

UBS-WEMI

UBS World Emissions Index

Frequently Asked Questions

1. When has the UBS World Emissions Index been launched?

The UBS-WEMI has been launched on 2 November 2006.

2. Who holds the rights to this Index?

The Index sponsor UBS AG holds all rights to the Index.

3. How is the Index compiled and how is its weightings calculated?

The UBS-WEMI is designed as an open basket of futures contracts weighted between underlying emission reduction programmes, sponsored by a state or a group of states, based upon respective emissions programme value. A given emission programme can be a number of trading platforms. The UBS-WEMI selection process foresees weight allocation between trading platforms within a respective emissions programme based upon liquidity and open interest (provided that each component independently satisfies all the primary and secondary requirements of Index membership).

As of 2 November 2006, the only emission reduction programme that passed the Index membership requirements is the EU ETS carbon dioxide (CO₂) reduction scheme, 100% weight is allocated to this underlying programme and then redistributed between EU ETS underlying trading platforms. The two EU ETS trading platforms that have passed Index membership criteria are the European Climate Exchange (ECX) and the Nordic Power Exchange (Nordpool). Their respective weights are allocated based upon the liquidity of the underlying emissions trading platform.

As of launch, the Index composition is as follows:

European Climate Exchange (ECX):	72.11%
Nordic Power Exchange (NP):	27.89%

4. Why has UBS chosen the two trading platforms, representing EU ETS: ECX and Nordpool?

The choice of underlying emissions programmes and trading platforms in the Index is based on a number of criteria (such as the availability of futures instruments, geographical requirements, trading hours, foreign exchange controls; as well as programme size, volume and open interest criteria) with the aim of choosing only the most liquid trading platforms.

5. Why does the Index only include European emission programmes, while it is named the World Emissions Index?

At launch, the only program that UBS-WEMI includes is the EU ETS. As more emissions programmes are introduced globally and the commitment period of the Kyoto Protocol starts in 2008, and as the liquidity of other programmes such as those in the US passes the criteria of Index membership, they would be added to the list of UBS-WEMI components.

6. Do you plan to include other European trading platforms?

Other programmes and trading platforms are constantly observed for potential future membership in the Index. As other programmes within the EU ETS, such as EEX, Powernext, EXAA etc., develop and are able to pass the primary and secondary requirements of Index membership, they would be considered for inclusion into UBS-WEMI.

7. Why does this Index not include Asian emission allowances programmes?

For the time being, there is no compulsory traded scheme in Asia which fulfils Index membership criteria.

Japan has signed the Kyoto Protocol and is required to lower emissions. A domestic emissions trading scheme for power generation will start in 2008. It may, at a later stage, be linked to EU ETS or operate as a free-standing scheme.

Developing countries, such as China and India, are participating in Kyoto Protocol via the CDM mechanism. For the time being, this mechanism lacks sufficient level of standardization. However, that may be altered in the future.

There is also an alternative framework to Kyoto Protocol, the Asia Pacific Partnership on Clean Development and Climate, established in 2005 between six Asia-Pacific nations: Australia, China, India, Japan, South Korea and the U.S.. However, at the moment, there is no enforcement mechanism in place, which means that it does not pass the Index membership criteria.

8. Why does this Index not include US emissions allowance programmes?

Emission trading is a US “invention” and has effectively been used to reduce NO_x and SO₂ emissions in the US for over 20 years. This has happened under a large number of environmental programmes, including EPA NO_x, HGA NO_x, ERC, REC, RTC, DER etc. Among them, the largest and most influential programme is the Environmental Protection Agency’s (EPA) Acid Rain Programme, which provides a platform for trading SO₂ emissions allowances. The regulation is implemented in two stages, with the second phase - started in 2000 - setting a cap on the total number of SO₂ allowances at 8.95 million a year.

However, despite the spot markets being very active, the liquidity of the futures market is very low and does not pass the secondary requirements of Index membership.

Concerning CO₂ emissions, there is only a voluntary mechanism in place for the time being – the Chicago Climate Exchange (CCX). However, there are state-based mandatory CO₂ emissions trading, such as the ones in the north-east and California. UBS will be monitoring these developments for potential future membership in the Index.

9. How is the market for emissions allowances structured?

The main pillar of the global emissions market is the Kyoto Protocol.

The Kyoto protocol signed in 1997 and, by August 2006, ratified by a total of 165 countries foresees the reduction of greenhouse gas emissions by around 5% to the 1990 levels, through the implementation of a cost effective solution in the form of a “cap and trade system”.

Introducing a “cap and trade” system, allows efficient industries (where emissions reductions can be made cheaply) to sell unused permits to other less efficient industries, thereby creating a market for emissions allowances or certificates and ensuring that emission reductions are achieved in a least cost manner. This creates an incentive for industry to reduce emissions and improve efficiency.

The commitment period of the Kyoto Protocol starts in 2008. However, Europe has chosen early implementation with the European Emissions Trading Scheme (EU ETS), which is a scheme for

CO₂ emissions reduction and was started on 1 January, 2005. In 2008 this scheme could potentially be broadened to include all 6 greenhouse gases (carbon dioxide, methane, nitrous oxide, sulfur hexafluoride, HFCs, and PFCs) covered by the Kyoto Protocol.

From 2008, once the commitment period of the Kyoto Protocol comes into force, new regions, such as Japan and Canada, and markets, such as CDM, will be added to the emission market. Over time these markets are likely to converge with the EU ETS, but at the outset they are set up as free-standing markets, with some correlation as they have the same underlying product.

10. What is the European Emission Trading Scheme?

The European Emission Trading Scheme (EU ETS) is the world's only mandatory carbon trading programme and is the cornerstone of the EU's climate policy. Currently, it is the largest international greenhouse gas emissions trading scheme in the world. The scheme, created as an early adoption of the Kyoto Protocol, commenced operation on 1 January 2005, and in the first phase (2005-2007) caps the amount of carbon dioxide (CO₂) that can be emitted from large installations in the EU's 25 member countries, representing approximately 45% of EU CO₂ emissions. The 12,000 energy-intensive installations include combustion plants, oil refineries, coke ovens, iron and steel plants, and factories making cement, glass, lime, brick, ceramics, pulp and paper. The second phase (2008-2012) could also include other greenhouse gases (methane, nitrous oxide, sulfur hexafluoride, HFCs, and PFCs), along with a wider range of participating sectors. Ultimately, the post-2012 ETS is likely to expand to new sectors, including aviation, maritime transport and forestry, and new greenhouse gases.

The aim of the EU ETS is to help EU Member States achieve compliance with the Kyoto Protocol obligations. Emissions trading do not imply new environmental targets, but allows for cheaper compliance with the Kyoto Protocol existing targets. Letting participating companies buy or sell emission allowances means that firms that can reduce their emissions at a low cost will do so and then sell their credits on to firms that are unable to easily reduce emissions, thus ensuring that the emission reduction targets are achieved in a least cost manner.