Platts

S&P Global
Energy

Methodology and Specifications Guide

Global Hydrogen & Ammonia

Latest update: December 2025

Definitions of the trading locations for which Platts publishes daily indexes or assessments

The following specifications guide contains the primary specifications for Platts hydrogen and ammonia assessments globally. All the assessments listed here employ Platts Assessments Methodology, as published at https://www.spglobal.com/platts/plattscontent/_assets/_files/en/our-methodology/methodology-specifications/platts-assessments-methodology-guide.pdf .

These guides are designed to give Platts subscribers as much information as possible about a wide range of methodology and specification questions. This guide is current at the time of publication. Platts may issue further updates and enhancements to this guide and will announce these to subscribers through its usual publications of record. Such updates will be included in the next version of this guide. Platts editorial staff and managers are available to provide guidance when assessment issues require clarification.

Daily Regulation Compliant Hydrogen Symbols

Description	Symbol	Bates	MDC	Dec	Freq	Curr	UOM
Spain Alkaline Renewable PPA Derived Hydrogen Eur/kg	SARHE00	c	HY	4	DW	EUR	KG
Spain Alkaline Renewable PPA Derived Hydrogen $/kg	SARDH00	c	HY	4	DW	USD	KG
Spain Alkaline Renewable PPA Derived Hydrogen $/MMBtu	SARPD00	c	HY	4	DW	USD	MMB
Spain Alkaline Renewable PPA Derived Hydrogen Eur/KWh	SAPDH00	c	HY	4	DW	EUR	KWH
Spain Alkaline Renewable PPA Derived Hydrogen Eur/kg MAvg	SARHE03	c	HY	4	MA	EUR	KG
France Alkaline Renewable PPA Derived Hydrogen Eur/kg	FARHE00	c	HY	4	DW	EUR	KG
France Alkaline Renewable PPA Derived Hydrogen $/kg	FARDH00	c	HY	4	DW	USD	KG
France Alkaline Renewable PPA Derived Hydrogen $/MMBtu	FARPD00	c	HY	4	DW	USD	MMB
France Alkaline Renewable PPA Derived Hydrogen Eur/KWh	FAPDH00	c	HY	4	DW	EUR	KWH
France Alkaline Renewable PPA Derived Hydrogen Eur/kg MAvg	FARHE03	c	HY	4	MA	EUR	KG
Germany Alkaline Renewable PPA Derived Hydrogen Eur/kg	GARHE00	c	HY	4	DW	EUR	KG
Germany Alkaline Renewable PPA Derived Hydrogen $/kg	GARDH00	c	HY	4	DW	USD	KG
Germany Alkaline Renewable PPA Derived Hydrogen $/MMBtu	GARPD00	c	HY	4	DW	USD	MMB
Germany Alkaline Renewable PPA Derived Hydrogen Eur/KWh	GRPDH00	c	HY	4	DW	EUR	KWH
Germany Alkaline Renewable PPA Derived Hydrogen Eur/kg MAvg	GARHE03	c	HY	4	MA	EUR	KG
Netherlands Alkaline Renewable PPA Derived Hydrogen Eur/kg	NARHE00	c	HY	4	DW	EUR	KG
Netherlands Alkaline Renewable PPA Derived Hydrogen $/kg	NARDH00	c	HY	4	DW	USD	KG
Netherlands Alkaline Renewable PPA Derived Hydrogen $/MMBtu	NARPD00	c	HY	4	DW	USD	MMB
Netherlands Alkaline Renewable PPA Derived Hydrogen Eur/KWh	NAPDH00	c	HY	4	DW	EUR	KWH
Netherlands Alkaline Renewable PPA Derived Hydrogen Eur/kg MAvg	NARHE03	c	HY	4	MA	EUR	KG

Regulation Compliant Hydrogen Assessments

European Regulation Compliant Hydrogen Assessments

Platts European Regulation Compliant Hydrogen Assessments reflect the market value of hydrogen that aligns with the European Union's Renewable Fuels of Non-Biological Origin (RFNBO) definition and complies with EU Delegated Act C/2023/1087.

The scope of RFNBO includes hydrogen produced via electrolysis from renewable electricity, its derivatives as well as other energy carriers.

For a detailed discussion of the scope of the European Union's RFNBO rules, including detailed rules for sourcing of renewable electricity that is used for the production of RFNBOs and for determining the greenhouse gas emission intensity, see here.

In the absence of market-based information Platts uses a model-based cost of production plus a premium to reflect market value of firm hydrogen supply. When available, market information such as bids, offers, trades and indications will take precedence for assessments.

For the cost of production modelling, the renewable hydrogen producer is assumed to be buying renewable power as part of a "Pay-as-Produced" Power Purchase Agreement. The size of the alkaline electrolyzer is 100 MW, operating above a minimum load of 25%. The production mix is optimized for every country to satisfy monthly requirements before end-2029 and hourly requirements from 2030 onwards. The model allows power exchange through the grid. The model includes specific provision for the cost of hydrogen storage.

Platts assesses the European Regulation Compliant Hydrogen prices for four countries in Eur/kg, Eur/kWh, USD/kg and USD/MMBtu:

- Spain Alkaline Renewable PPA Derived Hydrogen
- France Alkaline Renewable PPA Derived Hydrogen
- Germany Alkaline Renewable PPA Derived Hydrogen
- Netherlands Alkaline Renewable PPA Derived Hydrogen

Ammonia Symbols

Description	Symbol	Bates	MDC	MI MDC	Dec	Freq	Curr	UOM
Ammonia CFR Far East Asia $/MMBtu	AMMOB00	c	AMO	ETR	2	DW	USD	MMB
Ammonia CFR Far East Asia $/MMBtu MAvg	AMMOB03	c	AMO	ETR	2	MA	USD	MMB
Ammonia CFR Far East Asia $/mt	AMMOA00	c	AMO	ETR	2	DW	USD	MT
Ammonia CFR Far East Asia $/mt MAvg	AMMOA03	c	AMO	ETR	2	MA	USD	MT
Ammonia CFR Northwest Europe $/MMBtu	AMMOD00	c	AMO	ETR	2	DW	USD	MMB
Ammonia CFR Northwest Europe $/MMBtu MAvg	AMMOD03	c	AMO	ETR	2	MA	USD	MMB
Ammonia CFR Northwest Europe $/mt	AMMOC00	c	AMO	ETR	2	DW	USD	MT
Ammonia CFR Northwest Europe $/mt MAvg	AMMOC03	c	AMO	ETR	2	MA	USD	MT
Ammonia CFR USGC $/MMBtu	AMMOF00	c	AMO	ETR	2	DW	USD	MMB
Ammonia CFR USGC $/MMBtu MAvg	AMMOF03	c	AMO	ETR	2	MA	USD	MMB
Ammonia CFR USGC $/mt	AMMOE00	c	AMO	ETR	2	DW	USD	MT
Ammonia CFR USGC $/mt MAvg	AMMOE03	c	AMO	ETR	2	MA	USD	MT
Ammonia FOB Black Sea $/MMBTu	AMMOH00	c	AMO	ETR	2	DW	USD	MMB
Ammonia FOB Black Sea $/MMBTu MAvg	AMMOH03	c	AMO	ETR	2	MA	USD	MMB
Ammonia FOB Black Sea $/mt	AMMOG00	c	AMO	ETR	2	DW	USD	MT
Ammonia FOB Black Sea $/mt MAvg	AMMOG03	c	AMO	ETR	2	MA	USD	MT
Ammonia FOB Middle East $/MMBtu	AMMOJ00	c	AMO	ETR	2	DW	USD	MMB
Ammonia FOB Middle East $/MMBtu MAvg	AMMOJ03	c	AMO	ETR	2	MA	USD	MMB
Ammonia FOB Middle East $/mt	AMMOI00	c	AMO	ETR	2	DW	USD	MT
Ammonia FOB Middle East $/mt MAvg	AMMOI03	c	AMO	ETR	2	MA	USD	MT

Ammonia Assessments

Pricing Locations: Platts publishes ammonia assessments for CFR Far East Asia, FOB Middle East, CFR Northwest Europe, FOB Black Sea, and CFR US Gulf Coast.

The underlying specifications for these assessments can be found in the Fertecon Specifications Guide.

Low-Carbon Ammonia Symbols

Description	Symbol	Bates	MDC	MI MDC	Dec	Freq	Curr	UOM
Market-based assessments								
Japan/Korea Ammonia Price (JKAP) CFR spot $/mt	AJKCA00	c	AMO	ETR	2	DW	USD	MT
Japan/Korea Ammonia Price (JKAP) CFR spot $/MMBtu	AJKCB00	c	AMO	ETR	2	DW	USD	MMB
Japan Low Carbon Ammonia - Carbon Intensity Escalator USD/gCO2e/MJ	ADEKB00	c	AMO	ETR	4	DW	USD	gCO2e/MJ
Korea Low Carbon Ammonia - Carbon Intensity Escalator USD/gCO2e/MJ	ADEKA00	c	AMO	ETR	4	DW	USD	gCO2e/MJ

Low-carbon Ammonia assessments

Market-based assessments

Japan-Korea Low-carbon ammonia price assessment (JKAP)

For details on the Japan-Korea low-carbon ammonia price, please refer to the Fertecon methodology guide: Specifications Guide Fertecon

Carbon Intensity escalator

The Carbon Intensity (CI) escalator represents the price per gram of carbon saved in importing 1 Megajoule of low-carbon ammonia.

The CI escalators can be used to normalize bids/offers/trades of low carbon ammonia into Korea and Japan, with a carbon intensity below the JKAP threshold of 40gCO2e/MJ. The Japan and Korea CI escalators are published in USD/gCO2e/MJ.

For low-carbon ammonia cargoes bid/offered/traded into Korea the escalator will use daily values as published by Platts for Korea Allowance Units (KAUs). Cargoes bid/offered/traded into Japan will use the Japanese Carbon tax as per the official Japanese regulation.

Model-based assessments

Renewable power derived Ammonia assessments

Renewable power derived ammonia is often referred to as 'green ammonia'.

Pricing Locations: Platts publishes renewable power-based ammonia prices. The prices represent delivery into:

- Far East Asia on CFR basis originating from the Middle East, Australia and West Coast (WC) of Canada
- Northwest Europe on CFR basis originating from the Middle East, US Gulf Coast and East Coast (EC) of Canada.

Assessment window: Weekly assessments basis CFR Far East Asia and CFR Northwest Europe are based on latest information sourced from the market up to the close of the assessment window at 4:30 pm London time.

Timing: Weekly assessments for CFR Far East Asia and CFR Northwest Europe are for parcels to be delivered 15-45 days forward from the date of publication.

Basis and locations:

- **CFR Far East Asia:** Major ports that can accommodate ammonia cargoes in China, Japan, South Korea, and Taiwan
- **CFR Northwest Europe:** Major ports that can accommodate ammonia cargoes in Belgium, Germany, the Netherlands, and northern France

Platts assessments represent duty-free cargoes. Cargoes incurring any duty may be normalized as part of the assessment process.

Cargo Size:

- **CFR Far East Asia:** 20,000-40,000 mt
- **CFR Northwest Europe:** 20,000-25,000 mt.

Platts may use information with different cargo sizes after normalization.

Units: Platts assesses renewable power derived ammonia in US dollars per metric ton and US dollars per MMBtu.

Credit terms: Assessments are cash prices, net of any credit. Platts may use information with longer credit terms after normalization.

Quality specifications: Minimum purity of 99.5% of anhydrous ammonia by weight, a maximum water content of 0.5% by weight, and a maximum oil content of 10 ppm by weight.

Further Assumptions: The Platts renewable power derived ammonia valuations are published to two decimal places. In the absence of spot market activity, 'green' ammonia prices would consider the cost of production of ammonia using an alkaline electrolyzer and renewable electricity, adding freight cost to calculate CFR price for Far East Asia and Northwest Europe.

Representative electricity costs for the relevant region are taken from S&P Global Commodity Insight's Levelized Cost of Electricity (LCOE) to match the duration of the electrolyzer and ammonia plant, where the average cost of onshore wind and solar photovoltaic underpins the cost of ammonia production calculation.

How the Cost of Production is produced can be found below:

Origination	Delivery	Cost of Production (Calculated using renewable electricity prices)	Cost of Freight of transporting ammonia
Australia	Far East	Australia	From Western Australia to Japan
Middle East	Far East	Saudi Arabia	From Saudi Arabia to Japan
Middle East	Northwest Europe	Saudi Arabia	Cost of freight transporting ammonia from Saudi Arabia to the Netherlands
West Coast Canada	Far East	Canada	Cost of freight of transporting ammonia from the West Coast of Canada to Japan
US Gulf Coast	Northwest Europe	Texas	Cost of freight of transporting ammonia from Texas to the Netherlands
East Coast Canada	Northwest Europe	Canada	Cost of freight of transporting ammonia from the East Coast of Canada to the Netherlands

The feedstock water cost is constant for all regions. The operational parameters for alkaline electrolysis across all hubs are identical and include electrolyzer efficiency of 60%. The ammonia plant capacity across locations is assumed to be 500,000 mt per year at a high-capacity capacity factor of 90%. The capital cost of alkaline electrolyzers for all origin regions is given in the tables below.

Low-Carbon Ammonia Symbols

Description	Symbol	Bates	MDC	MI MDC	Dec	Freq	Curr	UOM
Model-based assessments								
Australia Renewable derived Ammonia dlvd into Far East Asia - High CF $/MMBtu Wkly	GADAA04	c	AMO	ETR	2	WA	USD	MMB
Australia Renewable derived Ammonia dlvd into Far East Asia - High CF $/MMBtu MAvg	GADAA03	c	AMO	ETR	2	MA	USD	MMB
Australia Renewable derived Ammonia dlvd into Far East Asia - High CF $/mt Wkly	GADAB04	c	AMO	ETR	2	WA	USD	MT
Australia Renewable derived Ammonia dlvd into Far East Asia - High CF $/mt MAvg	GADAB03	c	AMO	ETR	2	MA	USD	MT
WC Canada Renewable derived Ammonia dlvd into Far East Asia - High CF $/MMBtu Wkly	GADAC04	c	AMO	ETR	2	WA	USD	MMB
WC Canada Renewable derived Ammonia dlvd into Far East Asia - High CF $/MMBtu MAvg	GADAC03	c	AMO	ETR	2	MA	USD	MMB
WC Canada Renewable derived Ammonia dlvd into Far East Asia - High CF $/mt Wkly	GADAD04	c	AMO	ETR	2	WA	USD	MT
WC Canada Renewable derived Ammonia dlvd into Far East Asia - High CF $/mt Mavg	GADAD03	c	AMO	ETR	2	MA	USD	MT
Middle East Renewable derived Ammonia dlvd into Far East Asia - High CF $/MMBtu Wkly	GADAG04	c	AMO	ETR	2	WA	USD	MMB
Middle East Renewable derived Ammonia dlvd into Far East Asia - High CF $/MMBtu MAvg	GADAG03	c	AMO	ETR	2	MA	USD	MMB
Middle East Renewable derived Ammonia dlvd into Far East Asia - High CF $/mt Wkly	GADAH04	c	AMO	ETR	2	WA	USD	MT
Middle East Renewable derived Ammonia dlvd into Far East Asia - High CF $/mt MAvg	GADAH03	c	AMO	ETR	2	MA	USD	MT
Middle East Renewable derived Ammonia dlvd into Northwest Europe - High CF $/MMBtu Wkly	GADAE04	c	AMO	ETR	2	WA	USD	MMB
Middle East Renewable derived Ammonia dlvd into Northwest Europe - High CF $/MMBtu MAvg	GADAE03	c	AMO	ETR	2	MA	USD	MMB
Middle East Renewable derived Ammonia dlvd into Northwest Europe - High CF $/mt Wkly	GADAF04	c	AMO	ETR	2	WA	USD	MT
Middle East Renewable derived Ammonia dlvd into Northwest Europe - High CF $/mt MAvg	GADAF03	c	AMO	ETR	2	MA	USD	MT
US Gulf Coast Renewable derived Ammonia dlvd into Northwest Europe - High CF $/MMBtu Wkly	GADAI04	c	AMO	ETR	2	WA	USD	MMB
US Gulf Coast Renewable derived Ammonia dlvd into Northwest Europe - High CF $/MMBtu MAvg	GADAI03	c	AMO	ETR	2	MA	USD	MMB
US Gulf Coast Renewable derived Ammonia dlvd into Northwest Europe - High CF $/mt Wkly	GADAJ04	c	AMO	ETR	2	WA	USD	MT
US Gulf Coast Renewable derived Ammonia dlvd into Northwest Europe - High CF $/mt MAvg	GADAJ03	c	AMO	ETR	2	MA	USD	MT
EC Canada Renewable derived Ammonia dlvd into Northwest Europe - High CF $/MMBtu Wkly	GADAK04	c	AMO	ETR	2	WA	USD	MMB
EC Canada Renewable derived Ammonia dlvd into Northwest Europe - High CF $/MMBtu MAvg	GADAK03	c	AMO	ETR	2	MA	USD	MMB
EC Canada Renewable derived Ammonia dlvd into Northwest Europe - High CF $/mt Wkly	GADAL04	c	AMO	ETR	2	WA	USD	MT
EC Canada Renewable derived Ammonia dlvd into Northwest Europe - High CF $/mt MAvg	GADAL03	c	AMO	ETR	2	MA	USD	MT

Monthly Hydrogen Pump Price Symbols

Description	Symbol	Bates	MDC	Dec	Freq	Curr	UOM
California H2 Pump Price	HYPUC00	c	HY	2	MA	USD	KG
California H2 Pump Price	HYPUD00	c	HY	2	MA	Eur	KG
Germany H2 Pump Price	HYPUE00	c	HY	2	MA	USD	KG
Germany H2 Pump Price	HYPUF00	c	HY	2	MA	Eur	KG

Hydrogen Pump Prices

On a monthly basis, Platts assesses the price of hydrogen at refueling stations in the California market based on source data from hydrogen fuel station operators, and republishes posted pump prices for Germany hydrogen fuel stations.

Prices for German markets are sourced from H2 Mobility Deutschland, a consortium of hydrogen retail station operators.

Prices for California and Germany are published in US dollars per kilogram and Euros per kilogram. Prices are published on the first working day of every month.

Revision history

December 2025: Platts discontinued its Japan Metropolitan Hydrogen Pump Price, Carbon Neutral Hydrogen (CNH), Implied Hydrogen Origin Certificate (h-OC), Blue Ammonia, Blue Ammonia Premium, and Hydrogen Production Cost Valuation assessments. Platts also removed input costs from the Hydrogen guide which fed into the discontinued Hydrogen Production Cost Valuation assessments.

October 2025: Platts discontinued its Daily Hydrogen Cost Valuations for the PEM production pathway, its Ammonia Forward Curves for the US Gulf Coast and the Middle East, and its Japan Hydrogen Pump Prices for Chubu, Chugoku and Kyushu, Kinki, and Tohoku. Platts also removed the Northwest Ammonia Forward Curve assessments, which can now be found in the Fertecon Specifications Guide. Platts also made minor edits to language throughout for consistency and clarity.

June 2025: Platts made several updates to its capital expenditure, WACC, and lifespan figures used in the calculation of cost of production for most of its Platts global hydrogen assessments.

February 2025: Platts completed the annual guide review. Platts reviewed all content and made edits to wording and layout for clarity. In addition, removed a number of Hydrogen Production Cost Valuations in North America, Europe, Japan, Australia and the Middle East following a discontinuation. Updated the variable input for Appalachia natural gas to Eastern Gas South TDt Com. Updated the timestamp for the USGC Blue Ammonia Premium and Ammonia Forward Curve.

May 2024: S&P Global Commodity Insights has added new Regulation compliant hydrogen assessments for Europe. In addition, made several updates to capital expenditure figures, weighted average cost of capital, blue ammonia plant efficiency and electrolyzer efficiencies used in the calculations of cost of production for most of its Platts global hydrogen and ammonia assessments, as part of a yearly review of the Platts hydrogen methodology.

October 2023: S&P Global Commodity Insights added new market-based Japan-Korea low-carbon ammonia price assessment (JKAP) and Carbon Intensity escalator for Japan and Korea delivery.

June 2023: S&P Global Commodity Insights has made several updates to its capital expenditure figures and PEM efficiency used in the calculations of cost of production for most of its Platts global hydrogen assessments, as part of a yearly review of the Platts hydrogen methodology. In addition, the electricity inputs used in Australian, Middle Eastern and Japanese prices have been added to the guide for better visibility.

March 2023: S&P Global Commodity Insights aligns ammonia coverage globally with legacy Fertecon ammonia assessments. Completed annual review guide.

December 2022: S&P Global Commodity Insights added new Renewable power derived Ammonia assessments for delivery into Far East Asia and Northwest Europe.

April 2022: S&P Global Commodity Insights added new Blue Ammonia Premiums for Far East Asia, the Middle East, Northwest Europe, and US Gulf Coast, and added Blue Ammonia Price Assessments for Far East Asia, the Middle East, and Northwest Europe. Launched three months ammonia physical forward curves for Northwest Europe, the US Gulf Coast and the Middle East. Added euro per kilogram and US Dollar per kilogram assessments for the h-OC price assessments in Europe and the US, respectively.

April 2022: S&P Global Commodity Insights has made several updates to its capital expenditure figures used in the calculations of cost of production for most of its Platts global hydrogen assessments, as part of a yearly review of the Platts hydrogen methodology.

March 2022: Platts launched daily implied hydrogen origin certificate (h-OC) assessments for NW Europe, California, and the US Gulf Coast. February 2022: Platts completed an annual review of this guide, reviewing all content, correcting typos, and making edits to language throughout.

January 2022: Added UK hydrogen PEM and Alkaline Electrolysis product description and symbol codes to the methodology guide.

December 2021: Platts launched Carbon Neutral Hydrogen (CNH) assessments on an Ex-Works basis for Northwest Europe, the Middle East, Far East Asia, Australia, California and the US Gulf Coast. Reorganized methodology guide, including removal of S&P Global Platts description of methodologies Parts I-VI and replacement with a link to the methodologies.

November 2021: Platts launched Middle East hydrogen assessments for Oman, Qatar, Saudi Arabia, and the United Arab Emirates, across the following production pathways: SMR with CCS, Alkaline Electrolysis and PEM Electrolysis.

October 2021: Added new ammonia assessments for CFR Far East Asia, CFR Northwest Europe, CFR US Gulf Coast, FOB Middle East, and FOB Black Sea.

September 2021: Added new Steam Methane Reforming and Autothermal Reforming price valuations for the UK and the Netherlands, respectively, both including CCS.

September 2021: Platts launched monthly Hydrogen Pump Prices for the California market based on source data from hydrogen fuel station operators, and began to republish posted pump prices for Germany and Japan hydrogen fuel stations, based on publicly available source data from each of those respective markets.

August 2021: Platts launched Australia hydrogen assessments for the following locations and pathways: New South Wales (Coal Gasification w CCS, Alkaline Electrolysis and PEM Electrolysis), Queensland (Coal Gasification w CCS, Alkaline Electrolysis and PEM Electrolysis), South Australia (Alkaline Electrolysis and PEM Electrolysis), Tasmania (Alkaline Electrolysis and

PEM Electrolysis), Victoria (Lignite Gasification w CCS, Alkaline Electrolysis and PEM Electrolysis), and Western Australia (SMR w CCS, Alkaline Electrolysis and PEM Electrolysis).

August 2021: Replaced existing European Commission's carbon spot auction prices as a daily input for Dutch and UK hydrogen assessments with Platts assessed EU Emission Trading System (EUAs) and UK Emission Trading Scheme (UKAs) daily prices.

April 2021: Platts completed an annual review of this guide, reviewing all content, correcting typos, and making edits to language throughout. In this update, Platts also made several methodology changes, including the adoption of a fixed charge rate, defined as the product of a capital recovery factor and a project finance factor, to more accurately incorporate inflation, depreciation, return on equity, debt service, insurance as well as income and property taxes. Increased the capital costs for ($/KW) for proton exchange membrane (PEM) electrolysis from $900/KW to $1,382/KW and alkaline electrolysis from $702/KW to $891/KW. Increased steam methane reforming (SMR) plant efficiency from 70% to 76%, SMR with carbon capture and sequestration (CCS) plant efficiency from 63% to 69%; and alkaline electrolysis efficiency from 65% to 67%. Increased the cost of stack refurbishment as a percent of capital cost for PEM electrolysis from 15% to 35% for PEM electrolysis, and from 15% to 45% for alkaline electrolysis. Adjusted the percentage of Dutch peak and base electricity prices from 80% base and 20% peak to 50% base and 50% peak. Changed the method for calculating carbon dioxide emissions by adopting the emission factor of 8.9 kg CO2/kg H2. Launched new UK hydrogen assessments for autothermal reforming with carbon capture and sequestration (ATR w CCS), alkaline electrolysis and PEM electrolysis. Adjusted the cadence of its methodology review from quarterly to annual.

January 2021: Replaced Dutch EEX month-ahead settlements with Platts Dutch first-month (peak) power assessments and replaced EEX EU Emission Trading System input data with data from the European Commission's Carbon Auction Platform. Reactivated Platts Dutch month-ahead Base and Peak power price assessments for use as the power component in the full suite of Dutch hydrogen prices.

December 2020: Discontinued the duplicative hydrogen assessments for North America and Japan in the ES market data category and moved the surviving North America and Japan hydrogen assessments in the GD market data category to a new HY market data category. The Netherlands hydrogen assessments were also moved to the new HY market data category from their original EG market data category.

October 2020: Platts launched Netherlands PEM and Alkaline Grid-Only price assessments and backfilled to January 2018.

April 2020: Added Capex costs to methodology guide.

April 2020: Changed California location names to Northern California. Added daily SMR w/o CCS prices for Alberta, Appalachia, Midcontinent, Northeast, Northwest, Rockies, Southeast, Southern California, Upper Midwest, and Japan. Added daily PEM Electrolysis prices for Alberta, Appalachia, Midcontinent, Northeast, Northwest, Rockies, Southeast, Southern California, Upper Midwest, and Japan. Added daily Alkaline Electrolysis prices for Alberta, Appalachia, Midcontinent, Northeast, Northern California, Northwest, Rockies, Southeast, Southern California, Upper Midwest, and Japan. Added Netherlands month ahead SMR with CCS, SMR with CCS (includes Capex), SMR with CCS (includes Carbon), SMR with CCS (includes Capex and carbon), PEM Electrolysis, PEM Electrolysis (includes Capex), Alkaline Electrolysis, and Alkaline Electrolysis (includes Capex) prices. Added refurbish cost to PEM Electrolysis prices. Noted European hydrogen fixed capital costs are converted to Euros from USD using Platts daily forex assessments.

February 2020: Platts has added a table of constant input symbols used for calculations for its Dutch hydrogen SMR assessments

January 2020: Platts has corrected typos for Capex cost for USGC SMR w/o CCS, California SMR w/o CCS, and California PEM Electrolysis.

December 2019: Platts launched Hydrogen Inc. Capex USGC SMR w/o CCS, Hydrogen USGC SMR w/o CCS, Hydrogen Inc. Capex California SMR w/o CCS, Hydrogen California SMR w/o CCS, Hydrogen Inc. Capex California PEM Electrolysis, Hydrogen California PEM Electrolysis, and Hydrogen Netherlands SMR w/o CCS valuations. Platts also launched Hydrogen Inc. Netherlands SMR (H2 99.9%) w/o CCS MA, Netherlands SMR (H2 99.9%) w/o CCS (inc. Capex) MA, Netherlands SMR (H2 99.9%) w/o CCS (inc. Carbon) MA, Netherlands SMR (H2 99.9%) w/o CCS (inc. Capex & Carbon) MA valuations.