

Pledger	Original Pledge	Pledge Update – May 2023
<p>ACCIONA</p>	<p>At ACCIONA Energía we are committed to the creation of a robust renewable hydrogen ecosystem that helps meet decarbonization targets in an environment of economic growth. To this end, ACCIONA Energía recently teamed up to establish a joint venture with Plug Power, through which we target to achieve a 20% market share in the renewable hydrogen business in Spain and Portugal by 2030, through an initially planned investment of more than €2 billion.</p>	<p>At ACCIONA Energía we are committed to the creation of a robust renewable hydrogen ecosystem to meet decarbonization targets in an environment of economic growth. To this end, ACCIONA Energía has teamed up with Plug Power, establishing the joint venture ACCIONAPLUG in 2021 which targets to capture 20% of the Iberian renewable hydrogen market by 2030, currently estimated at 1,2 GW of electrolysis capacity. ACCIONAPLUG’s first 25 MW electrolysis facility will initiate renewable hydrogen production by the end of 2024 in Navarra, Spain. The JV is developing several additional projects, replicable and scalable to hundreds of MW of electrolysis capacity in the next years. Beyond this joint venture, ACCIONA Energía is progressing with the development of pilot projects following the lead of Power to Green Hydrogen Mallorca in countries with great potential for the production of renewable hydrogen, such as Chile, with a project in Quintero Bay that has already received a grant, and Australia. Additionally, ACCIONA, ACCIONA Energía and Nordex have created a JV to develop renewable hydrogen projects in areas with abundant wind resources, not connected to conventional power grids, where hydrogen can be produced at competitive costs. With a target renewable energy development portfolio of 50 GW, the JV already has sites in the US, Latin America and Africa. The JV’s plan is to develop projects that will produce 0.5 million tons of renewable hydrogen annually within the next ten years. The first would be ready-to-build by 2027. Each of the projects, with minimum size of 1 GW of installed renewable capacity, will be deployed through strategic agreements with other companies and public and private institutions.</p>
<p>IBERDROLA</p>	<p>In its mission to lead the energy transition, Iberdrola is spearheading the development of green hydrogen with projects in a number of countries (Spain, the United Kingdom, Brazil, the United States, among others) to meet the demand for electrification and decarbonisation in hard-to-abate sectors such as industry and long-haul heavy transport. The group is addressing the technological challenge of producing and supplying green hydrogen from clean energy sources, powering the electrolytic process with 100 % renewable electricity. Iberdrola plans to have 3 gigawatts (GW) of electrolyzers capacity to produce renewable hydrogen by 2030</p>	<p>In its mission to lead the energy transition, Iberdrola is spearheading the development of green hydrogen and its derivatives with two real projects already built in Spain: the largest green hydrogen plant in Europe today, our 20 MW Puertollano plant for fertilisers and potentially for other industrial uses and heavy mobility, and our 2.5 MW green hydrogen refuelling station for buses in Barcelona. Overall, the Group currently has over 60 projects under different phases of development in eight countries (Spain, the United Kingdom, Australia, Brazil and the United States, among others) to meet the demand for electrification and decarbonisation in hard-to-abate sectors. Iberdrola is addressing the technological challenge of producing and supplying green hydrogen and derivatives, such as green ammonia, e-methanol or green steel, from clean energy sources, powering the electrolytic process with 100% renewable electricity. Iberdrola has the ambition to reach 3 GW of electrolyzers installed capacity worldwide by 2030.</p>



YOSEMITE CLEAN ENERGY

Yosemite Clean Energy and our subsidiary companies under the Yosemite Umbrella are committed to providing our first portfolio of Carbon Negative renewable hydrogen from waste biomass (Carbon Intensity score of -56 or better) that will be produced at three production facilities currently under development in California and slated for production beginning in 2024. We commit to the completing our first portfolio of 3 hydrogen projects, with an estimated completion date of 2025. The first portfolio will reduce GHGs by eliminating an estimated 402k metric tonnes CO₂e per year and will reduce the use of Diesel fuels by an approximate 19.5 million diesel gallon equivalents annually. Each of our projects will produce an estimated 12.2MT of SJ2719 fuel cell grade hydrogen daily, therefore 3 plants will produce an estimated 11ktpa of hydrogen. These figures would supply over 500 heavy-duty class 8 trucks on an annual basis, or an approximate 1,400 busses to support public transportation.

Yosemite Clean Energy, and our subsidiary companies under the Yosemite umbrella, are committed to providing our first portfolio of carbon negative renewable hydrogen from waste biomass (carbon intensity score ranging from -56 to -25) that will be produced at three production facilities. The sites are currently under development in California and slated for production beginning in 2026 for the first plant, with goals of opening plants #2 and #3 by 2027. We commit to completing our first portfolio of 3 hydrogen projects, with an estimated completion date of 2027. The first portfolio will reduce GHGs by eliminating an estimated 402k metric tonnes CO₂e per year and will reduce the use of Diesel fuels by an approximate 19.5 million diesel gallon equivalents annually. Each of our projects will produce an estimated 24 MT of SJ2719 fuel cell grade hydrogen daily: therefore 3 plants will produce an estimated 21 ktpa of hydrogen. These figures would support public transportation by supplying an approximate 1,400 heavy duty class 8 trucks on an annual basis, or an approximate 2,400 buses.

HINICIO

As Hincio, we have been investing in the design of hydrogen certification schemes and systems since 2014 through the CertifHy@ Initiative, supported financially by the FCH-JU. Hincio pledges today to continue designing renewable hydrogen certification systems in line with the upcoming regulation, such as RED2, CBAM, EU Taxonomy, FuelEU Maritime, RefuelEU Aviation, etc. Moreover, Hincio pledges in a first step to set up an Issuing Body for Renewable Hydrogen Guarantees of Origin and a “Renewable Fuel of Non-Biological Origin” certification scheme recognized by the European Commission, as the regulation of these certification systems starts to be well defined. Other certification purposes might follow later, as regulation becomes clearer.

Hincio, project leader of CertifHy™, is rapidly progressing toward its ambition of becoming a major pure player in the field of hydrogen and e-fuels certification. On the 1st of March 2023, CertifHy™ submitted its RFNBO EU Voluntary Scheme documents for approval by the European Commission in Q4 2023. By seeking this approval, CertifHy™ aims to translate the EU legislative framework on Renewable Fuels of Non-Biological Origin (RFNBO) and enable the uptake of clean hydrogen and synthetic renewable fuels in the transport sector. Hincio is looking forward to continuing to work closely with its partners, clients, and stakeholders to fasten the implementation of a clean hydrogen economy and maximize the role of hydrogen in the energy transition.

ANGLO AMERICAN

We are currently in the process of engineering world-class green hydrogen technologies – including the world’s first 2000kW hydrogen fuel-cell powered ultra-class mine haul truck and producing green hydrogen at our mine sites.

We are currently in the process of engineering world-class low carbon hydrogen technologies. In May 2022, we unveiled a prototype of the world’s largest hydrogen-powered ultra-class mine haul truck designed to operate in everyday mining conditions at our Mogalakwena Platinum Group Metals mine in South Africa. The 2MW hydrogen-battery hybrid truck, generating more power than its diesel predecessor, is capable of carrying a 290-tonne payload and now forms part of the [“First Mode”](#)

- We pledge to both produce and consume 100 kilo tonnes of green hydrogen per year by 2030.
- We pledge to develop green hydrogen production systems at 7 of our open cut sites by 2030, with 3-8 hydrogen refuelling facilities at each, based on their haul truck fleet size.
- We pledge that by 2030 we will convert all our diesel-powered ultra-class mine haul trucks at these sites to green hydrogen power, as well as to stimulate a wide range of hydrogen associated industries and opportunities within our host communities.

[Zero Emission Haulage Solution \(ZEHS\)](#). In December 2022, we announced our investment in First Mode Holding Inc (“First Mode”), a specialist engineering technology company that we have partnered with to decarbonise our global fleet of ultra-class mine haul trucks. The \$200 million capital investment transaction was officially completed in January 2023, which results in Anglo American being a majority shareholder in First Mode.

- We pledge to both produce and consume 100 kilo tonnes of low carbon hydrogen per year by 2030.
- We pledge to develop low carbon hydrogen production systems at 7 of our open cut sites by 2030, with 3-8 hydrogen refuelling facilities at each, based on their haul truck fleet size.
- We pledge that by 2030 we will convert all our diesel-powered ultra-class mine haul trucks at these sites to low carbon hydrogen power, as well as to stimulate a wide range of hydrogen associated industries and opportunities within our host communities.

SHELL

Demand

Shell pledges that by 2030, at least 65% of the hydrogen consumption in its Chemicals and Energy parks will be Reduced Carbon or better (~300ktpa, excluding co-produced hydrogen).

Supply

Shell pledges to produce 75ktpa of Ultra Low Carbon Hydrogen and 100ktpa of Reduced Carbon Hydrogen by 2030.

Demand

Shell pledges that by 2030, at least 65% of the hydrogen consumption in its Chemicals and Energy parks will be Reduced Carbon or better (~300ktpa, excluding co-produced hydrogen).

Supply

Shell pledges to produce 75ktpa of Ultra Low Carbon Hydrogen and 100ktpa of Reduced Carbon Hydrogen by 2030.

Update May 2023: Shell has taken a final investment decision for Holland Hydrogen I, which will be Europe’s largest renewable hydrogen plant once operational in 2025. The 200MW electrolyser will be constructed on the Tweede Maasvlakte in the port of Rotterdam and will produce up to 60,000 kilograms of renewable hydrogen per day.