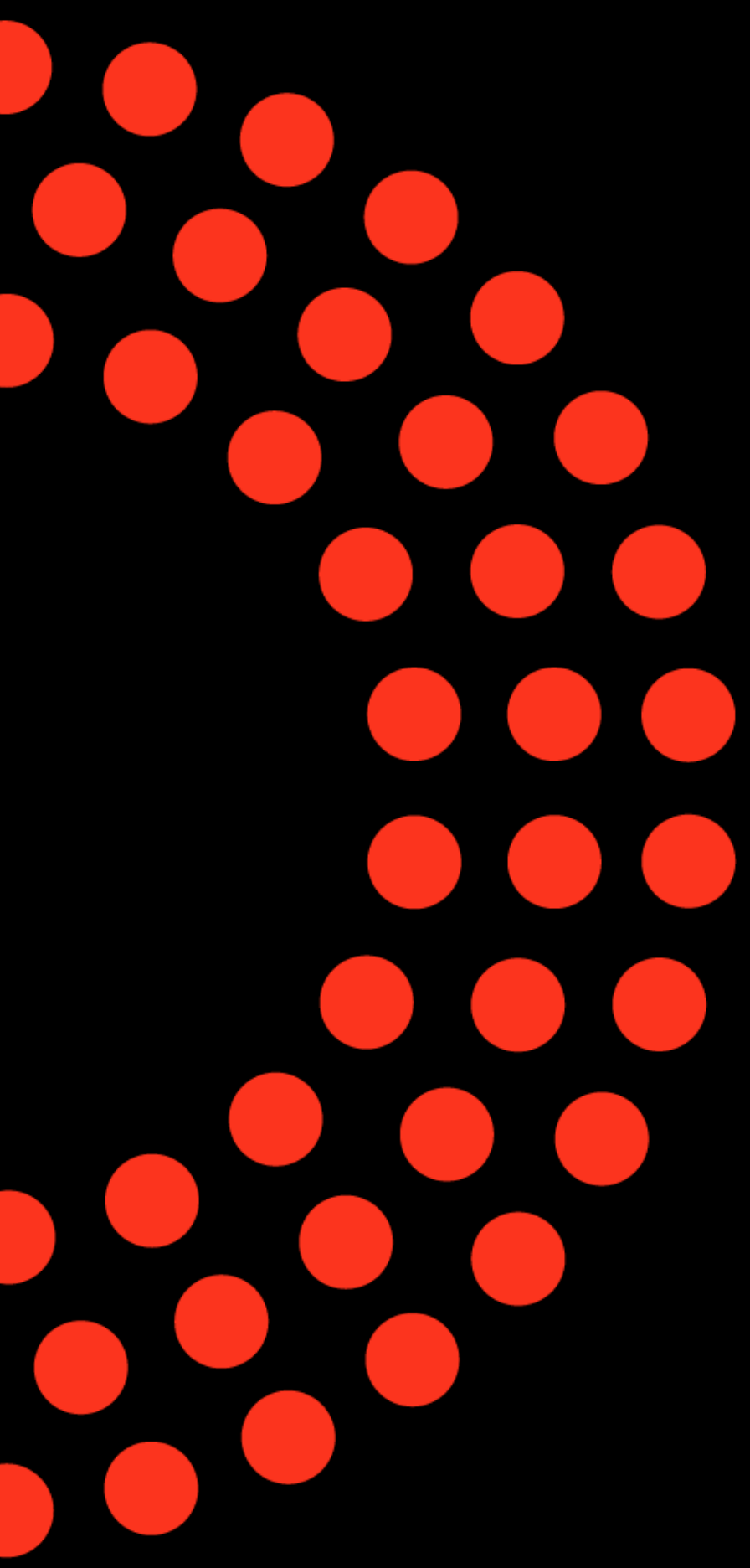
- EV100 is a global initiative bringing together forward looking companies committed to accelerating the transition to electric vehicles

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The world's most influential companies, committed to sourcing 100% of their global electricity consumption from renewable sources



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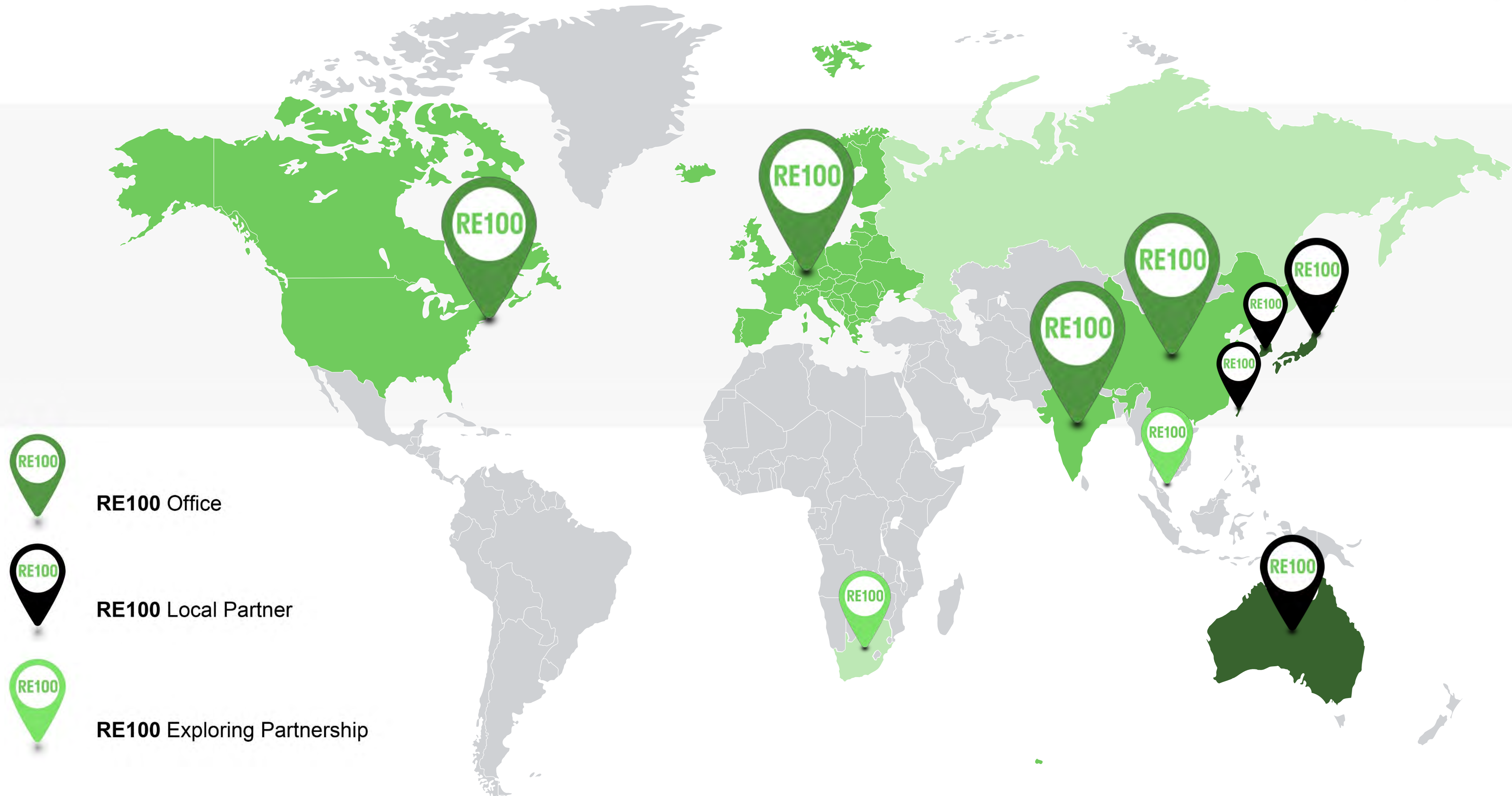
RE100 Mission

RE100 Role

Accelerate change towards zero carbon electricity grids globally by 2040

Send the demand signal and bring companies together to create political space in order for RE100 priority markets to adopt RE100 global policy asks leading to mass deployment of renewables on the grid

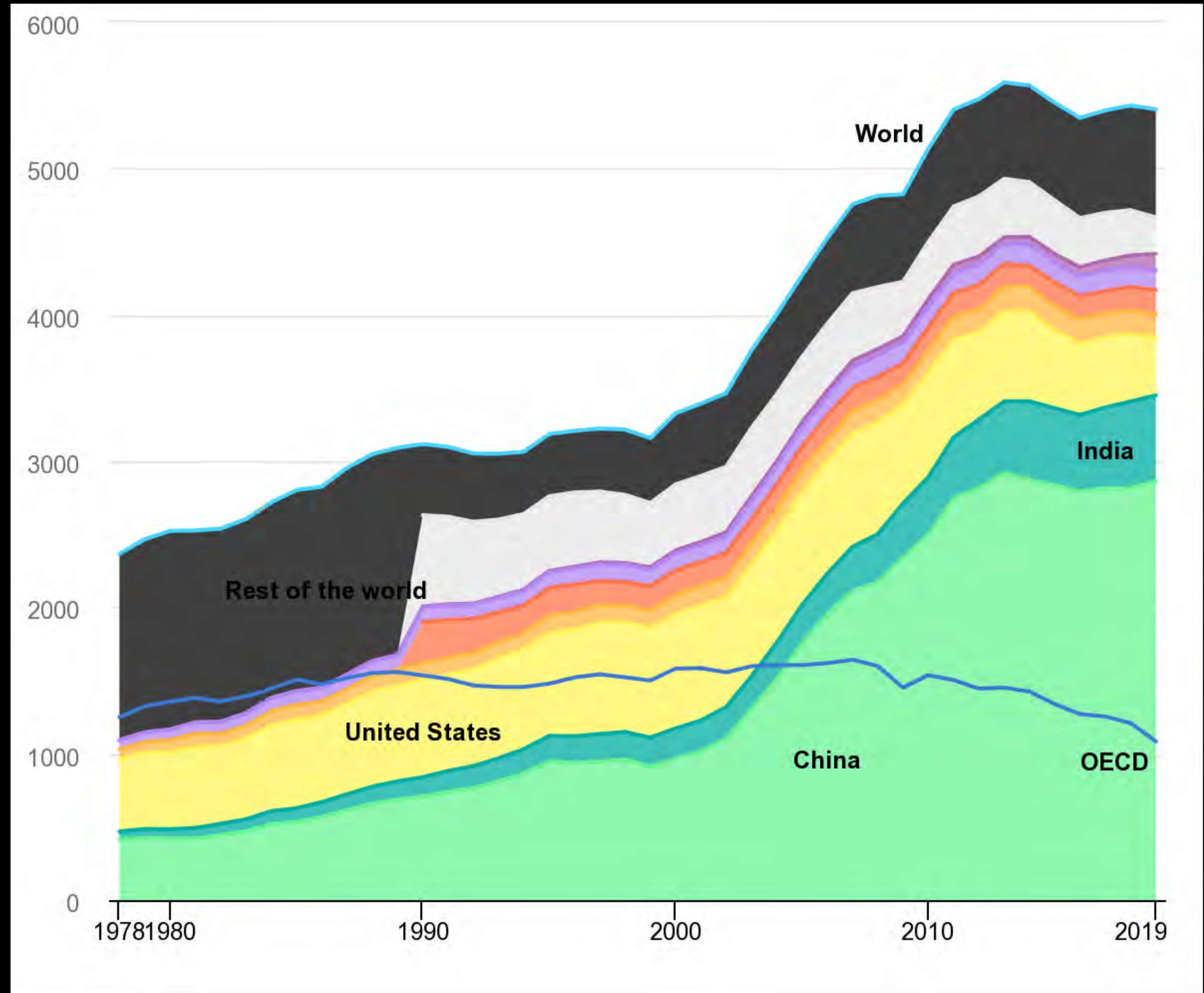
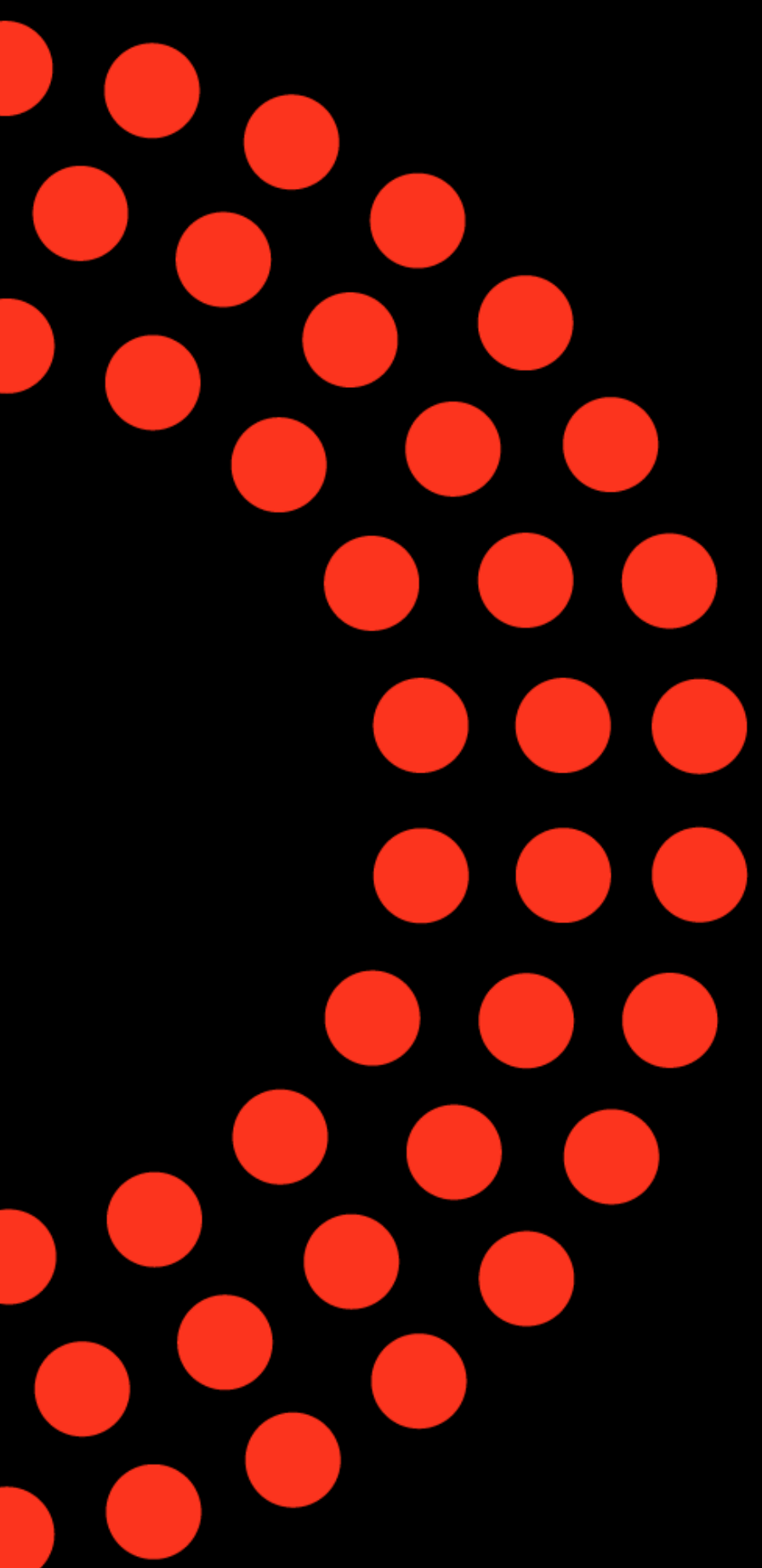
Creating a Global Movement



-  RE100 Office
-  RE100 Local Partner
-  RE100 Exploring Partnership

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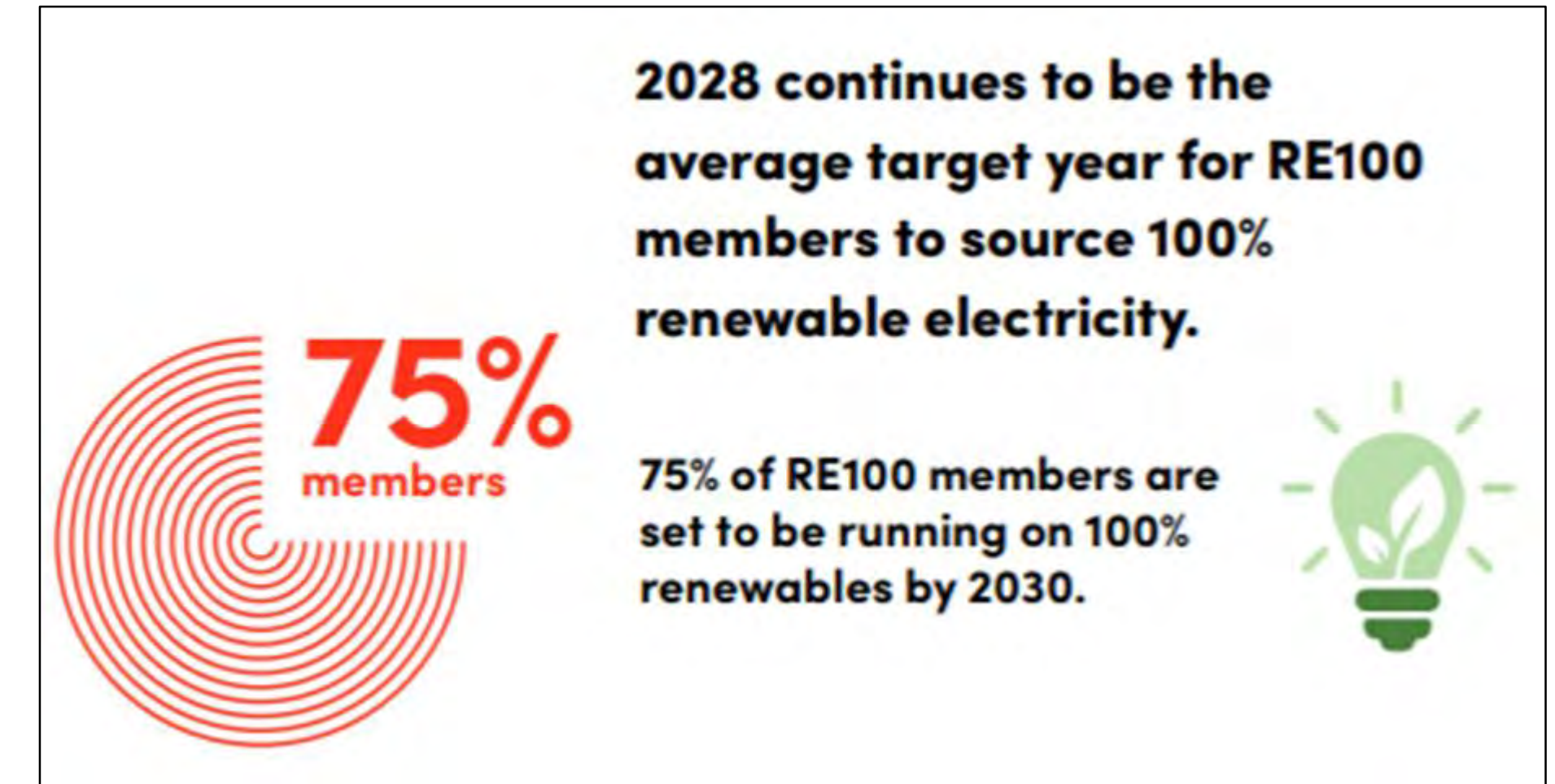
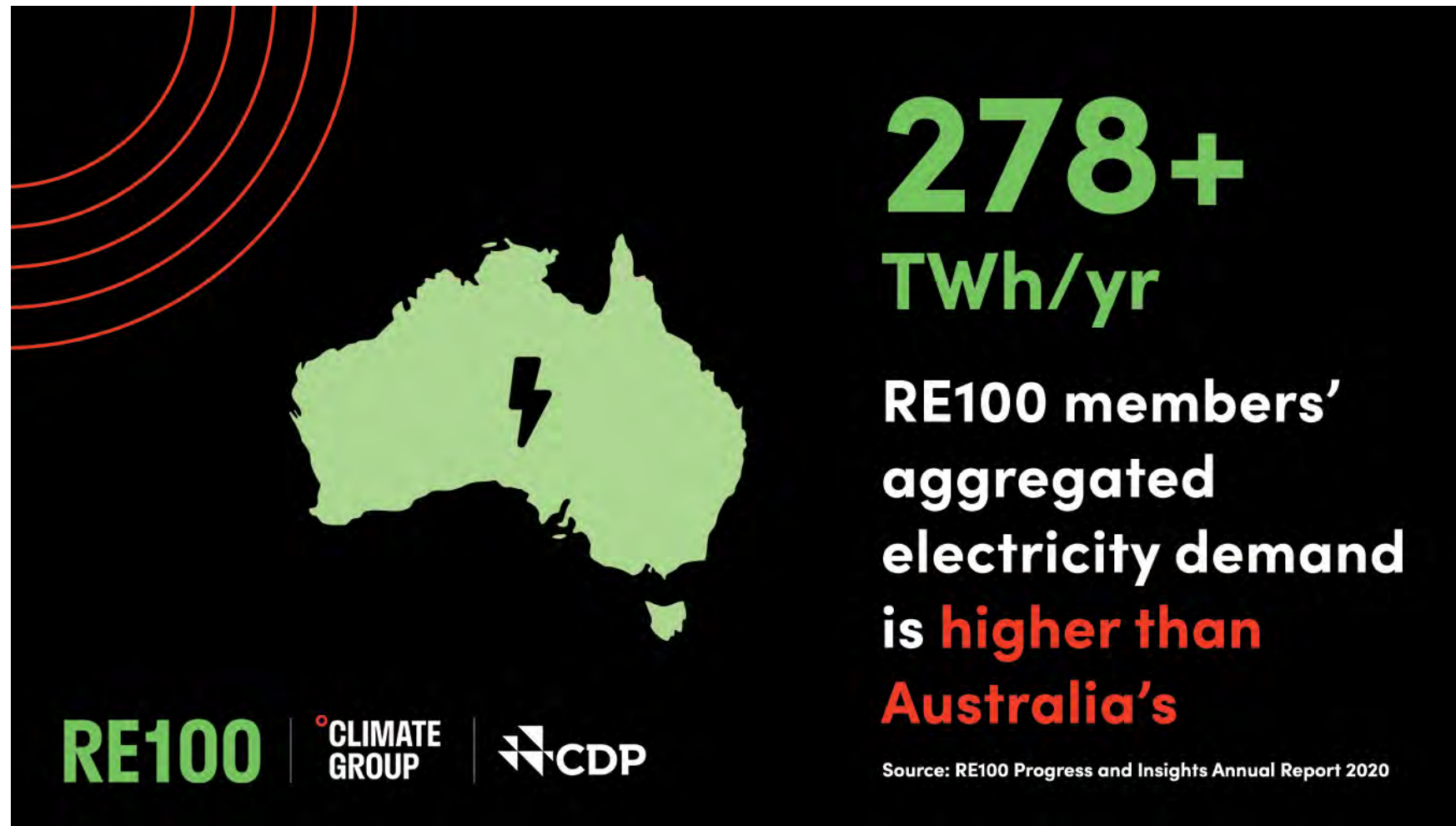


**TWh/yr
Demand**

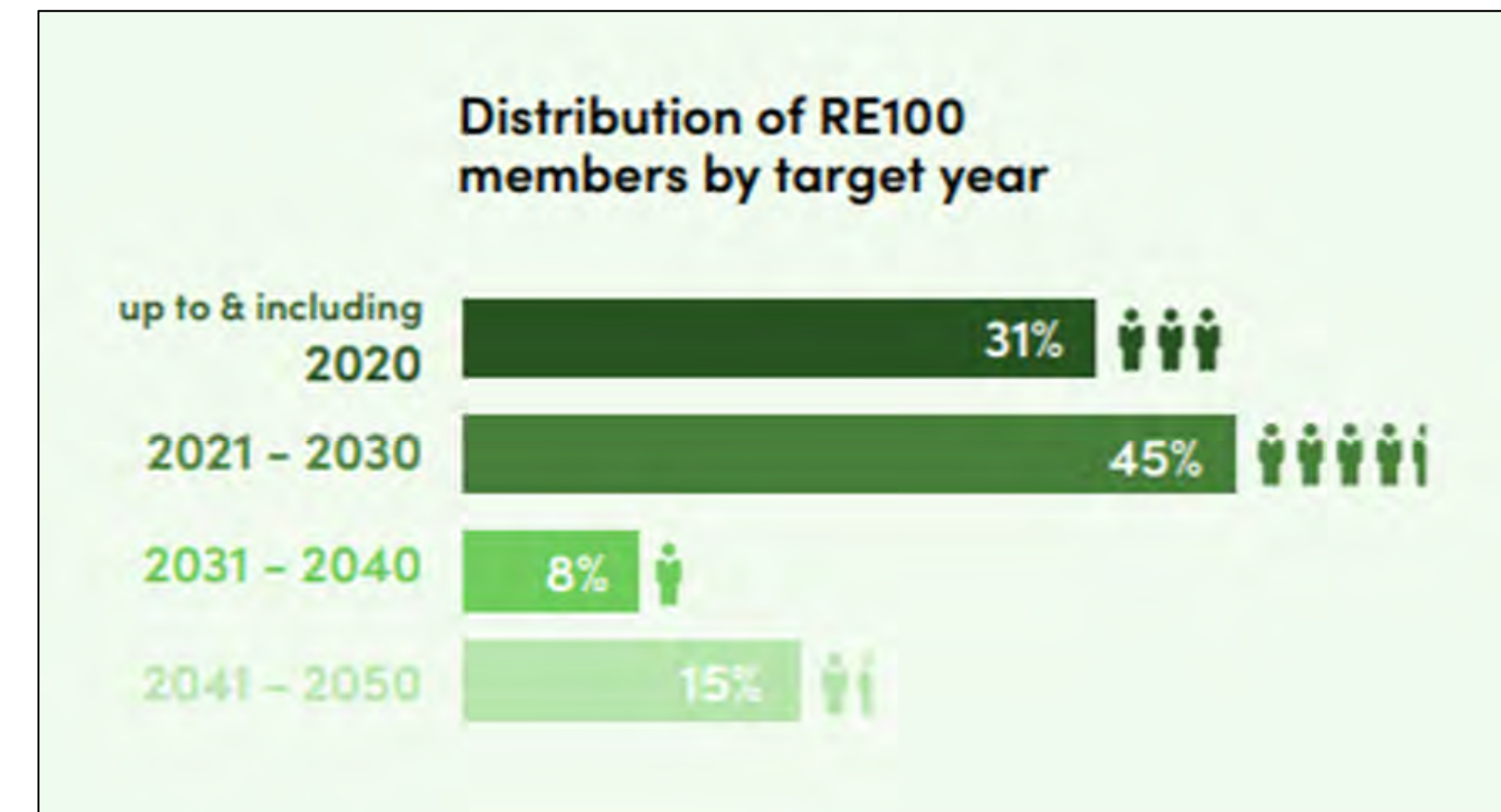
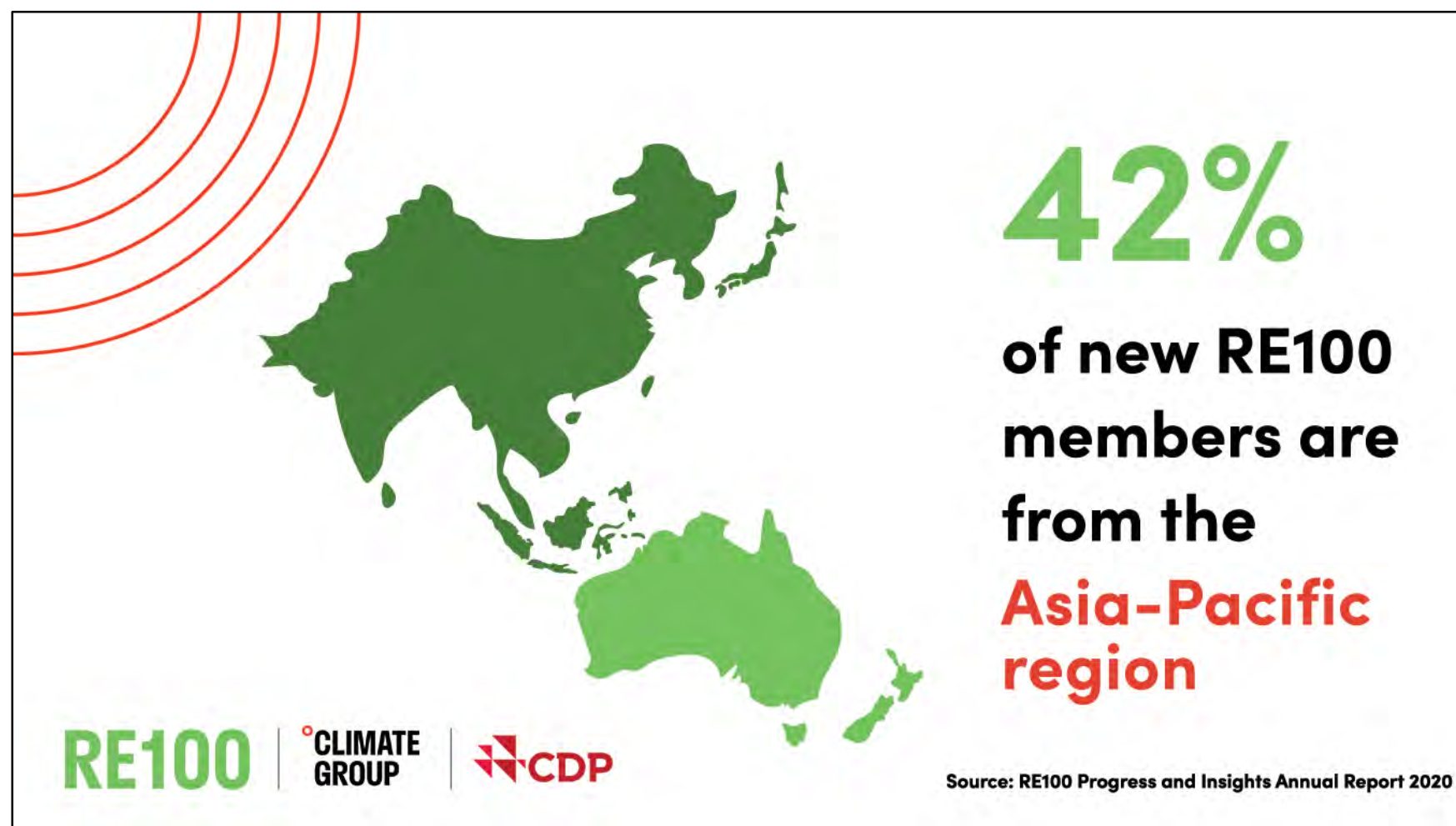
10	France	480
11	Saudi Arabia	345
12	UK	326
	RE100	317
13	Italy	316
14	Mexico	290
15	Iran	273
16	Turkey	272
17	Taiwan	266
18	Indonesia	263
19	Spain	260
20	Australia	247



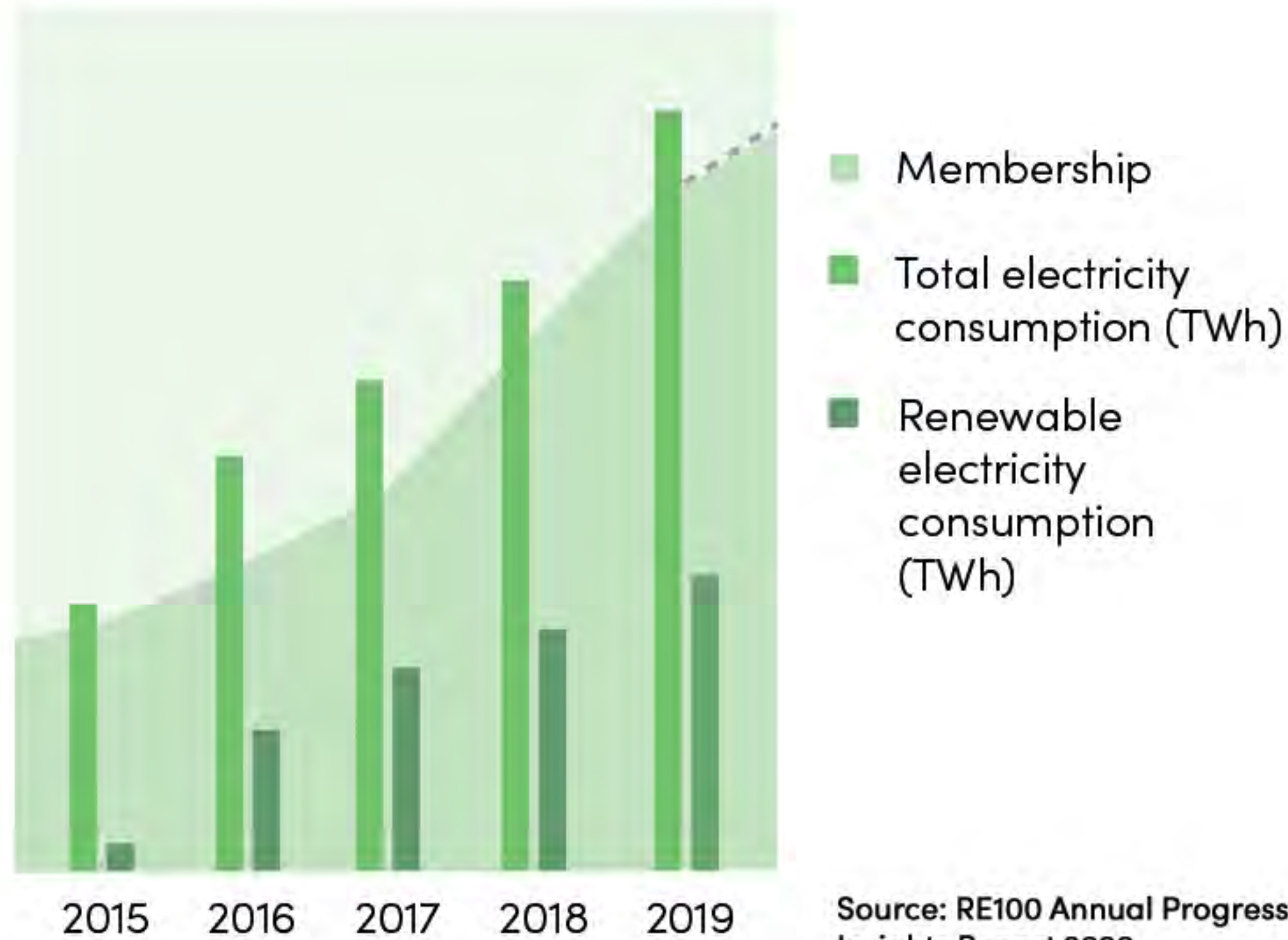
Creating a Movement



288
COMPANIES
committed to RE100



RE100 Members' progress

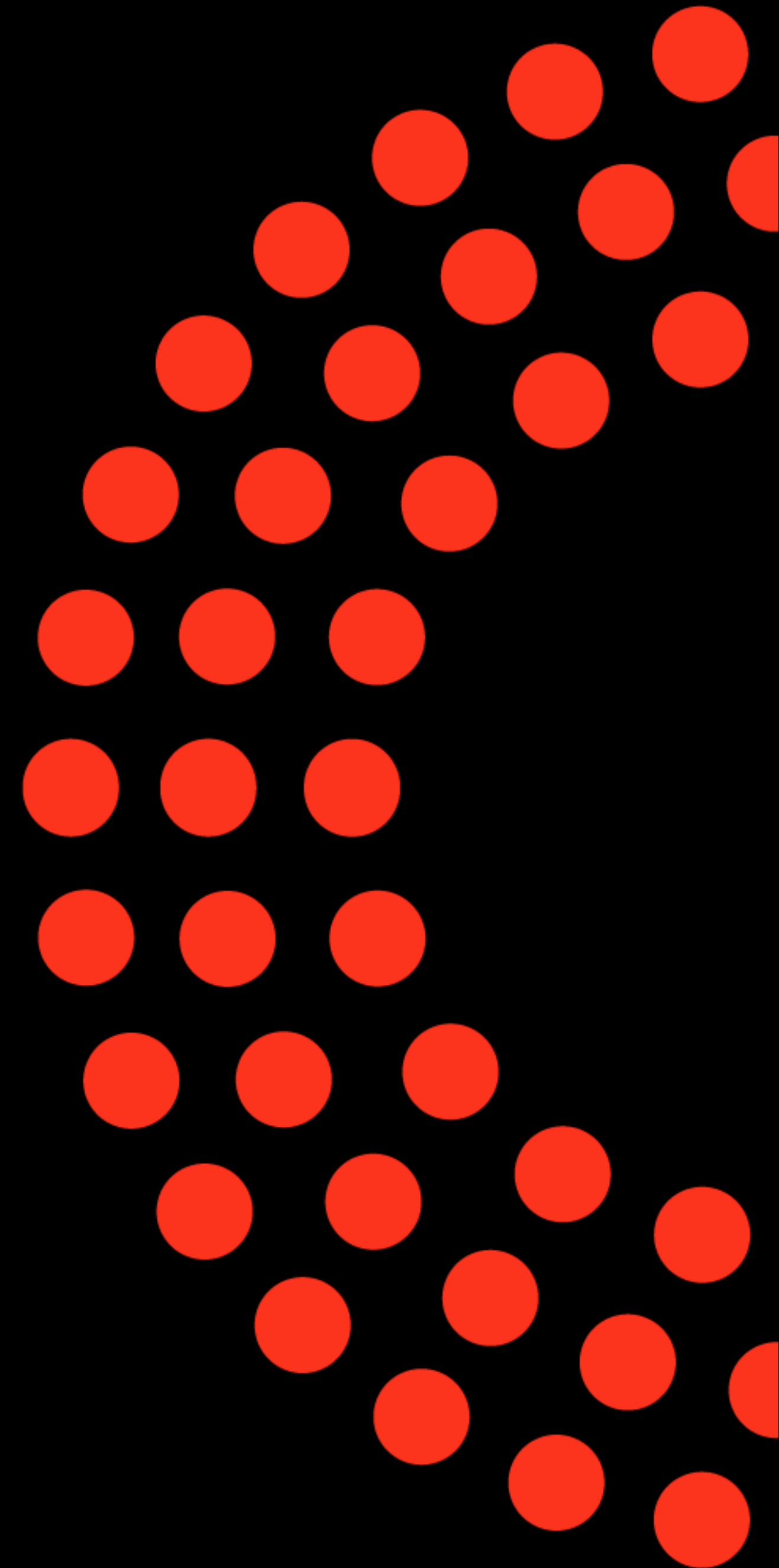


Source: RE100 Annual Progress and Insights Report 2020

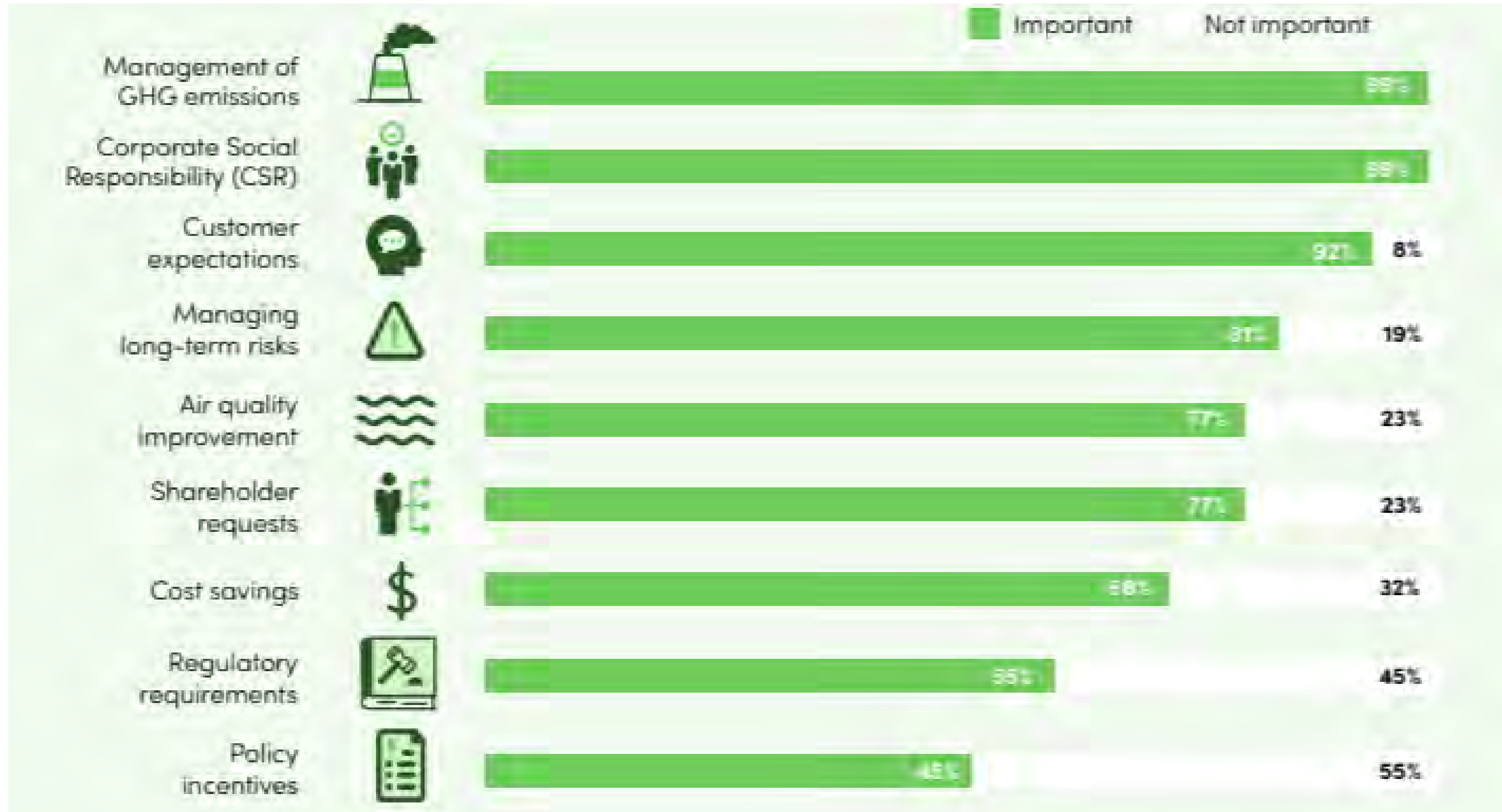
More and more RE100 members are progressing towards **100% renewable power.**

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Drivers for RE Sourcing for RE100 Members



Cheapest Energy Generation Technology By Country

2014

Coal	Gas	Wind	Solar
Belgium	Algeria	Denmark	
Bulgaria	Argentina	Germany	
Chile	Australia	Uruguay	
China	Brazil		
France	Canada		
Greece	Egypt		
India	Israel		
Indonesia	Mexico		
Italy	Peru		
Japan	Philippines		
Malaysia	Russia		
Morocco	Saudi Arabia		
Poland	U.S.		
South Africa	UAE		
South Korea			
Spain			
Thailand			
Turkey			
U.K.			
Vietnam			

2019

Coal	Gas	Wind	Solar
Indonesia	Algeria	Argentina	Australia
Japan	Belgium	Brazil	Chile
Malaysia	Bulgaria	Canada	Egypt
Philippines	Greece	China	France
Poland	Russia	Denmark	India
South Korea		Germany	Israel
Thailand		Mexico	Italy
Turkey		Morocco	Saudi Arabia
Vietnam		Peru	South Africa
		U.K.	Spain
		U.S.	UAE
		Uruguay	

Note: Reflecting the cheapest benchmark project for each technology and market.
 Source: [BloombergNEF New Energy Outlook](#)

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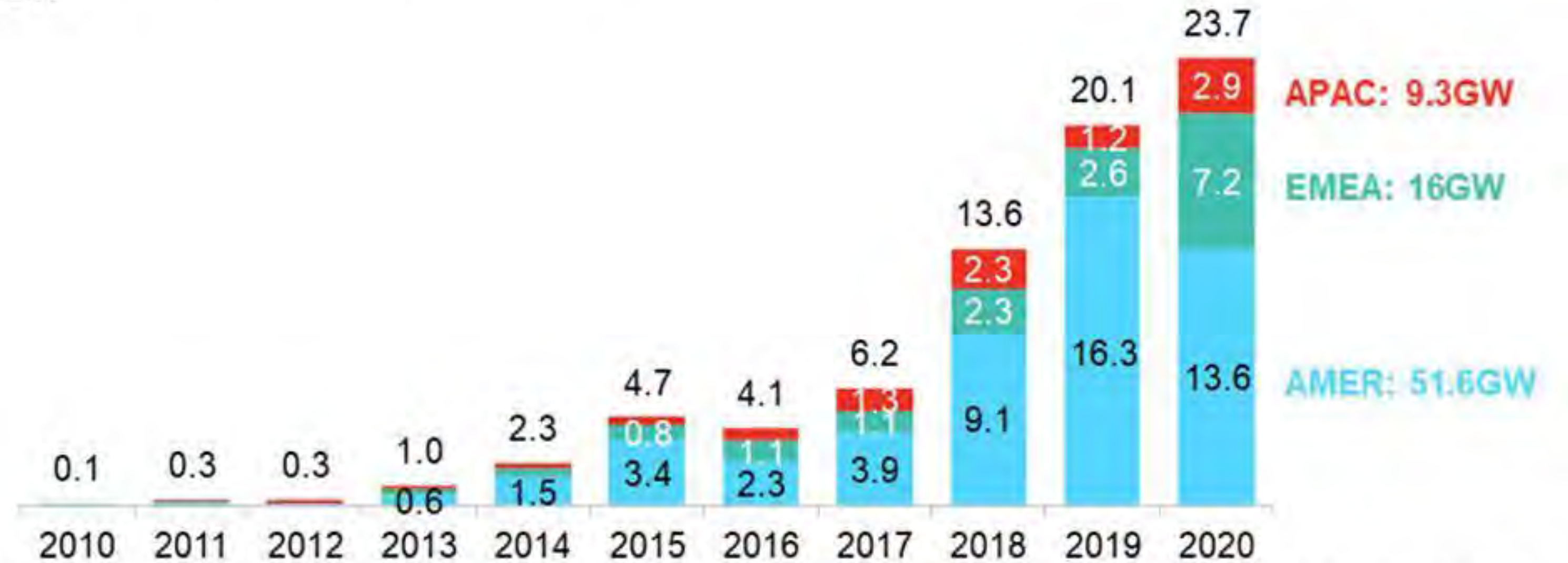


- **Solar PV and onshore wind now the cheapest sources of power for at least two-thirds of global population**
- **Offshore wind will surge to over 234 GW by 2030, led by Asia-Pacific**
- **\$54 billion already committed to a green recovery by governments as of July 2020**
- **Replacing the costliest 500 GW of coal with solar and wind would cut annual system costs by up to \$23 billion per year**
- **Banks responding to financial and social drivers to divest from coal**



Corporate PPA activity up in 2020

Figure 1: Global corporate PPA volumes, 2010-2020
GW



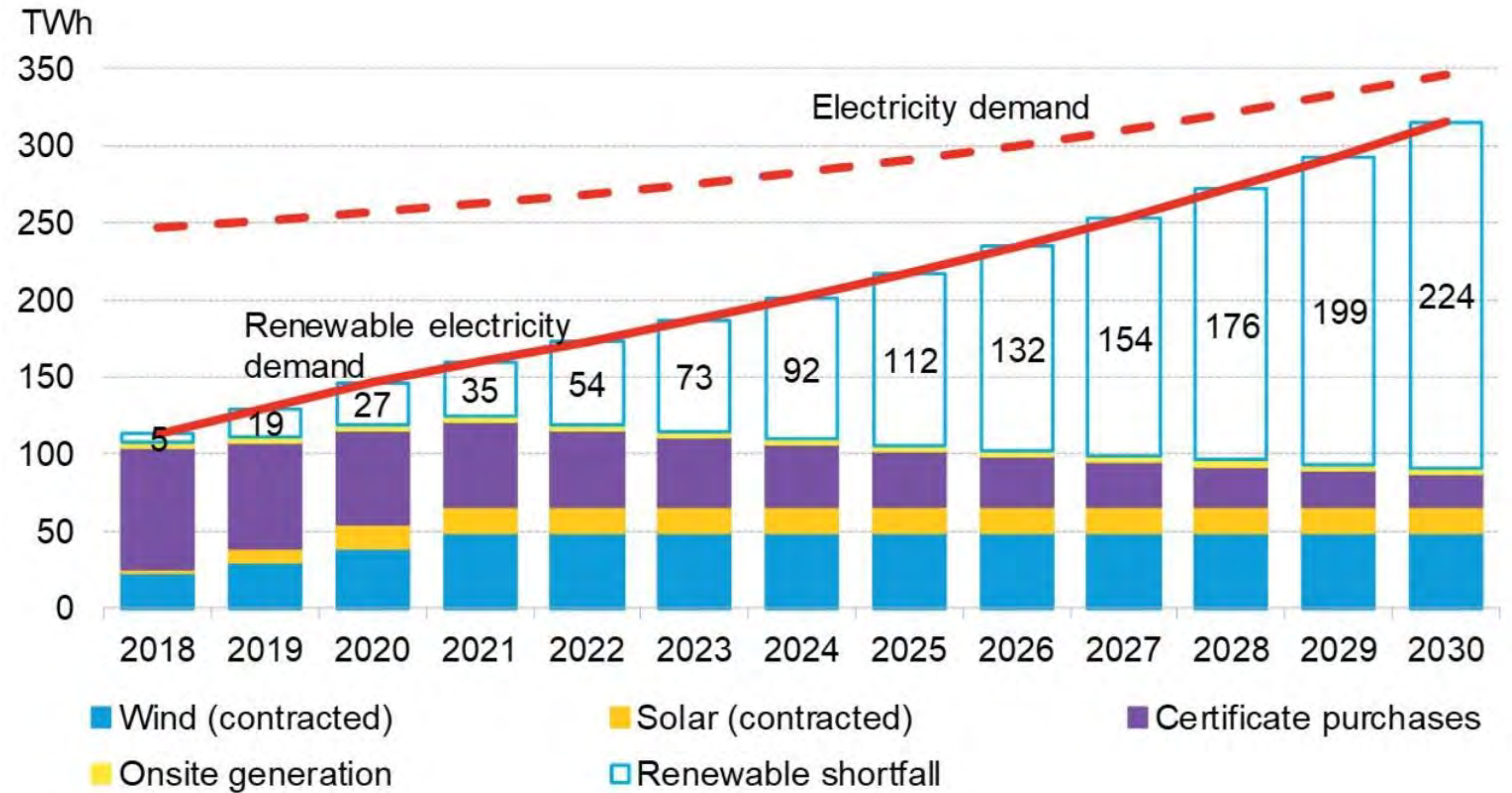
Source: BloombergNEF. Note: Data is through 2020, reported in MW DC capacity. Onsite PPAs not included. Australia sleeved PPAs are not included. Pre-market reform Mexico PPAs are not included. APAC number is an estimate. These figures are subject to change and may be updated as more information is made available.

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RE100 Forecast



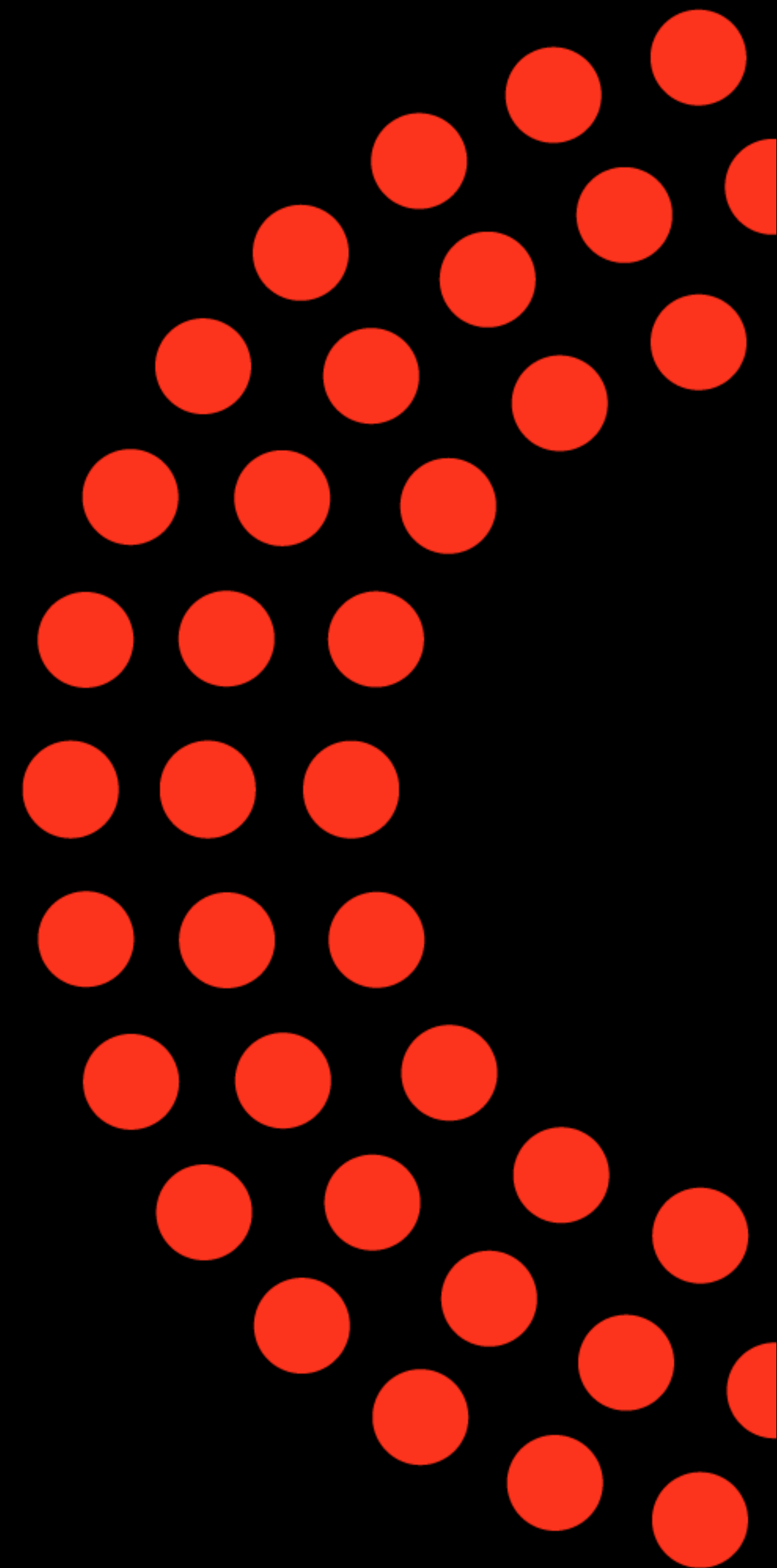
Bloomberg New Energy Finance RE100 Forecast

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What happens after 100%?



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Mainstreaming renewables

IMPACTFUL LEADERSHIP

2020

44% are already influencing suppliers on renewable electricity. 1 in 2 plan to engage stakeholders (such as policy makers or utilities) on renewables by 2020.

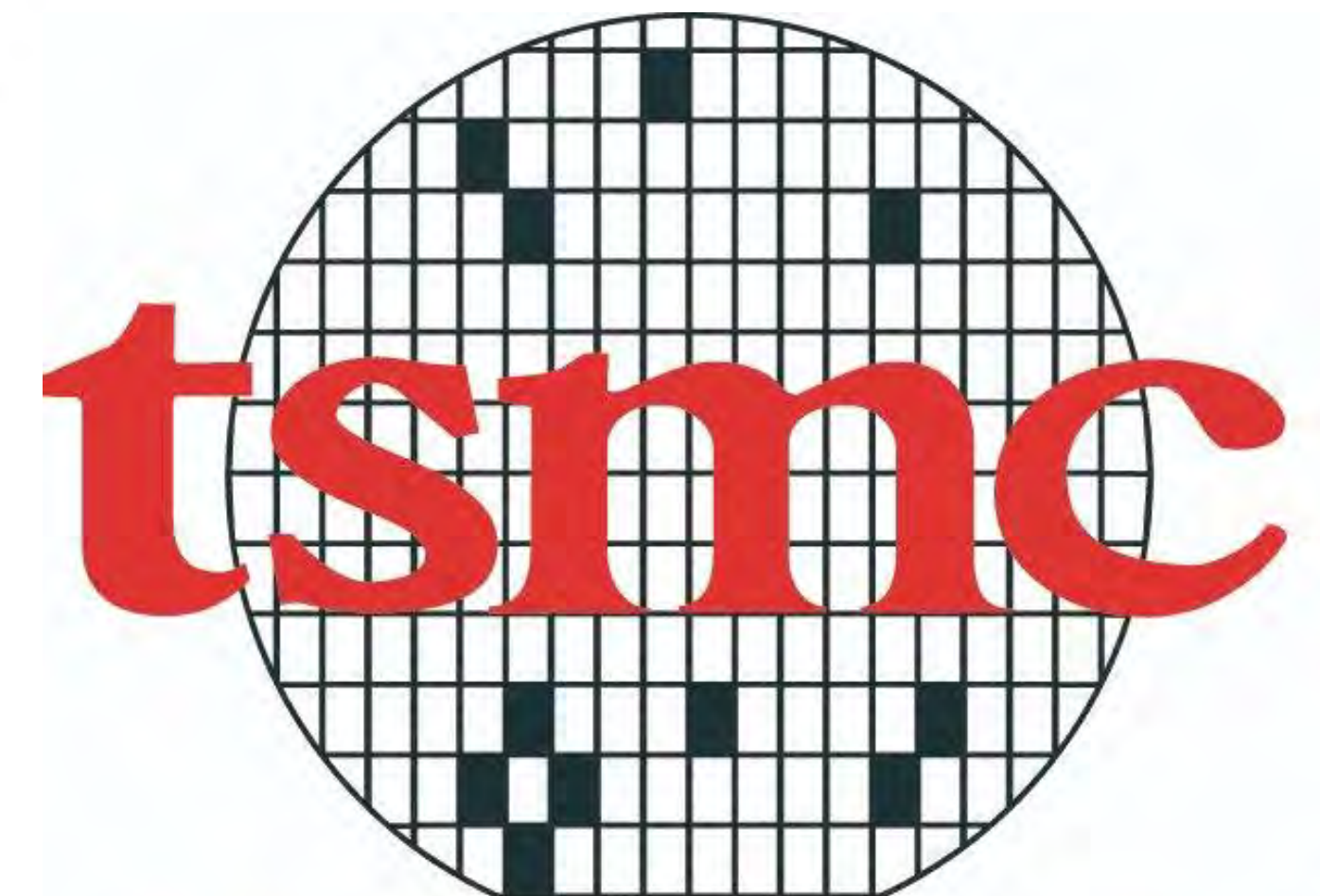


EVERY TIME ONE OF OUR SUPPLIERS JOINS US IN OUR EFFORTS TO ADDRESS CLIMATE CHANGE, WE MOVE CLOSER TO A BETTER FUTURE FOR THE NEXT GENERATION. WE'VE MADE IT A PRIORITY TO HOLD OUR SUPPLIERS ACCOUNTABLE TO THE SAME ENVIRONMENTAL STANDARDS WE OBSERVE AND HOPE THAT OUR COLLABORATION WILL SHOW OTHERS WHAT IS POSSIBLE.

Lisa Jackson, VP, Environment, Policy and Social Initiatives, Apple



**“We have a global commitment to be a low-carbon business, using our size and scale to help the companies that supply us commit to do the same”
Gabrielle Ginér, Head of Environmental Sustainability at BT**



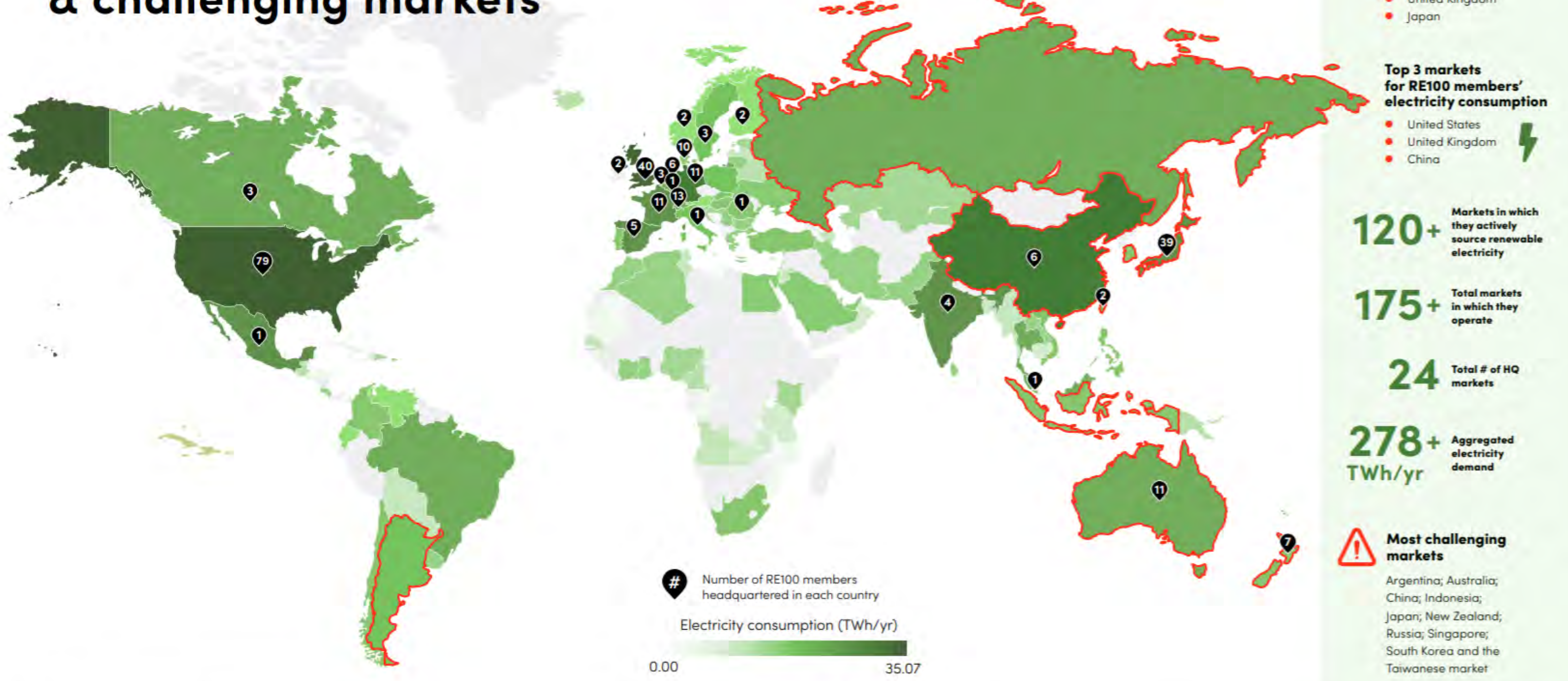
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RE100 Global Policy Message

RE100 members look to policymakers to enact the following policy measures to support corporate sourcing of renewable electricity¹:

1. Create a **level playing field** on which renewable electricity competes fairly with fossil-fuel electricity and **reflects the cost-competitiveness of renewable electricity**.
2. **Remove regulatory barriers and implement stable frameworks** to facilitate the uptake of corporate renewable electricity sourcing.
3. Create an **electricity market structure** that allows for **direct trade** between corporate buyers of all sizes and renewable electricity suppliers.
4. **Work with utilities or electricity suppliers** to provide options for corporate renewable electricity sourcing.
5. **Promote direct investments** in on-site and off-site renewable electricity projects
6. Support a **credible and transparent system** for issuing, tracking, and certifying competitively priced **Environmental Attribute Certificates (EACs)**.

Map of member operations & challenging markets



Market	Barrier highlighted by our members
Singapore	Limited renewables availability; Physical space to build new capacity unavailable
South Korea	Renewables not available for corporate sourcing
Australia	Renewables costs still higher than other markets
Indonesia	Limited options to purchase renewables
Russia	Energy Attribute Certificates (EACs) are currently not available to purchase and other sourcing options are limited

Market	Barrier highlighted by our members
Taiwan	Prohibitive renewables costs
Argentina	Renewables not available for corporate sourcing
Japan	High costs of renewables; Limited availability due to certificate shortage
China (mainland)	Regulatory complexity; Renewables unavailable for sourcing in some regions
New Zealand	Insufficient sourcing options and no tracking system currently in place

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Market Transformation: Global Successes

- Direct influence on EU, Korean and Japanese policy
- RE100 publicly endorsed by President Tsai of Taiwan as a 'critical consideration for industrial policy'
- RE100 cited in Japan's COVID Stimulus Package as the reason for investment in renewables
- Special mentions of the initiative by South Korean Ministries
- Increased local support - Japan Market Report, increased member meetings



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Extending the Impact of RE100

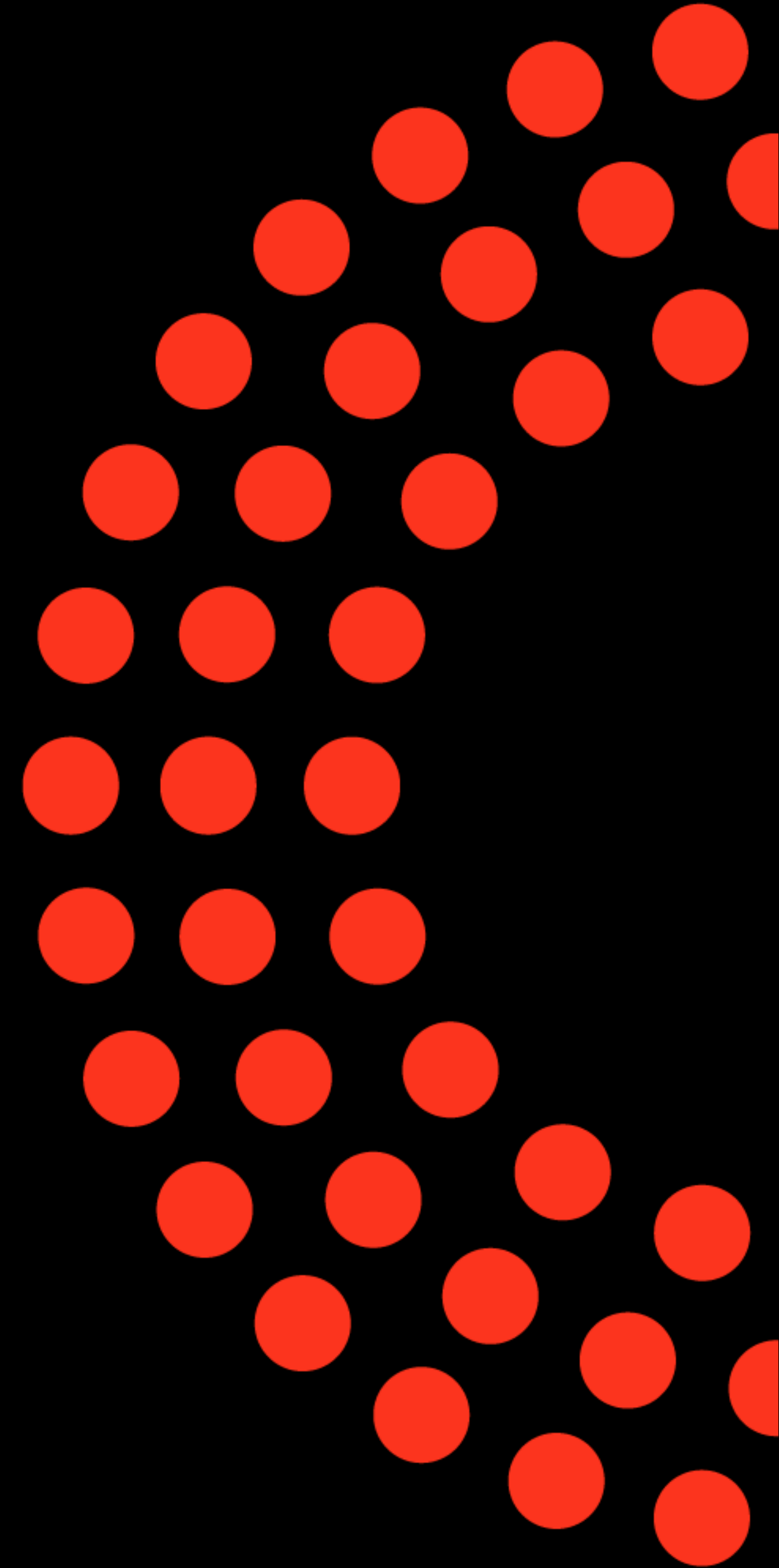
- Renewable heat
- Carbon neutrality
- Coal disinvestment
- New technologies
- New developing markets
- Increased collaboration

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Covid Recovery: Positive Signs



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> 96%

SAY CLIMATE ACTION IS JUST AS, IF NOT MORE IMPORTANT, TO THEIR COMPANY NOW COMPARED TO PRE COVID-19



1 IN 2

WILL NEED SUPPORTIVE GOVERNMENT POLICIES TO HELP THEM ACHIEVE BUSINESS SUSTAINABILITY GOALS



63%

SAY

WE MUST INVEST FIRST IN MEASURES THAT DECARBONIZE THE ECONOMY



59%

SAY

ANY FINANCIAL SUPPORT SHOULD PRIORITIZE INDUSTRIES THAT CUT EMISSIONS AND CREATE GREEN JOBS



50%

SAY

TAXPAYER MONEY SHOULD NOT BE USED FOR BAILING OUT FOSSIL FUEL COMPANIES

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COP26 President call to action

“Business has already played a big part in the clean energy transition.

But we need more companies to commit to 100 per cent renewable sources by 2050 at the latest, **through the ‘RE100’ initiative.”**

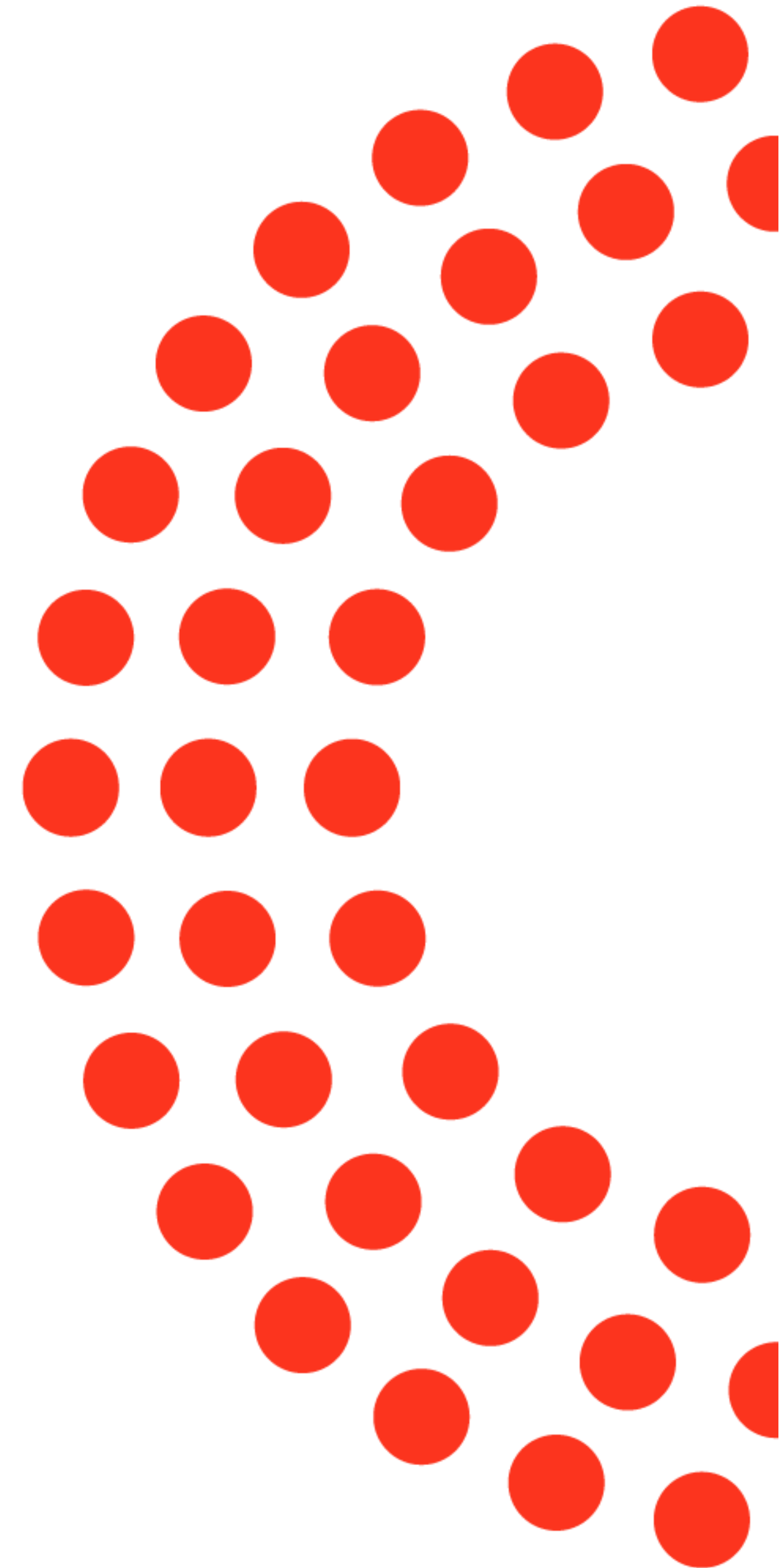


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**What do we need to
achieve and by when
to align with the Paris
Agreement?**



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Paris Agreement: A sustainable future

- **170 NDCs (90%)** mention renewables. **134 (71%)** include quantifiable targets for electricity generation.
- Only **56** included heat & transport targets.
- IF Targets met: **1041 GW** renewables added by 2030 **+42%**
- 2020: **18** new NDCs, only **5** have more ambitious RE targets

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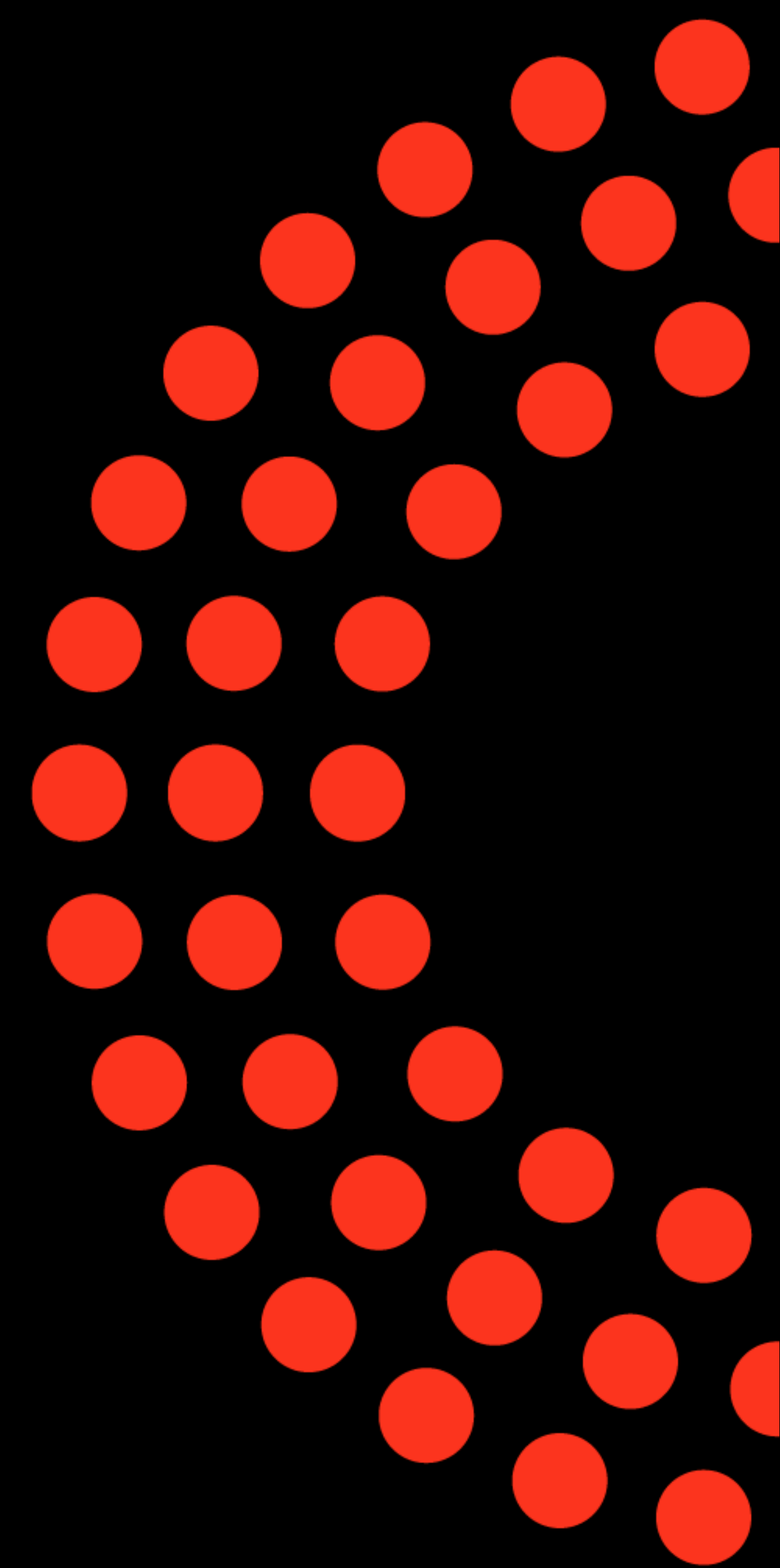
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Renewable

energy needs

investments





Thank you

Ross Mitchell, RE100 Project Manager
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