



SDG7 Energy Compact of the Basque County

**Commitment on the creation of a sound and sustainable local market, promoting the production of renewable and low-carbon hydrogen, and stimulating domestic demand
A next Decade Action Agenda to advance SDG7 on sustainable energy for all, in line with the goals of the Paris Agreement on Climate Change**

SECTION 1: AMBITION

1.1. Ambitions to achieve SDG7 by 2030. [Please select all that apply, and make sure to state the baseline of each target]

(Member States targets could be based on their NDCs, energy policies, national five-year plans etc. targets for companies/organizations could be based on their corporate strategy)

<input checked="" type="checkbox"/> 7.1. By 2030, ensure universal access to affordable, reliable and modern energy services.	Target(s): <ul style="list-style-type: none"> Affordable and carbon-free hydrogen-based energy for all consuming sectors, especially for those hard-to-abate, with no viable electrification alternatives. Time frame: 2021-2030 Context for the ambition(s): Basque Hydrogen Strategy.
<input checked="" type="checkbox"/> 7.2. By 2030, increase substantially the share of renewable energy in the global energy mix.	Target(s): <ul style="list-style-type: none"> Low-carbon economic growth by creating innovative economies and business models and maximizing RES integration. Time frame: 2021-2030 Context for the ambition(s): Basque Hydrogen Strategy.
<input type="checkbox"/> 7.3. By 2030, double the global rate of improvement in energy efficiency.	Target(s): Time frame: Context for the ambition(s):
<input checked="" type="checkbox"/> 7.a. By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology.	Target(s): <ul style="list-style-type: none"> High quality industrial jobs, enhancing local opportunities for re-skilling and capacity building, and regional competitiveness. Innovative industrial deployment, R+D and technological leadership, enabling local companies to gain commercial position in a growing international hydrogen market. Hydrogen infrastructure deployment to place the region in a relevant position as a hydrogen trading and logistics hub, replicating similar experiences (LNG) and taking advantage of capacities such as the port of Bilbao and the region's situation within the Atlantic Arc. Time frame: 2030 Context for the ambition(s): Basque Hydrogen Strategy.
<input type="checkbox"/> 7.b. By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States, and land-locked developing countries, in accordance with their respective programs of support.	Target(s): Time frame: Context for the ambition(s):

1.2. Other ambitions in support of SDG7 by 2030 and net-zero emissions by 2050. [Please describe below e.g., coal phase out or reforming fossil fuel subsidies etc.]

Target(s):
 Time frame:
 Context for the ambition(s):

SECTION 2: ACTIONS TO ACHIEVE THE AMBITION

2.1. Please add at least one key action for each of the elaborated ambition(s) from section 1. [Please add rows as needed].

<i>Description of action (please specify for which ambition from Section 1)</i> Action 1: Promote the installation of electrolysis plants to produce hydrogen by using renewable energy (Ambition 7.1).	<i>Start and end date</i> 2021-2030
<i>Description of action (please specify for which ambition from Section 1)</i> Action 2: Encourage the adaptation of existing hydrogen production plants from fossil energy sources to install technology for carbon capture, storage, and use (Ambition 7.a).	<i>Start and end date</i> 2021-2030
<i>Description of action (please specify for which ambition from Section 1)</i> Action 3: Promote the production of synthetic fuels and biofuels from renewable or low-carbon hydrogen, with high added value due to their simple logistics and usability (Ambition 7.a).	<i>Start and end date</i> 2021-2030
<i>Description of action (please specify for which ambition from Section 1)</i> Action 4: Promote the replacement of grey hydrogen by renewable or low carbon hydrogen as feedstock for industrial consumers, as a way of reducing the carbon footprint of their products (Ambition 7.2).	<i>Start and end date</i> 2021-2030
<i>Description of action (please specify for which ambition from Section 1)</i> Action 5: Promote a fuel switch to hydrogen or blends containing it in many industries as a means of reducing the carbon footprint. This measure could be employed in the chemical, petrochemical, steel and logistics industries and, in general, in any sector that is an intensive user of natural gas and other fossil fuels (Ambition 7.2).	<i>Start and end date</i> 2021-2030
<i>Description of action (please specify for which ambition from Section 1)</i> Action 6: Promote the adaptation of equipment for the consumption of hydrogen or hydrogen blends in buildings (Ambition 7.1).	<i>Start and end date</i> 2021-2030
<i>Description of action (please specify for which ambition from Section 1)</i> Action 7: Promote the replacement of fossil fuels in transport with hydrogen or hydrogen blends. This measure is mainly aimed at bus fleets and heavy goods transports, but may extend to other users, including maritime transport. Although consumption will generally be in fuel cell vehicles, for certain applications the feasibility of using hydrogen blends with fossil fuels such as natural gas could be analyzed (Ambition 7.1).	<i>Start and end date</i> 2021-2030

<i>Description of action (please specify for which ambition from Section 1)</i> Action 8: Promote the implementation of hydrogen filling stations in the Basque Country, from the perspective of the potential needs of the fleet owners, through subsidy programs or other financing instruments (Ambition 7.1).	<i>Start and end date</i> 2021-2030
<i>Description of action (please specify for which ambition from Section 1)</i>	<i>Start and end date</i> 2021-2030

SECTION 3: OUTCOMES

3.1. Please add at least one measurable and time-based outcome for **each** of the actions from section 2. *[Please add rows as needed].*

<i>Outcome</i>	<i>Date</i>
Action 1: Installed electrolysis capacity of 300 MW Action 2: 100% of the hydrogen produced to be of renewable or low-carbon origin Action 3: Annual production of 2,000 t/year of synthetic fuels Action 4: 90% of hydrogen consumed in industry as feedstock to be of renewable or low-carbon origin Action 5: Hydrogen accounting for 5% of total energy consumption in the industrial sector Action 6: 10 pilot projects for hydrogen use in buildings Action 7: Fleet of 20 hydrogen buses in the Basque Country Action 7: Fleet of 450 goods transport vehicles of varying sizes Action 8: Network of 10 public access hydrogen filling stations, covering all three Basque provinces	2030

SECTION 4: REQUIRED RESOURCES AND SUPPORT

4.1. Please specify required finance and investments for **each** of the actions in section 2.

Action 1: Investment of €180-330 Million (M) Action 2: Investment of €20-25 M Action 3: Investment of €40-50 M Action 4: Investment of €15-30 M Action 5: Investment of €50-75 M Action 6: Investment of €5-10 M Action 7: Investment of €51-62 M Action 8: Investment of €42-53 M

4.2. [For countries only] In case support is required for the actions in section 2, please select from below and describe the required support and specify for which action.

[Examples of support for Member States could include: Access to low-cost affordable debt through strategic de-risking instruments, capacity building in data collection; development of integrated energy plans and energy transition pathways; technical assistance, etc.]

<input type="checkbox"/> Financing	<i>Description</i>
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<input type="checkbox"/> In-Kind contribution	Description
<input type="checkbox"/> Technical Support	Description
<input type="checkbox"/> Other/Please specify	Description

SECTION 5: IMPACT

5.1. Countries planned for implementation including number of people potentially impacted.

The Basque Country (Spain). The Basque Country is a region in Spain with a surface area of 7,234 sq.km and a population of 2,200,000 inhabitants. The objective of the creation of a sound and sustainable local market, promoting the production of renewable and low-carbon hydrogen, and stimulating domestic demand is to impact all consumer sectors of Basque society.

5.2. Alignment with the 2030 Agenda for Sustainable Development – Please describe how **each** of the actions from section 2 impact advancing the SDGs by 2030.

[up to 500 words, please upload supporting strategy documents as needed]

Action 1: Promote the installation of electrolysis plants to produce hydrogen by using renewable energy (Ambition 7.1).	SDG 7: Affordable and Clean Energy; SDG 8: Decent Work and Economic Growth; SDG 9: Industry, Innovation and Infrastructure; SDG 11: Sustainable Cities and Communities; SDG 12: Responsible Consumption and Production; SDG 13: Climate Action.
Action 2: Encourage the adaptation of existing hydrogen production plants from fossil energy sources to install technology for carbon capture, storage, and use (Ambition 7.a).	SDG 7: Affordable and Clean Energy; SDG 8: Decent Work and Economic Growth; SDG 9: Industry, Innovation and Infrastructure; SDG 11: Sustainable Cities and Communities; SDG 12: Responsible Consumption and Production; SDG 13: Climate Action.
Action 3: Promote the production of synthetic fuels and biofuels from renewable or low-carbon hydrogen, with high added value due to their simple logistics and usability (Ambition 7.a).	SDG 7: Affordable and Clean Energy; SDG 8: Decent Work and Economic Growth; SDG 9: Industry, Innovation and Infrastructure; SDG 11: Sustainable Cities and Communities; SDG 12: Responsible Consumption and Production; SDG 13: Climate Action.
Action 4: Promote the replacement of grey hydrogen by renewable or low carbon hydrogen as feedstock for industrial consumers, as a way of reducing the carbon footprint of their products (Ambition 7.2).	SDG 8: Decent Work and Economic Growth; SDG 9: Industry, Innovation and Infrastructure; SDG 11: Sustainable Cities and Communities; SDG 12: Responsible Consumption and Production; SDG 13: Climate Action.
Action 5: Promote a fuel switch to hydrogen or blends containing it in many industries as a means of reducing the carbon footprint. This measure could be employed in the chemical, petrochemical, steel and logistics industries and, in general, in any sector that is an intensive user of natural gas and other fossil fuels (Ambition 7.2).	SDG 7: Affordable and Clean Energy; SDG 8: Decent Work and Economic Growth; SDG 9: Industry, Innovation and Infrastructure; SDG 11: Sustainable Cities and Communities; SDG 12: Responsible Consumption and Production; SDG 13: Climate Action.
Action 6: Promote the adaptation of equipment for the consumption of hydrogen or hydrogen blends in buildings (Ambition 7.1).	SDG 7: Affordable and Clean Energy; SDG 8: Decent Work and Economic Growth; SDG 9: Industry, Innovation and Infrastructure; SDG 11: Sustainable Cities and Communities; SDG 12: Responsible Consumption and Production; SDG 13: Climate Action.
Action 7: Promote the replacement of fossil fuels in transport with hydrogen or hydrogen blends. This measure is mainly aimed at bus fleets and heavy goods transports, but may extend to other users, including maritime transport. Although consumption will generally be in fuel cell vehicles, for certain applications the feasibility of using hydrogen blends with fossil fuels such as natural gas could be analyzed (Ambition 7.1).	SDG 7: Affordable and Clean Energy; SDG 8: Decent Work and Economic Growth; SDG 9: Industry, Innovation and Infrastructure; SDG 11: Sustainable Cities and Communities; SDG 12: Responsible Consumption and Production; SDG 13: Climate Action.

Action 8: Promote the implementation of hydrogen filling stations in the Basque Country, from the perspective of the potential needs of the fleet owners, through subsidy programs or other financing instruments (Ambition 7.1).

SDG 7: Affordable and Clean Energy; SDG 8: Decent Work and Economic Growth; SDG 9: Industry, Innovation and Infrastructure; SDG 11: Sustainable Cities and Communities; SDG 12: Responsible Consumption and Production; SDG 13: Climate Action.

5.3. Alignment with Paris Agreement and net-zero by 2050 - Please describe how **each** of the actions from section 2 align with the Paris Agreement and national NDCs (if applicable) and support the net-zero emissions by 2050. [up to 500 words, please upload supporting strategy documents as needed]

The Basque Hydrogen Strategy is focused on clean hydrogen production and use, therefore, all actions are aligned with the objectives of the Paris Agreement, in particular with the aim of a) help holding the increase in the global average temperature to well below 2 °C above pre-industrial levels, and to pursue efforts to limit the temperature increase to 1.5 °C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change.

SECTION 6: MONITORING AND REPORTING

6.1. Please describe how you intend to track the progress of the proposed outcomes in section 3. Please also describe if you intend to use other existing reporting frameworks to track progress on the proposed outcomes.

In partnership with UN-Energy, and to enable the achievement and tracking of this Energy Compact, the Basque Government commits to report and to measure progress on this Energy Compact on an annual basis, with the results being made public.

The following Key Performance Indicators will be tracked in the period 2021-2030:

- Installed electrolysis capacity (MW);
- Total H2 production (t);
- Renewable H2 production (t);
- Low-carbon H2 production (t);
- Synthetic fuels production (t);
- H2 consumed in industry as feedstock (t);
- Renewable H2 consumed in industry as feedstock (t);
- Low-carbon H2 consumed in industry as feedstock (t);
- Energy consumption in the industrial sector (toe);
- H2 consumption in the industrial sector as fuel (toe);
- Number of H2 pilot projects in buildings (no.);
- Number of H2 buses (no.); Number of freight transport vehicles (no.);
- Number of H2 refueling stations (no.);
- Number of Basque Provinces with H2 refueling stations (no.).

SECTION 7: GUIDING PRINCIPLES CHECKLIST

Please use the checklist below to validate that the proposed Energy Compact is aligned with the guiding principles.

I. Stepping up ambition and accelerating action - Increase contribution of and accelerate the implementation of the SDG7 targets in support of the 2030 Agenda for Sustainable Development for Paris Agreement

1. Does the Energy Compact strengthen and/or add a target, commitment, policy, action related to SDG7 and its linkages to the other SDGs that results in a higher cumulative impact compared to existing frameworks?

Yes No

I.2. Does the Energy Compact increase the geographical and/or sectoral coverage of SDG7 related efforts? Yes No

I.3. Does the Energy Compact consider inclusion of key priority issues towards achieving SDG7 by 2030 and the net-zero emission goal of the Paris Agreement by 2050 - as defined by latest global analysis and data including the outcome of the Technical Working Groups? Yes No

II. Alignment with the 2030 agenda on Sustainable Development Goals – Ensure coherence and alignment with SDG implementation plans and strategies by 2030 as well as national development plans and priorities.

II.1. Has the Energy Compact considered enabling actions of SDG7 to reach the other sustainable development goals by 2030? Yes No

II.2. Does the Energy Compact align with national, sectoral, and/or sub-national sustainable development strategies/plans, including SDG implementation plans/roadmaps? Yes No

II.3. Has the Energy Compact considered a timeframe in line with the Decade of Action? Yes No

III. Alignment with Paris Agreement and net-zero by 2050 - Ensure coherence and alignment with the Nationally Determined Contributions, long term net zero emission strategies.

III.1. Has the Energy Compact considered a timeframe in line with the net-zero goal of the Paris Agreement by 2050? Yes No

III.2. Has the Energy Compact considered energy-related targets and information in the updated/enhanced NDCs? Yes No

III.3. Has the Energy Compact considered alignment with reaching the net-zero emissions goal set by many countries by 2050? Yes No

IV. Leaving no one behind, strengthening inclusion, interlinkages, and synergies - Enabling the achievement of SDGs and just transition by reflecting interlinkages with other SDGs.

IV.1. Does the Energy Compact include socio-economic impacts of measures being considered? Yes No

IV.2. Does the Energy Compact identify steps towards an inclusive, just energy transition? Yes No

IV.3. Does the Energy Compact consider measures that address the needs of the most vulnerable groups (e.g. those impacted the most by energy transitions, lack of energy access)? Yes No

V. Feasibility and Robustness - Commitments and measures are technically sound, feasible, and verifiable based a set of objectives with specific performance indicators, baselines, targets and data sources as needed.

V.1. Is the information included in the Energy Compact based on updated quality data and sectoral assessments, with clear and transparent methodologies related to the proposed measures? Yes No

V.2. Has the Energy Compact considered inclusion of a set of SMART (specific, measurable, achievable, resource-based and time based) objectives? Yes No

V.3. Has the Energy Compact considered issues related to means of implementation to ensure feasibility of measures proposed (e.g. cost and financing strategy, technical assistance needs and partnerships, policy and regulatory gaps, data and technology)? Yes No

SECTION 8: ENERGY COMPACT GENERAL INFORMATION

8.1. Title/name of the Energy Compact

Energy Compact of the Basque Country

8.2. Lead entity name (for joint Energy Compacts please list all parties and include, in parenthesis, its entity type, using entity type from below)

Basque Government

8.3. Lead entity type

Government

Local/Regional Government

Multilateral body /Intergovernmental Organization

Non-Governmental Organization (NGO)

Civil Society organization/Youth

Academic Institution /Scientific Community

Private Sector

Philanthropic Organization

Other relevant actor

8.4. Contact Information

Delegation of the Basque Country in the United States, 820 Second Avenue suite 13B NY 10017; Felipe Victoria – UN Policy Officer, fe-victoria@euskadi.eus

8.5. Please select the geographical coverage of the Energy Compact

Africa Asia and Pacific Europe Latin America and Caribbean North America West Asia Global

8.6. Please select the Energy Compact thematic focus area(s)

Energy Access Energy Transition Enabling SDGs through inclusive just Energy Transitions Innovation, Technology and Data Finance and Investment.

SECTION 9: ADDITIONAL INFORMATION (IF REQUIRED)

Please provide additional website link(s) on your Energy Compact, which may contain relevant key documents, photos, short video clips etc.

<https://www.eve.eus/EveWeb/media/EVE/pdf/3E2030/EVE-3E2030-Ingles.pdf>