Practicing Scenario Analysis

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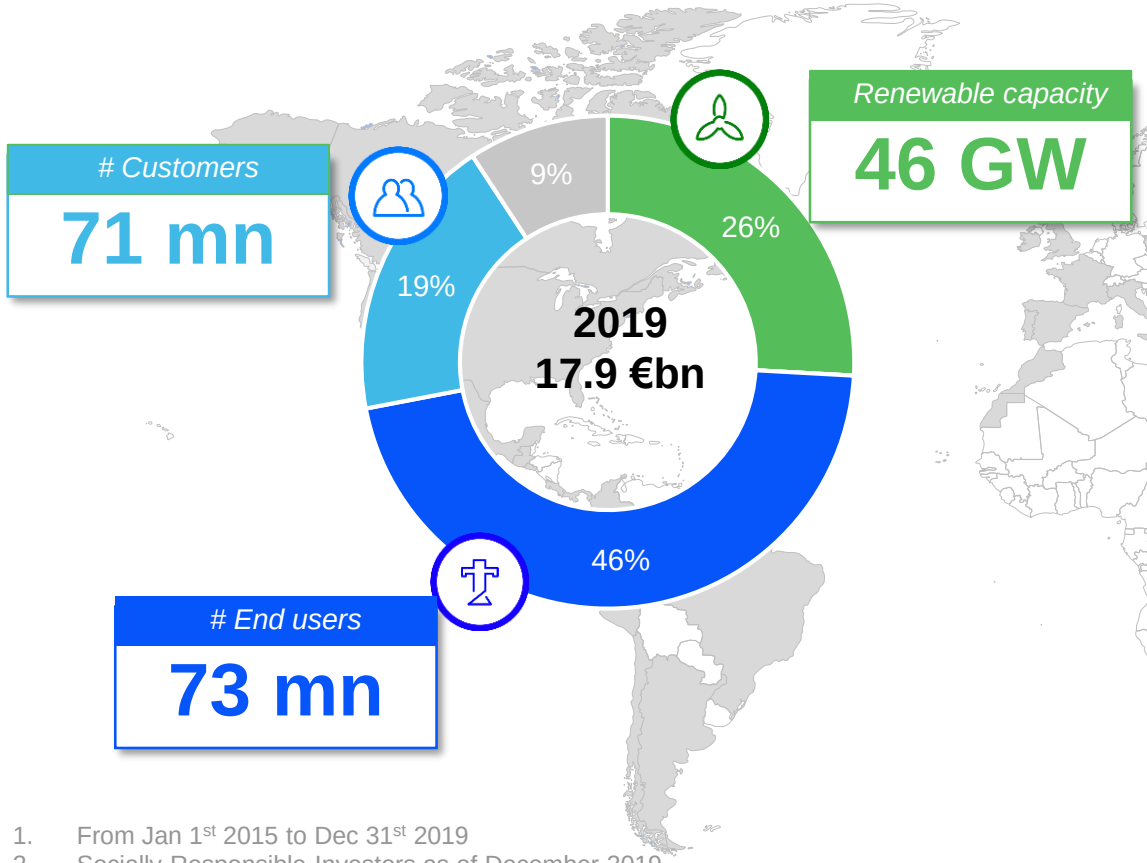
A sustainable and fully integrated business model delivering value

EBITDA by business

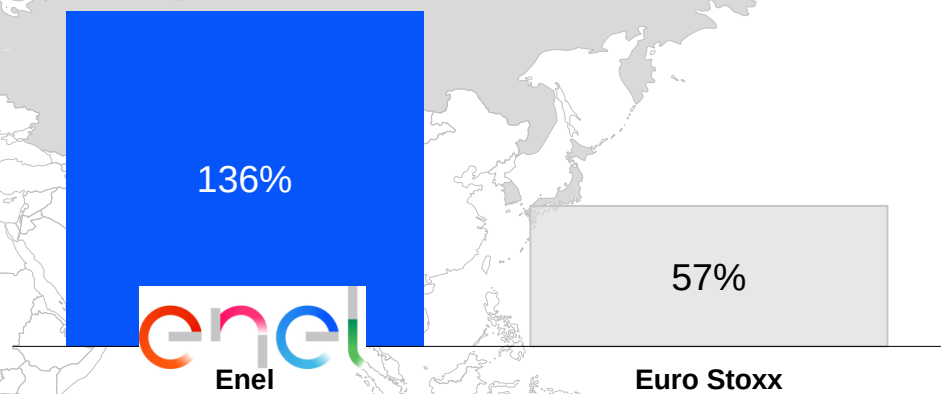


 # Customers
71 mn

Renewable capacity
46 GW

 # End users
73 mn

Total shareholder return 2015-2019[1]



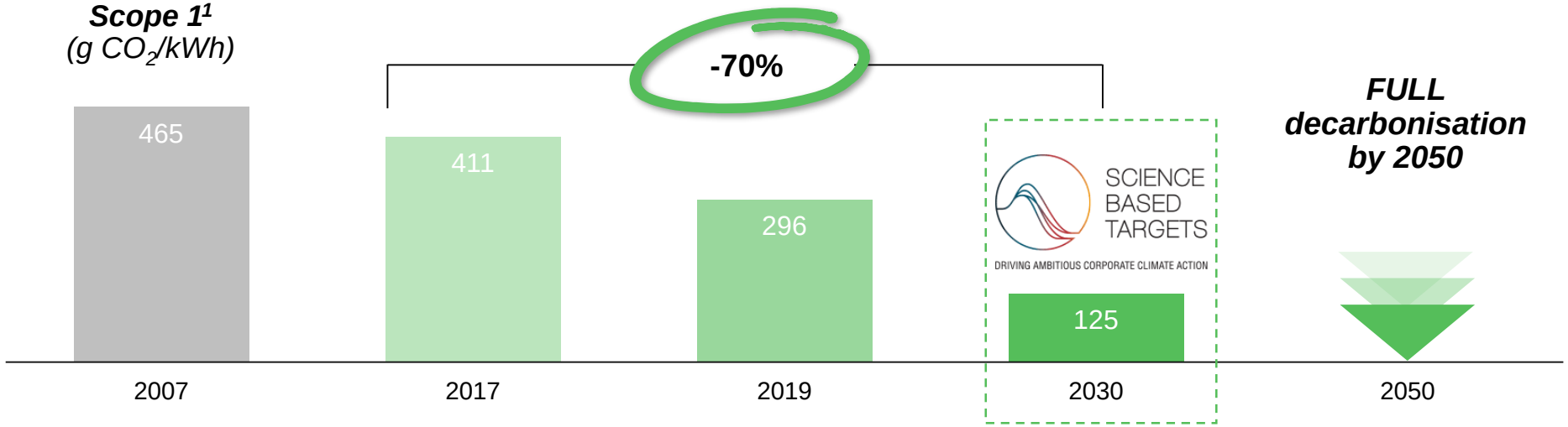
SRI[2]
10.8%

1. From Jan 1st 2015 to Dec 31st 2019
2. Socially Responsible Investors as of December 2019

Strategy strongly supports Enel path towards full decarbonisation by 2050

Scope 1 & Scope 3 CO_2 emissions evolution

Scope 1[1]
(g CO_2/kWh)



FULL decarbonisation by 2050

Previous SBTi target 350 ✓

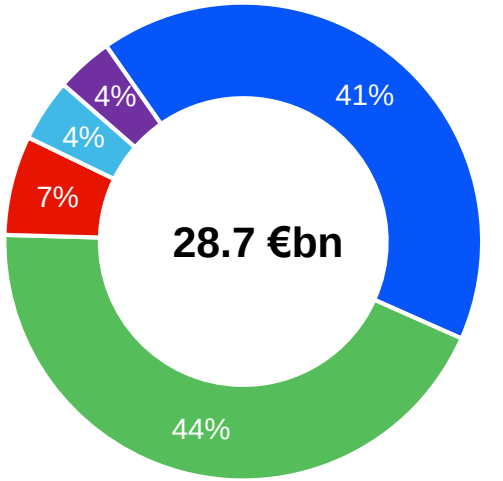
Scope 3[2]
(Mton CO_2)

SCIENCE BASED TARGETS
DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

16% indirect emissions reduction

✓ Target achieved

Total gross capex 2020-22



>90% of capex SDGs related

1. Scope 1 by 2030, consistent with the Well Below 2C pathway of the Science Based Target Initiative and the IEA B2DS scenario
2. Scope 3 related to gas retail activities by 2030, consistent with the 2C pathway of the Science Based Target Initiative

Our Scenario Analysis Framework aims to capture climate and market dynamics over different time frames

	Short (2020-22)	Medium (2022-30)	Long term (2030-50)
Define scenarios			
Transition Scenario		Transition impacts	
Physical Scenario	Acute physical impacts	Acute physical impacts	Acute physical impacts
			Chronic physical impacts

Corporate Level Downscaling

External References

- ✓ Transition Scenarios from IEA SPS and SDS
- ✓ Physical Scenarios from IPCC RCPs 4.5-6 and 2.6
- ✓ Scientific and technical partners

Data Inputs

- ✓ High resolution climate data
- ✓ Macroeconomic and commodity context
- ✓ Tech evolution, Consumer behavior, Geopolitics
- ✓ Climate and Energy Policies

Tools/Metrics

- ✓ TIMES Energy system modeling tool
- ✓ Natural hazard models
- ✓ Business relevant metrics definition

Continuous Dialogue

- ✓ Share scenarios outputs with local specific teams and business lines
- ✓ Risks and Opportunities mapping

From scenarios to strategic decisions

Climate scenarios project **long-term variations from historical trends** (such as temperature rise) that are **more pronounced in RCP8.5 scenario, for example, than in RCP 2.6.**
Over the long term (after 2050) the difference between **the two scenarios will increase faster** stating clear the need for action is now..

Acute phenomena
Potential impacts (damage and business interruption) such as heatwaves and fire risk

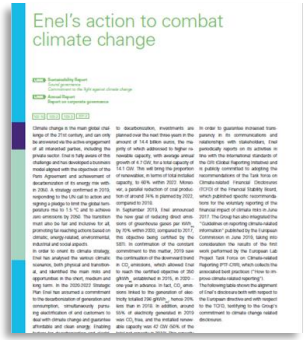
Chronic phenomena
Effect of temperature on electricity demand, or precipitation variation on manufacturability

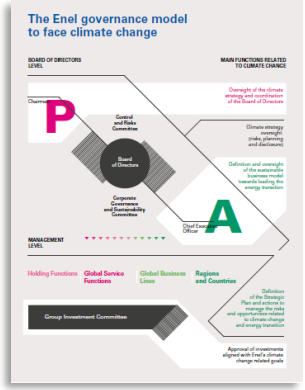
Transition phenomena
Different energy transition pathways related to policies, technologies, macroeconomics, commodities, etc

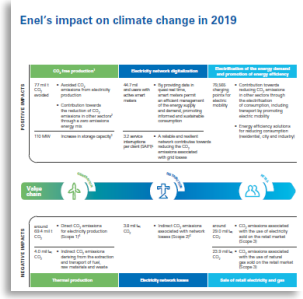
In order to assess the chronic and acute effects, the most relevant events for the business will be recognized through:

1. **Identification of phenomena** relevant to the business (e.g. impact on electricity demand or heatwaves impact)
2. Development of **link function** between **climate/transition scenarios and operations** variables
3. **Event trend** detection **from scenario data** (e.g. intensity and frequency)
4. **Impact calculation** (e.g. ΔMargin, Damages, Capex)
5. **Strategic actions** definition and implementation (e.g. capital allocation, resiliency plan)

Clarity of impact is paramount and Enel reports aim to show how our integrated approach generates value







- Enel Group Report structure has been **adapted according to the four core TCFD pillars**
- Additional sections were included regarding:
  - ✓ **Group Strategy** storytelling for Sustainability is Value
  - ✓ **Climate risks and opportunities**, including framework and first assessments
  - ✓ **Assessment** of physical and **transition-related risks and opportunities**

Market	**Opportunity:** increase in margins from electrification of consumption **Risk:** competition increase and decrease in market share	**Impact:** Effect on electricity demand
Products and Services	**Opportunity:** increase in margins and from new technologies and electric transportation	**Impact:** Transportation and residential consumption