

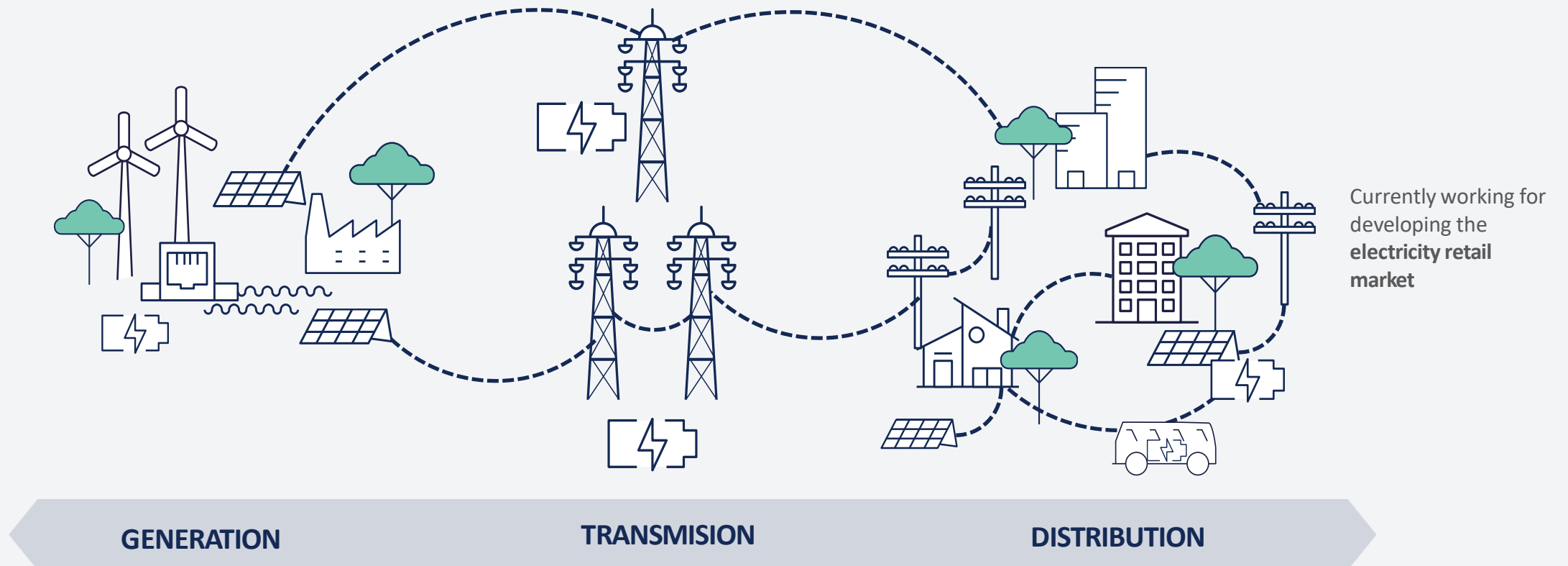
Envisioning a socio-technical transformation with people at the center: The experience of energy sector policy in Chile

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The Chilean energy context

- No indigenous fossil fuels, lots of renewable energy resources
- Unbundled liberalized electricity system since 1982, one of the first countries in undergoing liberalization

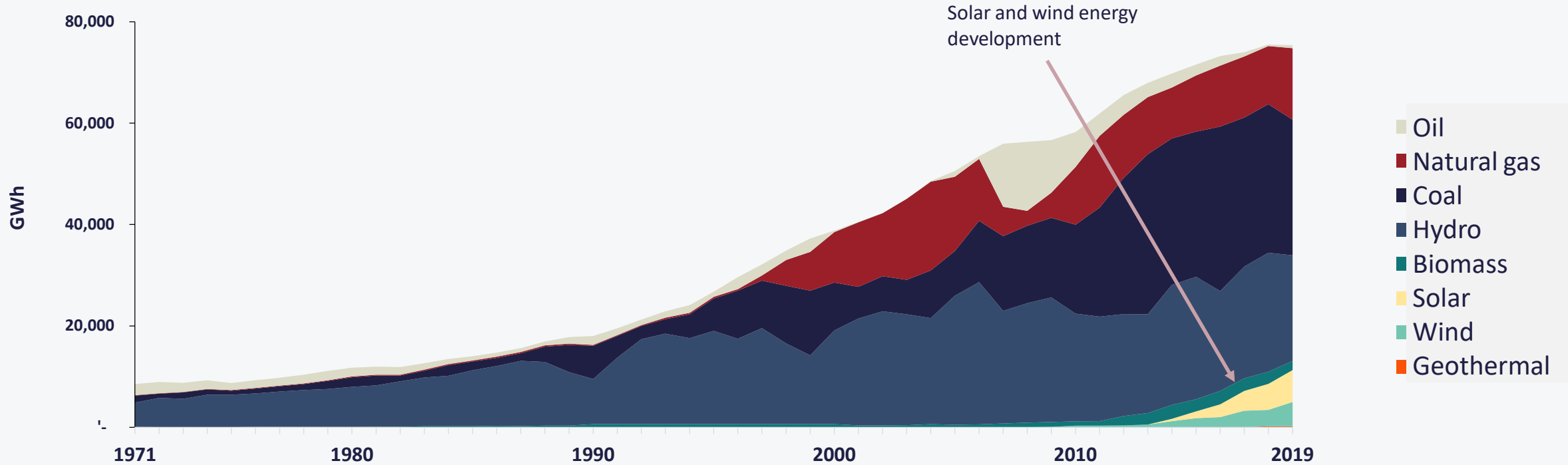


Energy transition to renewables



Renewable
electricity
generation

→ **44%**
2019

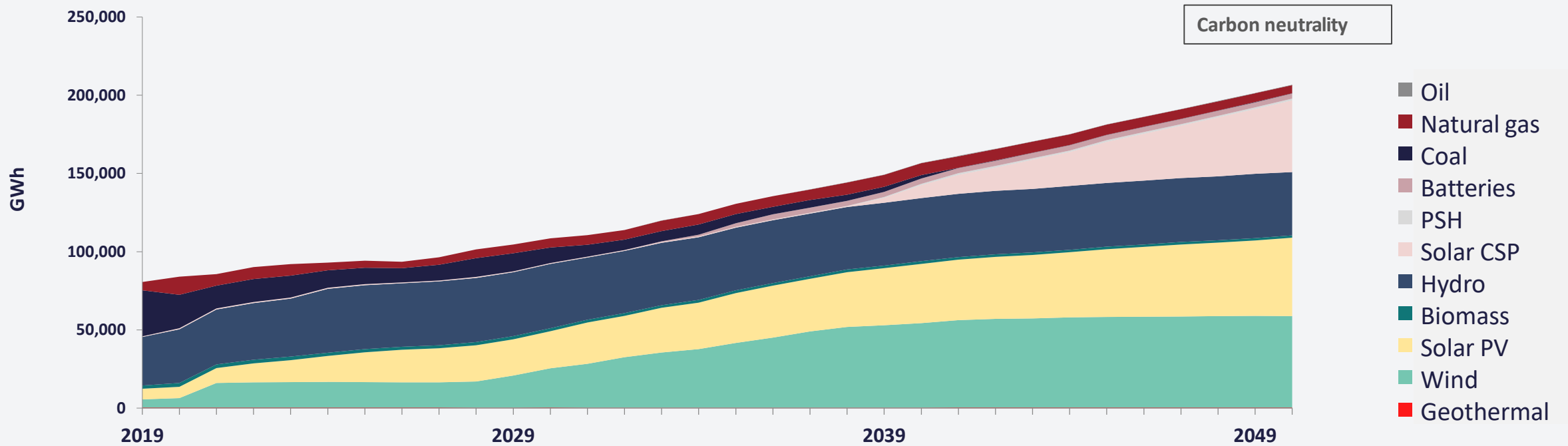


Carbon neutrality by 2050 & projections for the energy transition



Renewable
electricity
generation

→ **44%** 2019 → **70%** 2030



Digitalization-context in terms or energy

Infrastructure

- The use of **smart meters is not massified, neither distributed generation appl.**
- Started **reforms** on the **communications and management** side of the **system**

Security

- **Lack of defined regulation** and protocols for privacy, data sovereignty and information security

Economic

- **Lack of economic incentives** for implementation and deployment
- **High investment cost**

Regulatory

- Several applications **require a modification** or update of the **current regulation**

Human capital

- **Lack of training** and **need of new skills, knowledge** and **digital education**

Energy sector faces the big challenge of moving towards an end-user-centric paradigm, taking advantage of the opportunities given by digitalization

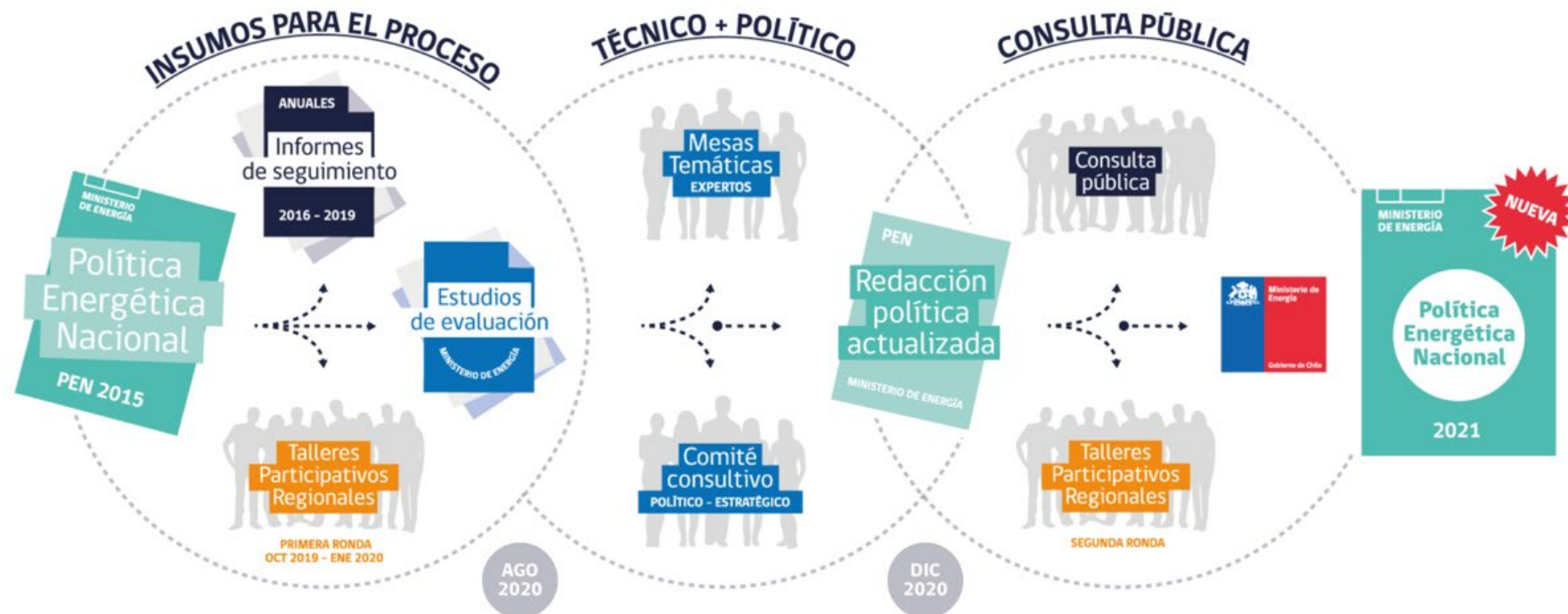
Learning from a first smart-meters' experience

- The way in which we **communicate** a solution is very important for policy success
- It is necessary for people **to percieve the benefits** of policies



Updating process of our long-term energy policy: participation is key

- We want our **policy to be rooted on people's needs** and address them
- **People** need to be part of the **diagnosis**, as well as on **weighting prospective solutions**
- **People** need to be **part of the implementation** of energy policies: for policies to be appropriated it is key to integrate actors in the policy design process



Key messages for the digitalization strategy from the participatory process

In the long-run, public policy should aim...

On electricity systems:

- **Empowered users:** Public policy should **guarantee that all users of electricity are able to make informed decisions** —as we focus on what we want in the long run, we do not choose a specific technology
- **Electricity systems:** accessible, flexible, sustainable and reliable for **opening-up more interaction spaces** with users

On information:

- Public policy should **guarantee the access of energy information** for people, public and private institutions
- Developing regulation for coordination, cooperation and security
- Continuous data collection and management processes

Digitalization: what are we doing now?

- Focusing on developing regulation for addressing **communication systems** and **information management systems** before we go back to the needed metering equipment

And when we tackle that again we want to **make sure the benefits of our policies for people are as much apparent as possible**

- **Regulation reform** for allowing for **electricity retailing** and associated services
- Our approach to help unleash distribution systems and digital applications focuses on **identifying barriers** that prevent their **adoption and deployment**
- **On information:** developing information management and communication systems at ISO level

What comes next? Policy recommendations

To take a more active approach:

- Promote **articulation** between the different **institutions**
- **Increase** public **investment in digital infrastructure**, build ICT infrastructure
- **Define a common data architecture, tools, and standards** for interoperability and **raise the quality, reliability, and security** of devices and services
- **Reduce the digital gap** among the different **territories** of the country
- Policies to increase investment in **human resources and education**
- **Pilot programs** to promote the use of digital applications
- **Encourage investment** by private parties in digitization projects

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