

WORKSHOP ENERGY TRANSITION AND ENERGY REGULATORY SANDBOXES



"Learning by doing"

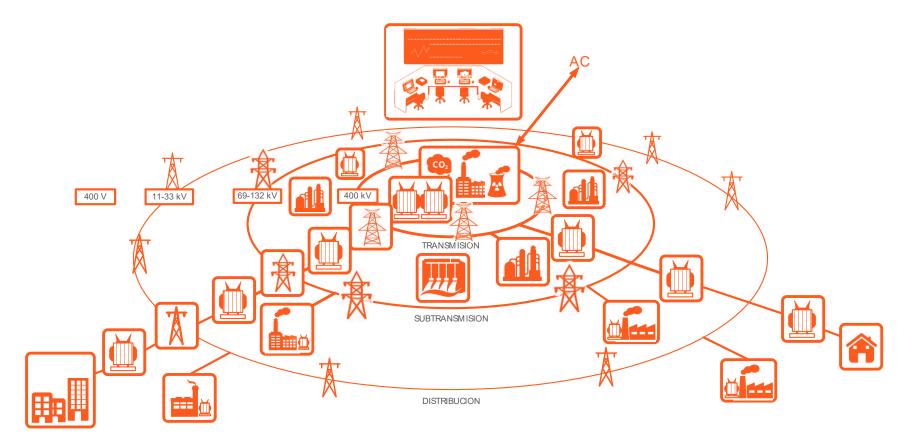
Innovation and regulation must go hand in hand

in a highly regulated sector such as the energy sector



Conventional Power System

Generation, Transmission and Consumption

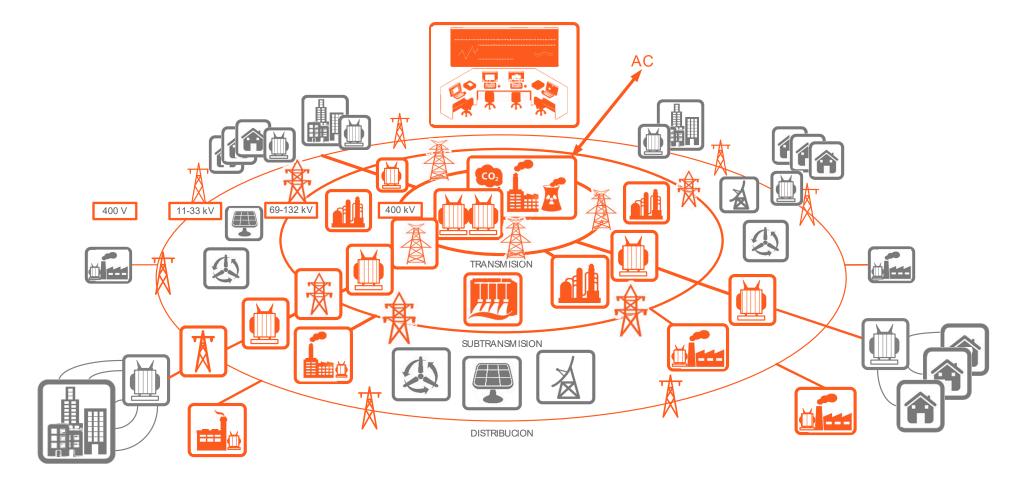






Current Scenario

Higher penetration of Power Electronic-Interfaced Systems (PEIS)

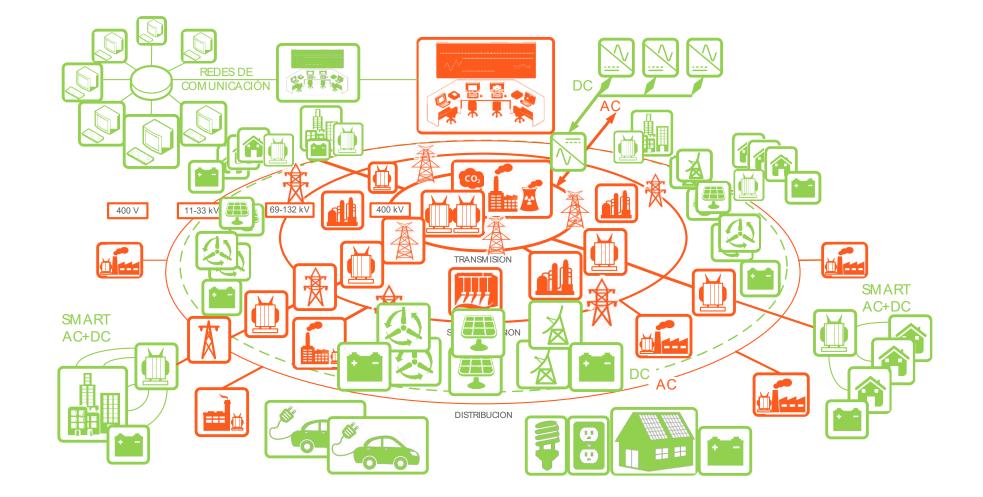






Close future situation

?????;







For that journey, we only have two tools: innovation and rules

Energy transition is a journey

from the present to a decarbonised future





X ZELEROS



We use Open Innovation to move deeper and faster, achieving our goals on energy transition, but we need Sandboxes to turn POCs on reality.





It is necessary to start up as soon as possible the regulatory sandboxes

How do we understand that sandboxes should look like?

Sandboxes should temporarily eliminate the disincentives to innovation

- o **Cross-activity or cross sector limitations**. Limitations on carrying out cross-cutting projects
- Joint projects of Red Eléctrica with other companies inside and outside the energy sector,
- Take into account impact of regulations outside the electricity sector (air navigation, telecommunications, etc.)
- o **Risk unbalances**. The assumption by the regulated company of the entire high risk of innovation projects due to their technological uncertainty.
- Progress should be made in the specific remuneration treatment of these projects under risk-sharing schemes.

o **Regulatory gaps. The absence of regulation applicable to innovations and new technological developments (e.g. storage, renewable hydrogen, etc).**

• The sandbox must provide the minimum regulation necessary to carry out projects with the necessary legal certainty





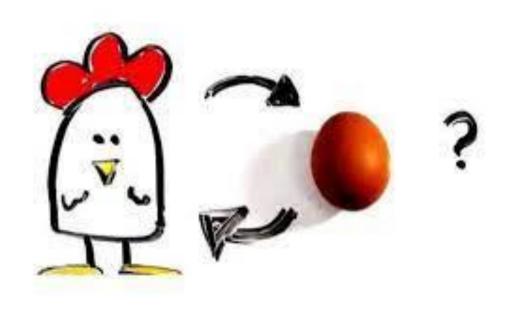
And after the regulatory sandbox, what?

- Apply the "learnings by doing". The learning achieved with the pilot projects must be internalized in the design of the new regulation
- Re-define structures with adequate incentives for innovation in the future.
- Re-Think about the cost and profits on innovation project: Profit-sharing schemes, specific remuneration schemes, tax incentives, compensations...





In summary



Regulation and innovation must go hand in hand.

Temporary regulations are needed to foster innovations and the <u>development of new</u> <u>technologies</u>.

Long-term regulation should be adaptive and flexible enough to foster innovation and allow the actual introduction of new technologies to achieve the sector goals regarding to energy transition.



