

# NCFX Forward365™ Benchmark Fixings Supporting the European Energy Exchange (EEX)

## Executive Summary

In this case study we present how NCFX forward FX Benchmarks are used by EEX to accurately value the forward curve for EEX TTF Natural Gas Month (\$/MMBtu) Futures using bespoke FX rates provided by NCFX that accurately correspond to future exchange settlement days.

## Challenge

In light of recent geo-political climate with renewed focus on global energy security, there is growing demand for better interoperability between energy markets to support more flexible supply solutions.

Contracts can be valued in different currencies, carry various energy thermal ratings and do not always share the same exchange settlement days, as a result, EEX wanted a way to accurately find the forward EUR/USD FX rates that correspond to the EEX TTF Natural Gas Month (\$/MMBtu) futures contracts settlement day.

EEX TTF Natural Gas Month (\$/MMBtu) Futures (\$TTF futures) are monthly expiry futures which are financially settled against the EEX TTF Front Month (\$/MMBtu) Index. TTF in \$/MMBtu has grown to become a pricing benchmark of choice for European LNG imports as well as being used outside of this region for LNG related trading strategies

## Solution

Launched on April 15, 2024, NCFX created a bespoke daily forward FX benchmark fixing protocol which is run at 5pm local time in Paris/Leipzig every weekday except Jan 1 and Dec 25.

The resultant calculations provide the prevailing NCFX Spot Benchmark for EUR/USD and a forward outright benchmark to enable the accurate pricing of the monthly EEX TTF Natural Gas Month (\$/MMBtu) futures contracts extending out to six years maturity.

Total time from calculation to published Benchmark rates is under one second and the data is available via RESTful API, SFTP and/or Email.

Sample email excerpt 20 June 2024:

eexecut 2024-06-20 ncfxeurusd5pmparisleipzig rates

| Expiry Month | Expiry Date | NCFXFix  | Expiry Month | Expiry Date | NCFXFix               |
|--------------|-------------|----------|--------------|-------------|-----------------------|
| SPOT         |             | 1.072180 |              |             |                       |
| Jul-2024     | 2024-06-27  | 1.072180 | Dec-2024     | 2024-11-28  | 1.080273              |
| Aug-2024     | 2024-07-30  | 1.074004 | Jan-2025     | 2024-12-30  | 1.081939              |
| Sep-2024     | 2024-08-29  | 1.075540 | Feb-2025     | 2025-01-30  | 1.083812              |
| Oct-2024     | 2024-09-27  | 1.077043 | Mar-2025     | 2025-02-27  | 1.085212... and so on |
| Nov-2024     | 2024-10-30  | 1.078762 |              |             |                       |

## Benefits

Using more accurate data allows a far more forensic approach to pricing the forward curve for the \$TTF futures contract thereby improving market efficiency and driving excess costs from the business.

Market participants can trust the Benchmarks and transact with each other safe in the knowledge that the rate is calculated in an unbiased and market neutral way.

When LNG exchange members transact with their banking partners they are no longer in the dark when it comes to forward FX rates.

This means that the underlying EEX TTF Natural Gas Futures contracts priced in EUR/MWh can be simply converted to USD/MMBtu which in turn, opens up the energy markets to a wider global trading audience.

Customer Testimonial: Peter Blogg, EEX Business Development – Global commodities

This collaboration represents a significant step forward in providing comprehensive support to EEX's LNG futures portfolio, enabling the Exchange to navigate currency fluctuations and forward price projections.

NCFX has been an excellent partner in this project from diligently understanding the scope of the project to creating and then delivering the solution on time and to budget.

The team at NCFX is knowledgeable and continue to provide excellent support to EEX and its derivative exchange members.