

Assocarboni claim 1.5 billion tons of CO2 can be eliminated

Assocarboni has said in a statement: To save hundreds of millions of people from poverty it is necessary to use more coal, along with the best combustion technologies, and more renewable sources

If the Best Available Technologies were extended to the inefficient coal plants worldwide, 1.5 billion tonnes of CO₂ per year would be eliminated

Climate changes are acknowledged as one of the main global themes to address in the present, as well as in the near future. There is, however, another important challenge related to it: the elimination of poverty, a fundamental requirement for a sustainable development that would integrate the ethical, social and economic dimensions.

Energetic scarcity, intended as the lack of access to reliable and adequate energy sources at sustainable prices to satisfy people's basic needs, such as eating, heating rooms, caring and moving, is one of the root causes of poverty in many countries. This situation currently affects 2 billion people around the world, a number expected to increase to 3 billion by 2030, mainly located in Sub-Saharan Africa, India and South-East Asia.

The reduction in energy poverty in developing countries is a necessary condition to promote economic growth and social decorum. To date, 1.3 billion people in the world are not able to access electricity and 2.7 billion ones use traditional biomass as main source of energy. Thus, a shift towards the consumption of more efficient combustibles is imperative.

China is an excellent example of electrification strategy based on coal. In the last thirty years, 99% of the population have had access to the power grid, steel production soared 18 times and cement production by almost 14 times. Since 1980, coal consumption in China has increased by 400%, enabling 660 million people to escape from destitution.

As forecasted by the International Energy Agency, coal will keep supplying for decades a significant percentage of primary energy and the increase in consumptions will particularly concern non-OECD countries. The need for energy and electricity will increase especially in these areas, and the implementation of modern coal combustion technologies are the best answers to tackle these unavoidable coincidences, respecting the environment and the health of large part of the global population.

On a global scale, coal fulfilled approximately half of the increase in energy consumption in the last decade. In the last century, the amount this source as produced as much energy as nuclear, renewable, fuel oil and natural gas combined.

Furthermore, several researches by preeminent research centres have demonstrated that, considering the whole lifecycle of fossil fuels, the difference between the GHG (CO₂eq) emissions from natural gases and the ones from coal drastically reduces and eventually completely offset. Not counting the "pre-combustion" emissions (i.e. when fuel extracted from fields are freed in the atmosphere through venting and flaring practices) or the methane fugitive emissions is a misconception and a misjudgement, if the comparison of the two fuels in terms of their GHG emissions into the atmosphere is deemed proper and necessary.

Recent studies, especially the one by Professor Robert W. Howarth of the Cornell University – Ithaca NY/USA, entitled "Methane and GHG footprint of natural gas from shale formation" published in 2011 and eventually confirmed by a further research in 2014, make a particular assessment of the emissions from the extraction of shale gas and show that the ecological footprint of shale gas is greater than the one of conventional oil or natural gas on any time horizon, be it 20 or 100 years. When compared with coal, the shale gas footprint is higher, ranging from 20% to more than double over 20 years, but it is similar over a 100-year period.

A recent article of the Financial Times highlighted that the shale gas boom in North Dakota, which has caused methane gas leakage in the atmosphere equivalent to the annual electricity consumption of the cities of Chicago and Washington together, is raising environmental concerns in the United States, for the impact on local communities and for the resulting global pollution.

The practice of gas flaring, in which the natural gas associated with petroleum extraction is burned off in the atmosphere rather than being removed by alternative means, has tripled in the last 5 years. According to estimates of the World Bank, the United States are fifth in the ranking of countries adopting this practice after Russia, Nigeria, Iran and Iraq.

Added to this is the direct venting technology, which allows for the ejection in the atmosphere of CO₂ naturally present in the deposits together with various gases (methane, butane, propane, etc.), to avoid conveying a huge amount of unwanted gas in the pipelines.

The European Power Plant Suppliers Association (EPPSA) estimated that if the BAT (Best Available Technologies) were extended to the over 3,000 inefficient coal plants operating in the developing countries, 1.5 billion tonnes of CO₂ per year

would be eliminated. This result would be equivalent to two and a half times the 600 million tons of CO₂ that are already avoided thanks to renewable sources, excluding hydroelectric, with the total cost of subsidy estimated at \$ 120 billion.

To save hundreds of millions of people from poverty it is necessary to use more coal, along with the best combustion technologies, and more renewable sources, following the example of some of the most advanced countries - such as USA, Japan, Germany and the UK - and developing countries like China, India, Turkey and Morocco.

ASSOCARBONI is a non-profit organisation founded in 1897, which represents national and international companies engaged in solid fuels. Its head office is in Rome and it has representative offices in London and Brussels. On a national level, Assocarboni is member of Confindustria Energia and sits in the Board of Directors of the Fuel Experimental Station, a fuel research institute within the Ministry of Economic Development.