

# The time is now for energy transition

27 Sep 2023

Enel X Advisory Services Japan G.K.

Managing Partner, Head of APAC

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We are proud of being a



**enel x** Advisory Services



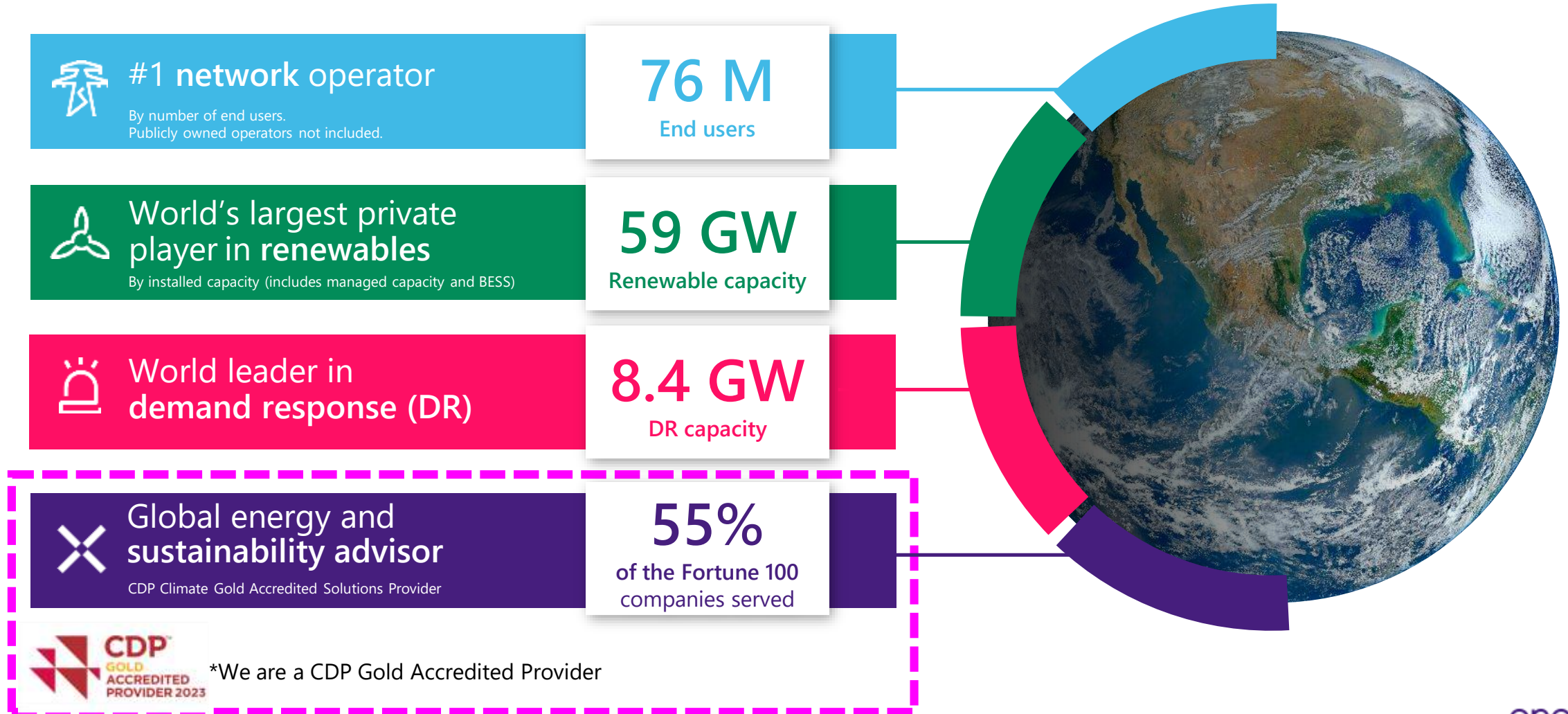
# Agenda

1. Enel X Advisory Services – Company Profiles
2. Decarbonization for a better society
3. Scope 1 – Green Hydrogen
4. Scope 2 – Virtual PPAs
5. Scope 3 – Virtual PPA Aggregation

# 1. Enel X Advisory Services- Company Profiles

## About Enel X Advisory Services

# Enel is a global leader in the energy transition, and Enel X Advisory Services its CDP Gold ASP



# We aim to be your future sustainability partner with integrated global operation support

## What we do



### Market Intelligence – Best practice

With extensive experience in energy market, in-depth analysis and updated energy market



### Net Zero and Decarbonization Advisory - Roadmap

We help client to meet decarbonization goals from planning and execution, aligning the companies target with SBTi and RE-100



### Carbon Emission Management – Scope 1, 2 & 3

Measuring the carbon emission start from enterprise to entire supply chain reduction plan that suitable with business plan, with our integrated digital database centre



### (V)PPA Advisory and EACs Global Procurement Platform

We support commercial and industrial companies to secure green energy and procure Corporate PPAs/RECs across Asia-Pacific



### Onsite/Offsite PVs

Onshore Wind

Offshore Wind

Our mission is to accelerate the development

## Where we are



### Global

28 Countries with over 400 consultants



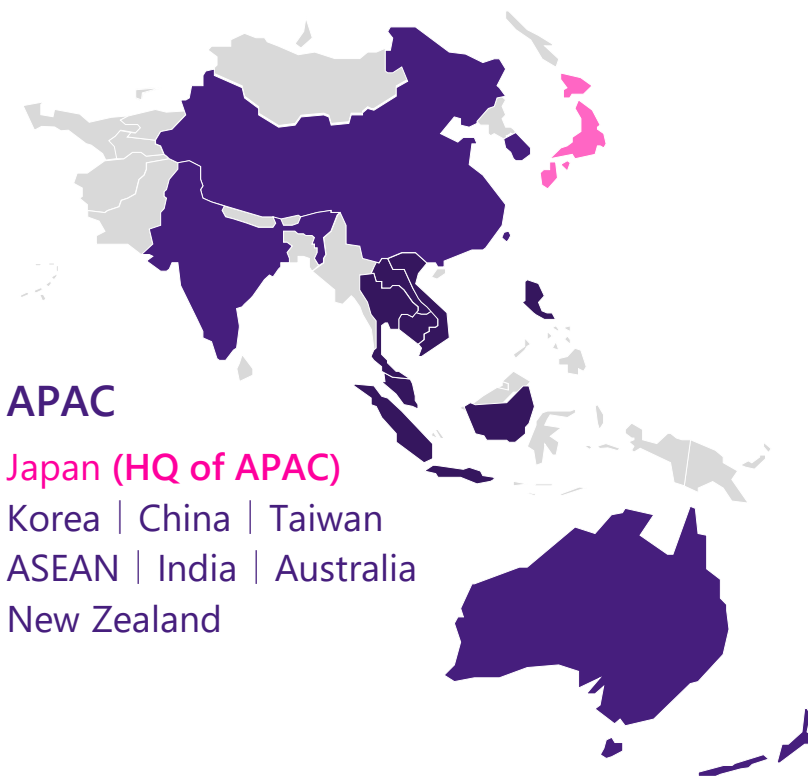
### APAC

Japan (HQ of APAC)

Korea | China | Taiwan

ASEAN | India | Australia

New Zealand



## 2. Decarbonization for a better society



Decarbonization for a better society

# Why we are doing this ?

## 1/3

of Global Emissions  
belong to the  
industrial sector

## +4,600

Companies joined the  
**Science Based Target  
initiatives(SBTi)** to reduce  
their emissions

## 18,700+

companies disclosed through  
**CDP** in 2022, a 38% increase  
since 2021

## 11.4

times higher (**supply chain  
emissions**) than a  
company's operational  
emissions.

## 96%

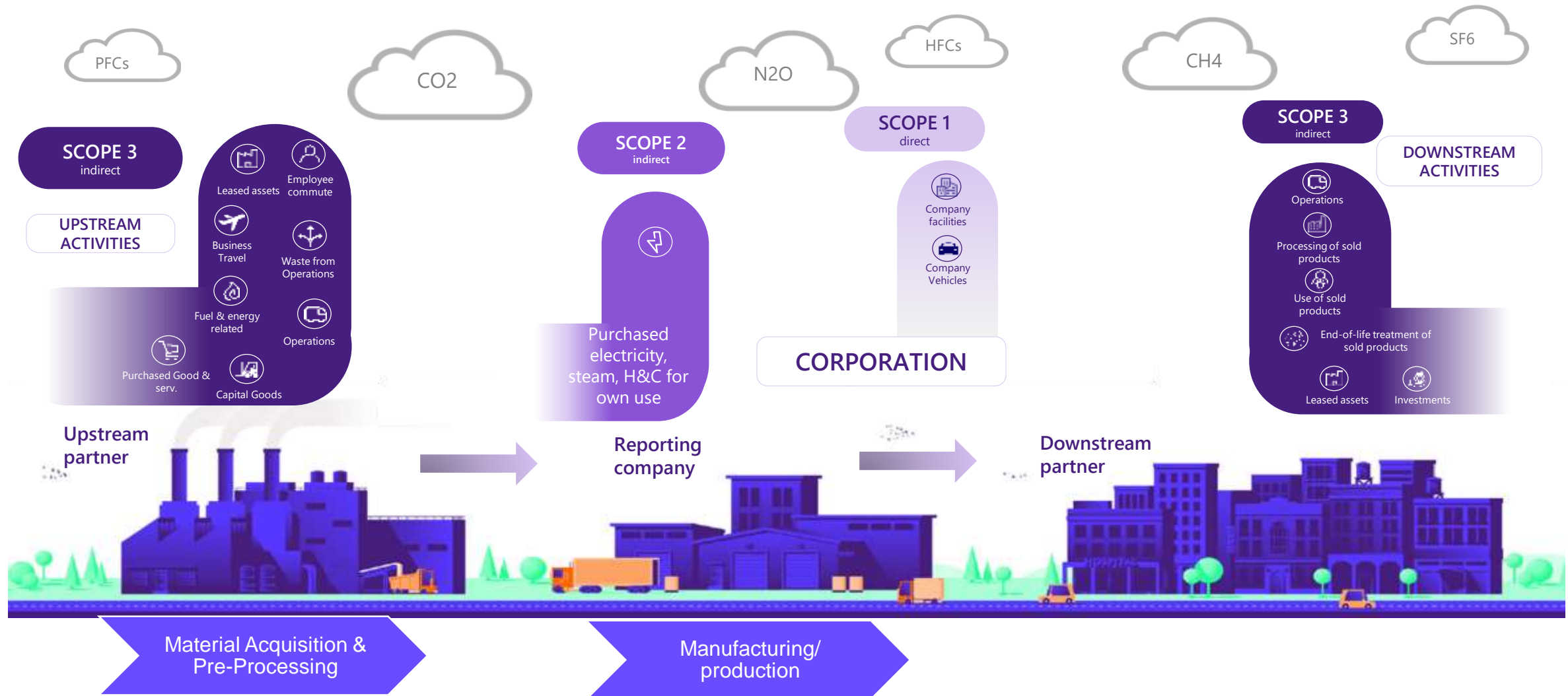
of all companies with  
approved **SBTi targets**, have  
targets covering **Scope 3  
emissions**



## A better society for future generations = Responsibility as corporate citizens

Decarbonization for a better society

# Towards a decarbonized society





### 3. Decarbonization – Scope 1 Green Hydrogen

# Becoming a leading Green Hydrogen Producer in Asia

- North Asian countries are huge energy importers and look for future sustainability energy partners

## Supply Chain

① Green Hydrogen Production



② Conversion/ Liquefaction



③ Transportation



④ Receiving



⑤ Cracking/ Gasification



⑥ Pipeline



⑦ Delivery to Consumers



*Green Hydrogen Exporters*

*Middle East*

*Australia*

*Chile*

*Vietnam*

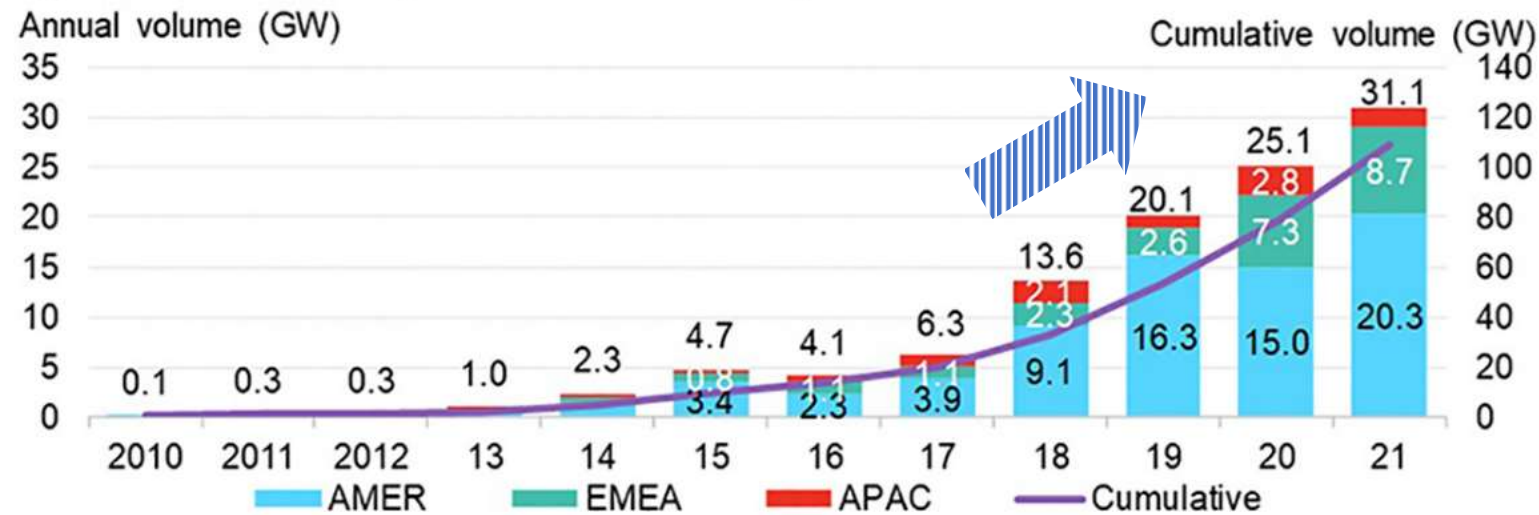
.....

*India*

## 4. Decarbonization – Scope 2 Virtual PPAs

# 80% of PPAs are Virtual PPAs.

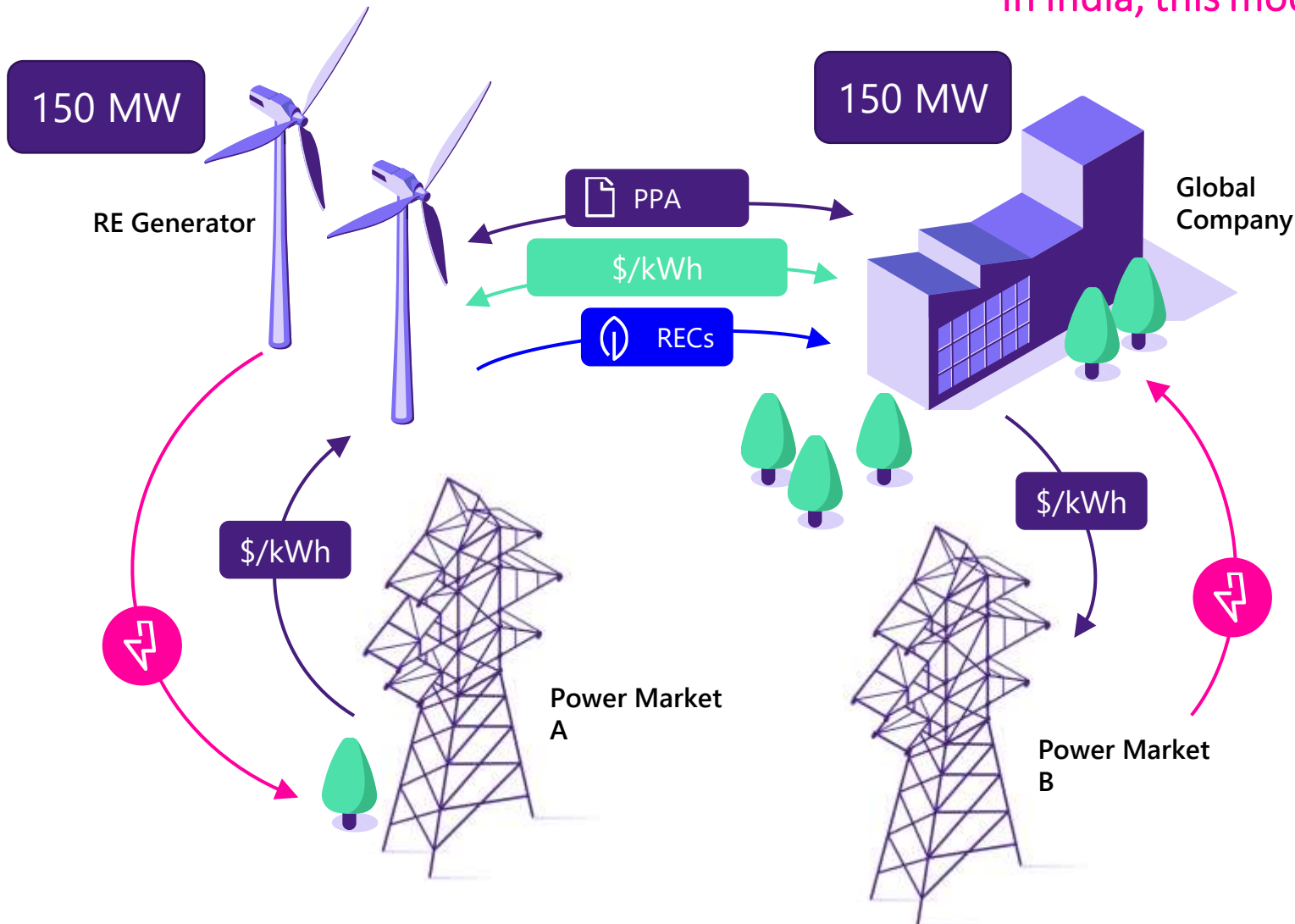
**Figure 1: Global corporate PPA volumes, 2010-2021**



Source: BloombergNEF. Note: Onsite PPAs excluded. APAC volume is an estimate. Pre-reform PPAs in Mexico and sleeved PPAs in Australia are excluded. Capacity is in MW DC.

Virtual PPA are flexible  
as most effective tools  
for decarbonization.

# One-to-One VPPA



In India, this model is NOT available yet.

- 1 Customer signs VPPA with renewable energy generator for wind power at a fixed rate (i.e. strike price). Term is typically 10-20 years.
- 2 Renewable energy generator sells customer's null power into wholesale market and receives market price.
- 3 Renewable energy generator sends/receives settlement to/from customer (Settlement = wholesale price minus strike price).
- 4 Customer counterbalances utility payments for power with settlement transfer and uses RECs to reduce scope 2 emissions.



## 5. Decarbonization – Scope 3 VPPA Aggregation

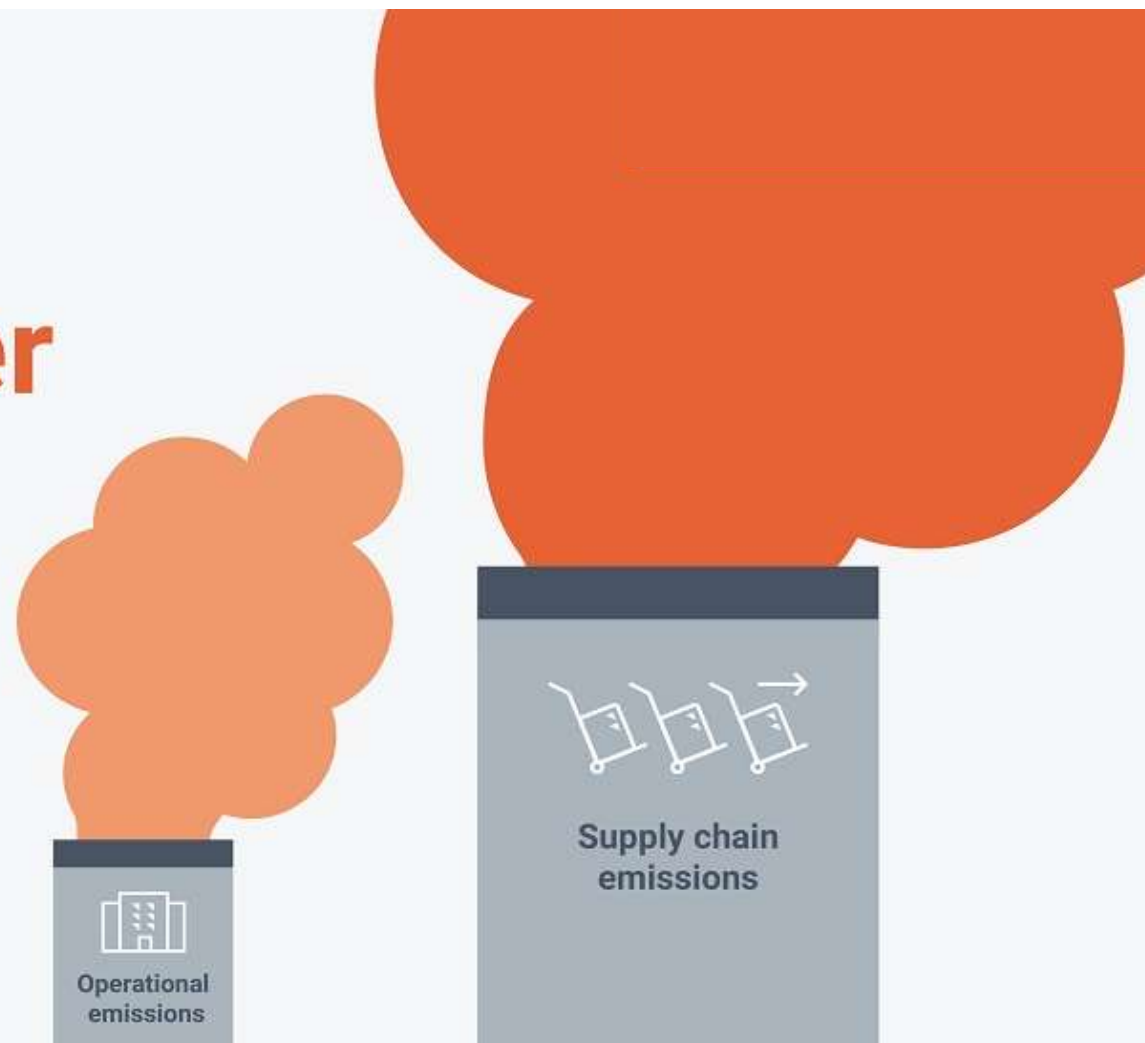
# Our challenge towards a decarbonized society



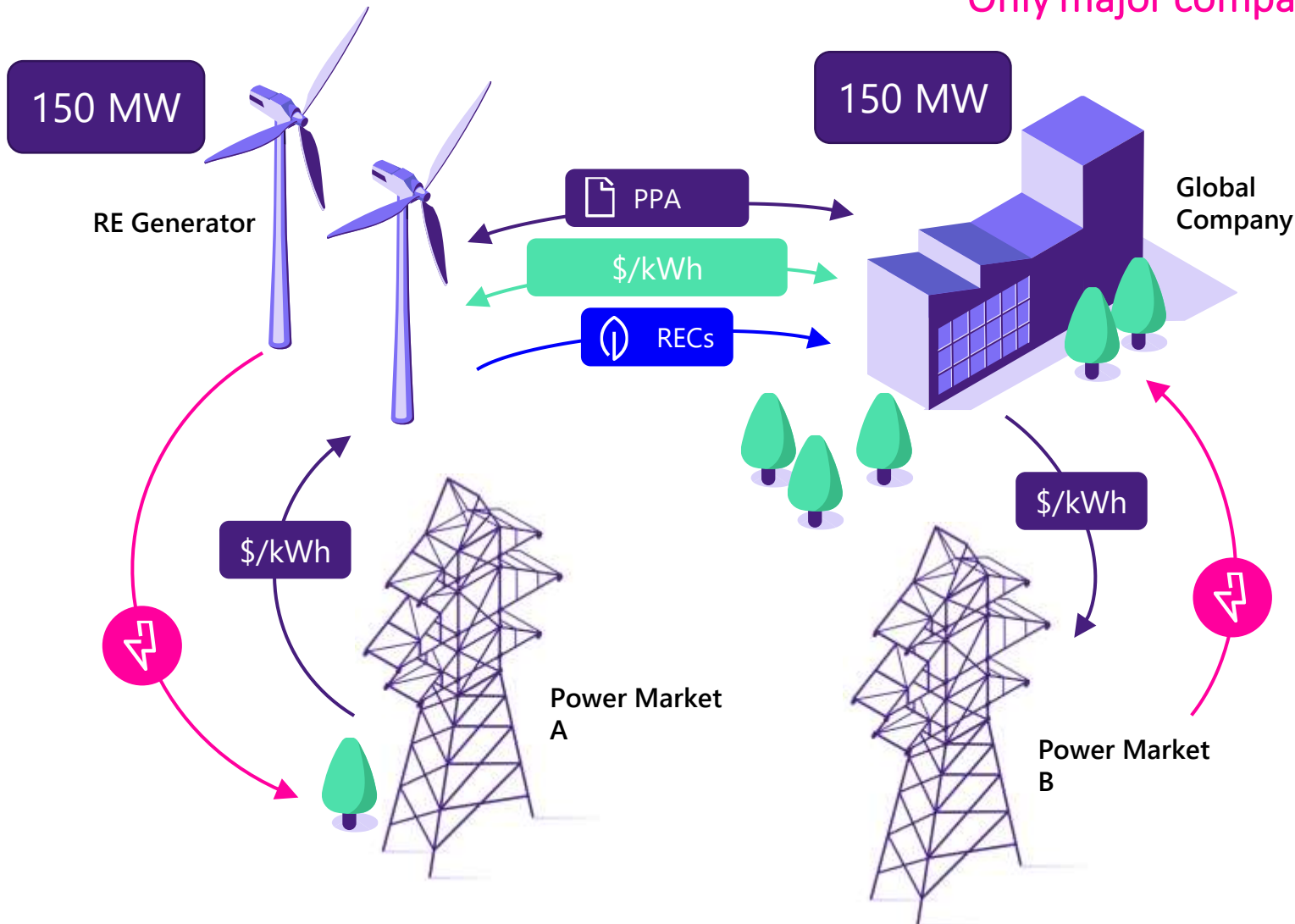
Supply chain emissions are

**11.4x higher**

than operational emissions.



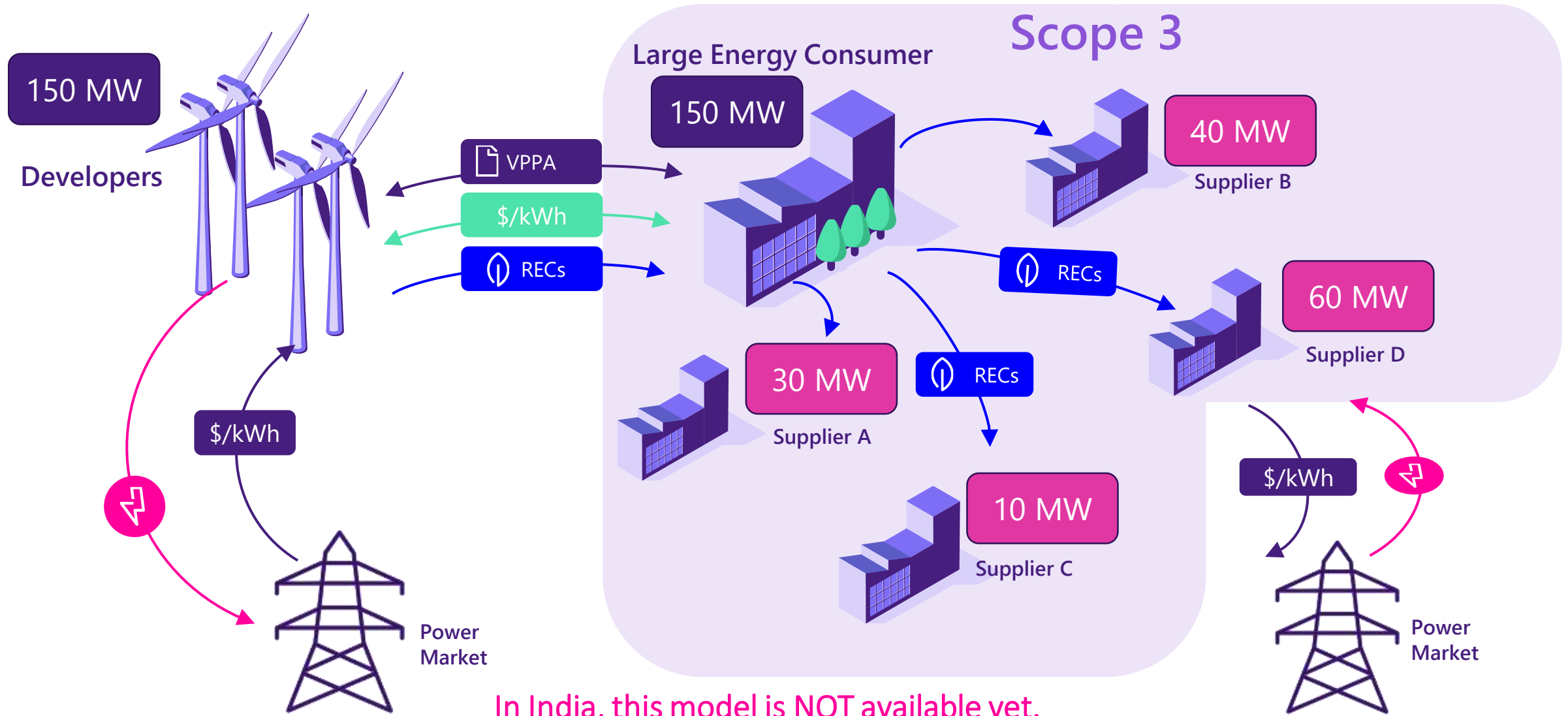
# One-to-One VPPA



Only major companies can implement this

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- 3** Renewable energy generator sends/receives settlement to/from customer (Settlement = wholesale price minus strike price).
- 4** Customer counterbalances utility payments for power with settlement transfer and uses RECs to reduce scope 2 emissions.

# Virtual PPA Aggregation Model - Our insight for future



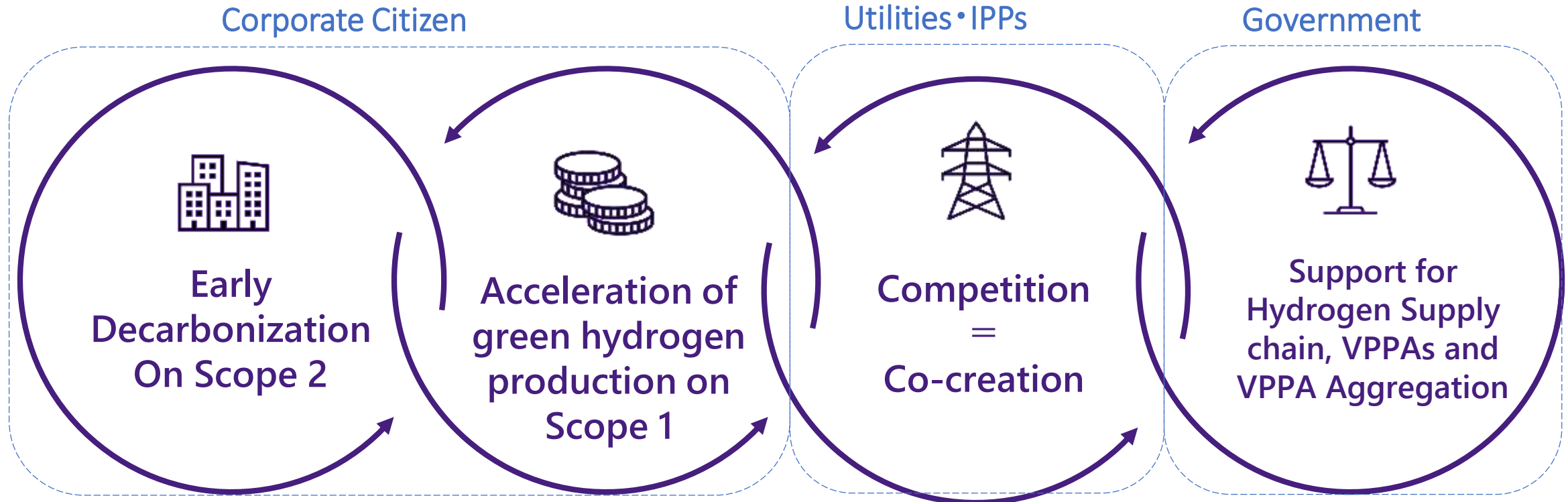
In India, this model is NOT available yet.

# Last words...





# Urgent needs to shift to an optimal energy mix at the national level



**NOT to burden future generations  
with upcoming energy transition costs**

# Super Country – India's potential

1. Promoting energy producer of Green Hydrogen for decarbonizing Scope 1
2. Promoting energy producers of Green Power with VPPAs for decarbonizing Scope 2
3. Promoting global businesses with VPPA Aggregation for decarbonizing Scope 3

For the best interest of beloved India,  
our children and prosperity.

# Thank you for your attention.

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