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THE ROLE OF THE EXCHANGE PLATFORMS IN AIR POLLUTANTS EMISSION ALLOWANCES TRADING IN USA AND THE EUROPEAN UNION

The concept of tradable emission rights in the form of emission allowances (permits) has existed in the world since the late 1960s while the first attempts to apply this approach within global environmental protection framework were in place since the 1990s (main principles of the Kyoto Protocol to the United Nations Framework Convention on Climate Change UNFCCC in 1997).

Introduced at the beginning of 2005, the European Union Emissions Trading System (EU ETS) is the first international commercial market for trading CO2 emission allowances, having the most developed transactional secondary market, including the largest standardized exchange platforms segment in the world which accounts for nearly 90% of tradeable carbon global value at the end of 2020. The United States, despite many years of experience in trading emission allowances and highly liquid capital markets, have not yet decided to federally implement a solution as strong as the EU trading system aiming at an affective CO2 emissions reduction.

The main subject of the doctoral dissertation are the transactional secondary markets (exchange-based and OTC over-the-market), currently operating in world's three main CO2 emissions cap-and trade systems: EU ETS, California State Emissions Trading Scheme and the American Interstate Regional Greenhouse Gas Initiative (RGGI). In addition, dissertation's analysis includes the US federal SO2 and NOx emissions trading scheme, operating under US Environmental Protection Agency Acid Rain Program (EPA ARP) and having the longest operating period so far.

The doctoral thesis is an attempt to diagnose the efficiency and reliability of standardized exchange platforms utilisation in the proper functioning of the cap-and-trade trading systems on the American and EU CO2 trading markets. The main research problem concerns the scope and degree of use of exchange-based trading instruments to help improve financial strategies implemented for price risk management and investors' profit increase (including speculative profit). The areas of analysis are related to both the current state of the derivative markets of these systems (the structure of spot, forward, futures and options markets, the course of price formation and price factors of CO2 emission allowances), as well as attempts

to diagnose the degree of effective use of standardized exchange trading platforms compared to the degree of use of OTC markets, their financial instruments and price risk management rules.

The attempt to define the rules for an effective federal system implementation of CO2 emission allowances trading in the USA may also be of great importance, both for the future of EU ETS and for the creation of a single global market of tradable emission rights.