Index Methodology Factsheet

# GX0011896: BLUE HYDROGEN ITALY

## INDEX DESCRIPTION

This index is a notional price reference for blue hydrogen in Italy, calculated utilising exchange-based natural gas and electricity prices, as well as cost assumptions for other inputs into the hydrogen production process.

## INDEX DETAILS

| | |
|---|---|
| Start date | 2024-01-08 |
| Commodity | Hydrogen |
| Frequency | Daily |
| CCY / UOM | USD / KG |
| Increment | 0.01 |
| Periods | 12,Month |
| Data types | Index |
| Pricing basis | Flat |
| Delivery basis | Ex Works |
| Trading hub | NWE |
| Timezone | Europe/London |
| Holiday calendar | Holidays_GX_Europe |

## INDEX QUALITY SPECIFICATION

This index reflects the production cost of blue hydrogen, based on Steam Methane Reforming (SMR) production and methyl diethanolamine (MDEA) carbon capture technology.

## CRITERIA FOR INCLUSION

Index calculation inputs comprise:
- Italian natural gas pricing
- Italian base electricity pricing
- FX rate (EUR/USD)

The following are all quarterly updated variables:
- Costs and volume assumptions for nitrogen, ammonia, process water and demineralised water
- Conversion energy, compression power and plant power cost assumptions
- CO2 capture electrical energy and CO2 capture thermal energy assumptions
- Capital recovery, fixed costs, and operating and maintenance cost assumptions

Forward curve inputs: forward power and gas prices

## ASSESSMENT TIMES

| TIME | DETAILS |
|---|---|
| 1700 | London Close |

## CALCULATION APPROACH

| TRADE DATA APPROACH | Y/N |
|---|---|
| Priority to reported and concluded transactions | N |
| Sole-sourced data from trading principals accepted | N |
| Inter-affiliate data accepted as valid | N |

See flowchart on next page.

## ALIAS DEFINITION

| ALIAS | TIME | PERIOD TYPE | PERIOD |
|---|---|---|---|
| BH2IT | 1700 | Month | 12 |

## LOCATION

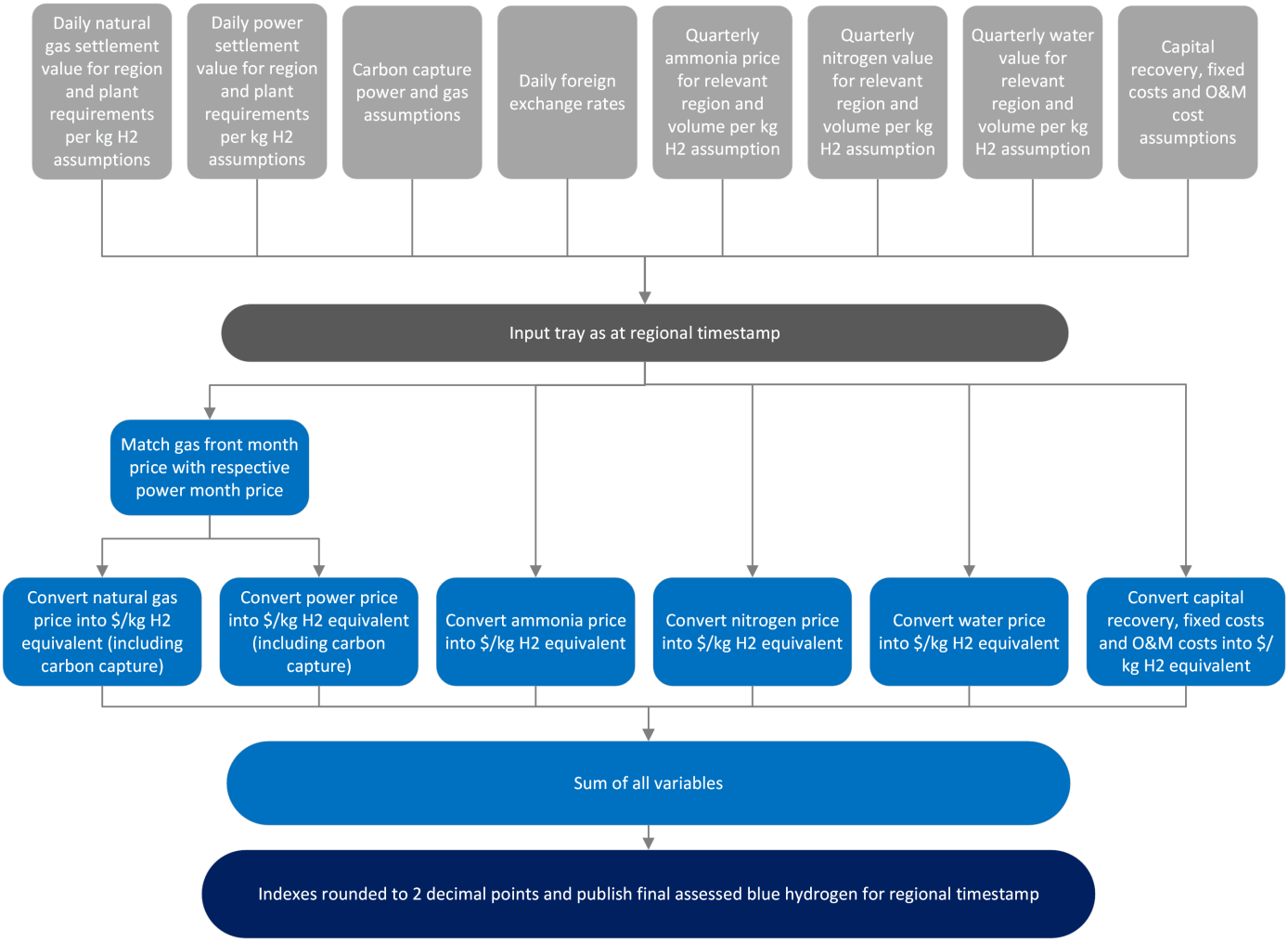



## FACTSHEET INFORMATION

| | |
|---|---|
| Factsheet version | 1.0 |
| Factsheet valid from | 2024-01-08 |
| Factsheet valid to | (ongoing) |

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