



Climate Change Disclosure

Understanding the risks and adapting to Climate Change

At TERNA ENERGY we recognize that climate change, as manifested in the gradual rise in average global temperature or the increasing frequency of exceptional and extreme weather conditions, constitutes a challenge for the global business community, presenting both opportunities and risks to designing and applying business models. We also recognize that reducing greenhouse gas emissions by shifting to clean energy, using this energy in electromobility and buildings' heating and cooling should constitute priorities for addressing climate change. Therefore, integrating climate risks and opportunities into our business strategy is a prerequisite for the company's Sustainable Development and our ability to continue to create value. Climate change and its induced actions and relevant mitigation measures concern the Company's operations and all those participating in its supply chain.

The most significant effects of climate change are likely to emerge over the medium to longer term, but their precise timing and magnitude are uncertain. This uncertainty presents challenges in understanding the potential effects of climate change on our business, strategy, and financial performance.

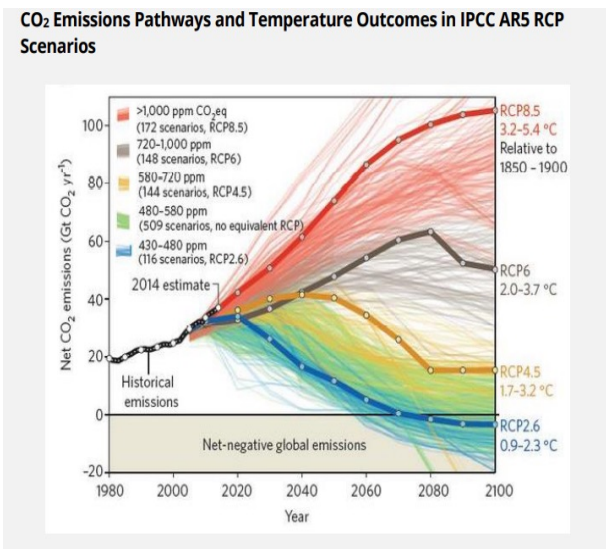
Scenario analysis is a well-established method for developing input to strategic plans in order to enhance plan flexibility or resiliency to a range of future states



Scenarios can be broadly assigned into two categories: (1) scenarios that articulate different policy outcomes (i.e., level of temperature increase) and the energy and economic pathways that would result, with some probability, in achieving temperature increases around the desired outcome, (transition scenarios) and (2) scenarios that start with a range of atmospheric GHG concentration and articulate the likely resulting temperature ranges. Scenario pathways to deliver a given limit to warming are commonly referred to as "transition scenarios." Patterns of physical impacts attributable to climate change can be termed "physical climate scenarios."

Physical Risk Scenarios

Representative Concentration Pathways developed by the IPCC describe the climate impacts of a range of possible future GHG emissions and consequent trajectories of atmospheric GHG concentrations. They are used to assess the physical risks of climate change (chronic and acute).



Source: Sabine Fuss, et al., "Betting on negative emissions," *Nature Climate Change* 4 (10), September 2014, pp. 850-853.

Transition Scenarios have varying assumptions about the likely timing of policy changes, technology adoption, changes in energy mix, and other factors to achieve a climate-friendly economy.

Terna Energy follows the 2°C transition scenario to identify the potential impact of climate related risks and opportunities on its operation, strategy and financial planning. This scenario lays out a pathway and an emissions trajectory consistent with limiting the average global temperature increase to a temperature range around 2°C with a stated level of probability.

(Limiting the temperature increase to below 2°C (relative to pre-industrial levels) is a stated goal of the 2015 UNFCCC Paris Agreement that entered into force on November 4, 2016)

IPCC Representative Concentration Pathway (RCP) Scenarios	
RCP8.5	High-emissions scenario, consistent with a future with no policy changes to reduce emissions, and characterized by increasing GHG emissions that lead to high atmospheric GHG concentrations. It is aligned broadly with a Current Policies or Business-As-Usual Scenario.
RCP6.0	High-to-intermediate emissions scenario where GHG emissions peak at around 2060 and then decline through the rest of the century.
RCP4.5	Intermediate-emissions scenario, consistent with a future with relatively ambitious emissions reductions and GHG emissions increasing slightly before starting to decline circa 2040. Despite such relatively ambitious emissions reduction actions, RCP4.5 falls short of the 2°C limit/1.5°C aim agreed on in the Paris Agreement. It is aligned broadly with the GHG emissions profile that would result from implementation of the 2015 NDCs (out to 2030), followed rapidly by peaking and then reduction of global emissions by 50% by 2080.
RCP2.6	the only IPCC scenario in line with the Paris Agreement's stated 2°C limit/1.5°C aim. This RCP is consistent with ambitious reduction of GHG emissions, which would peak around 2020, then decline on a linear path and become net negative before 2100.

Climate Related Risks and Opportunities

Terna Energy has a system in place for identifying, assessing and managing climate related risks and opportunities as part of its risk management procedure. Climate Risk categories outlined by the recommendations of TCFD (*Task Force on Climate-related Financial Disclosures*) have been taken into consideration during the risk identification process. The potential impact of climate related risks & opportunities on the Company's businesses, strategy and financial planning has been determined, assessed and incorporated in Company's strategy.

Category	Risk type	Climate-Related Risks	Climate-Related Opportunities
Financial	<ul style="list-style-type: none"> • Credit Risk • Liquidity risk • Tax Strategy 	<ul style="list-style-type: none"> • Creditworthiness is eroded and interest rates rise as lenders consider escalating business risks related to climate change. • Costs increase from taxes or fees on carbon emissions 	<ul style="list-style-type: none"> • Lower interest rates due to the adoption of climate change related policies.
Business	<ul style="list-style-type: none"> • Supply Chain • Raw Material Availability • Business Continuity • Regulatory Compliance 	<ul style="list-style-type: none"> • Supply chain disruptions occur because of droughts or extreme weather impacts in supplier regions • Costs increase on raw materials due extreme weather conditions in supplier regions • Changing weather patterns and increased natural disasters disrupt operations • Changing weather patterns may lead to the transition to alternative RES • Extreme weather conditions may affect electrical energy production from RES • Decrease in electricity demand due to population decrease • Increased operating cost (higher compliance costs, increased insurance premiums) 	<ul style="list-style-type: none"> • Increase of electrical energy demand due to higher average temperatures • Process and equipment optimization and renovation due to the requirements for low GHG emissions. • Enhancement of R&D process for new alternative technologies
Strategic	<ul style="list-style-type: none"> • Competition 	<ul style="list-style-type: none"> • Shift of investments from conventional energy to RES 	<ul style="list-style-type: none"> • Increase in margins and greater scope for investment as a consequence of the transition in terms of greater penetration of new electrical technologies.

Our Actions

Recognizing that climate change is a phenomenon that can affect the international economy and consequently our activities, we are taking into consideration not only national but also international and European climate agreements (*Paris Agreement on Climate Change*), thusly limiting any potential regulatory sanctions. Important issues, such as the increase in the share of RES in the energy mix and the reduction of carbon dioxide emissions, are commitments that have been agreed at global and regional level and influence the company's decisions and the design of its strategy. Specifically, we support the "National Plan for the Energy and the Climate", which is an ambitious plan for the restructuring of our country's energy mix by increasing the RES participation and which emerges as a national commitment from the European regulation on "Governance of the Energy Union and Climate Action".

We commit to reducing our energy consumption and greenhouse gas emissions generated from our buildings and facilities. At the same time, our activity in electricity generation from RES and waste management is focused on the general direction of addressing climate change. Electricity production from RES contributes to reducing carbon dioxide emissions into the atmosphere, the alleviation of the greenhouse effect and thereby the mitigation from associated impacts. Since RES are unlimited energy sources that are becoming increasingly competitive in the market and extremely necessary for the planet, they contribute to independence from fossil fuels such as oil and gas.

Our Commitment

The company is moving forward in its commitment to lead the energy transition, in line with the objectives of the Paris Agreement (COP21) and the Sustainable Development Goals set by the United Nations. In particular, we are fully committed to the development of a long-term sustainable business model, consistent with the objectives of the Paris Agreement to achieve a reduction in CO₂ emissions and to limit the average increase in global temperature to below 2 °C compared with pre-industrial levels.

Our recently established ESG committee will monitor the Company's performance and suggest improvements in environment, society and corporate governance to generate value. The work of the Committee includes, inter alia, monitoring the integration of non-financial actors in the business strategy and decision-making, in order for the Company to remain resilient and ready to manage changes in the environment in which it operates.

The Next Steps

Terna Energy has already submitted the target setting application to SBTi regarding the reduction of CO₂ emissions to acquire independent external target verification.

Following our commitment to develop a long-term sustainable business model we have set the following targets at Group level



- ✓ 25% Reduction of Scope 1 and Scope 2 emissions by 2030 from a 2020 base year (WB2C aligned)
- ✓ Measurement and Reduction of Scope 3 emissions



- ✓ 25% Reduction of energy consumption from non renewable resources by 2030 from a 2020 base year
- ✓ Measurement and Reduction of Scope 3 emissions



- ✓ In 2022 Terna Energy will join CDP climate change initiative
- ✓ Approval of GHG emissions reduction targets by the Science Based Targets initiative
- ✓ Reporting under the TCFD framework by the end of 2022