

State/national Actions :

climate change action plan is a program initiated to mitigate and adapt to the adversarial **impact of climate change**. The plan aims to achieve development goals by focusing on reducing emission intensity. The plan builds on support from developed countries, with the emphasis on being in place against developed economies at all times.

The missions of the program are as follows:

- *Solar mission*
- *Mission for enhanced energy efficiency*
- *Mission on sustainable habitat*
- *Water mission*
- *Mission for sustainable agriculture*
- *Mission on strategic knowledge of climate change*

1- Solar mission :

Global warming caused by greenhouse gas emissions is a global disaster. The problem lies largely in the massive use of fossil fuels (87% of the energies currently used in the world) which emit immense amounts of CO₂ into the atmosphere and disrupt the climate.

Photovoltaic energy as we offer it with **solar energy** represents a very interesting alternative to the use of fossil fuels because solar energy is a clean and inexhaustible resource. Equipping yourself with solar panels is an effective way to fight global warming. In other words, the more solar installations there are in the payroll, the less it will have to produce electricity from polluting raw materials, and the **less CO₂** we will release into the atmosphere.

The government can also provide discounts on solar panels for citizens to encourage them to use them in their homes, it can also be to the purchase of electric cars.

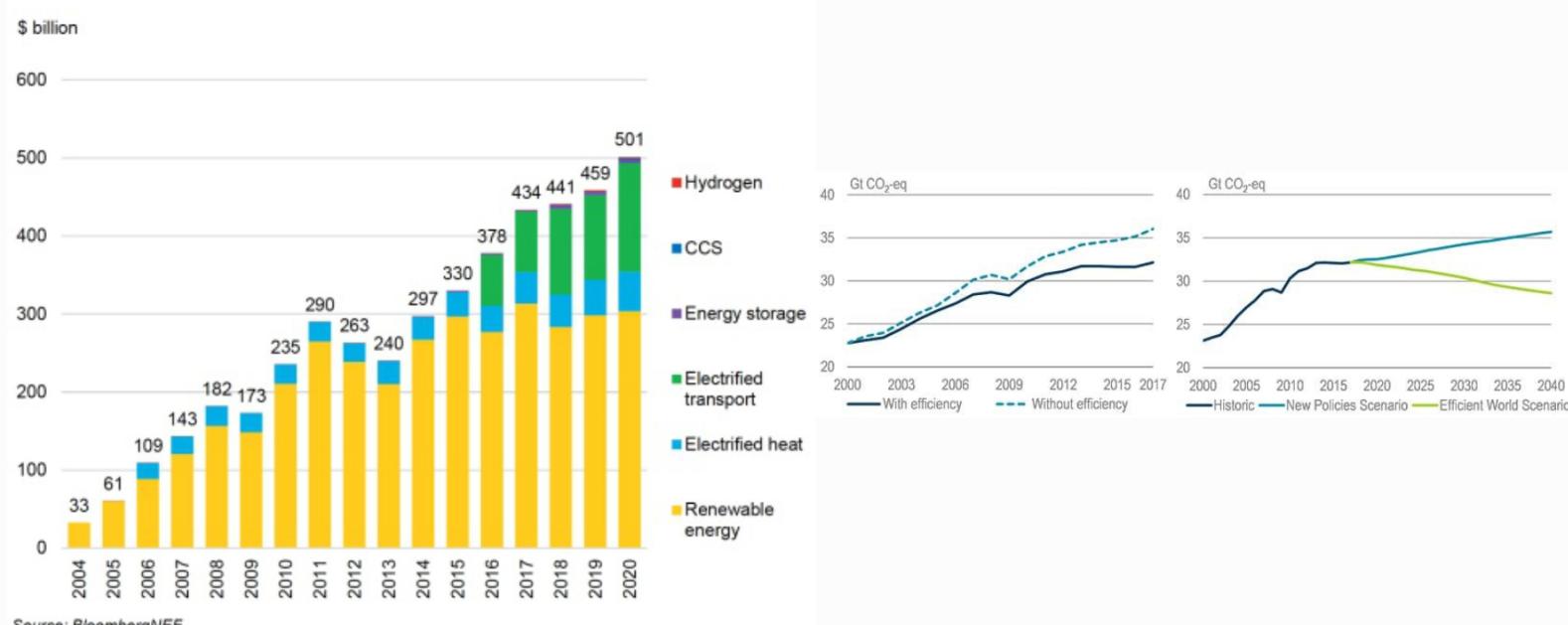


2- Mission for enhanced energy efficiency :

Energy efficiency is the workhorse of the clean energy world. Though solar and other renewable energy technologies usually take the spotlight, energy efficiency often works quietly in the background, making huge strides in lowering emissions without the fanfare. Energy efficiency delivers a number of environmental benefits. It notably reduces GHG emissions, both direct emissions from fossil fuel combustion or consumption, and indirect emissions reductions from electricity generation.

Energy efficiency has a central role in tackling climate change, a task made all the more urgent by the recent rise in emissions and the limited time to achieve mitigation targets, as outlined by the recent Intergovernmental Panel on Climate Change (IPCC) special report on Global Warming of 1.5°C.

Global investment in energy transition by sector



3- Mission on sustainable habitat :

The transportation sector, along with urban buildings, is a major consumer of energy, along with the electricity production sector. The Mission for Sustainable Habitat is a comprehensive program to reduce energy consumption, and thus the risk of climate change due to the pattern of urban settlement. The mission envisages a shift to building energy conservation in the design of new commercial buildings as well as solid and liquid waste management.



4- Water mission :

The main objective of the Water Mission is to conserve water, reduce wastage, and ensure its more equitable distribution across and within countries through the integrated development and management of water resources. The mission can be accomplished through five goals as follows:

- A comprehensive database of water in the public domain and assessment of the impact of climate change on water resources
- Enhancing citizens and state actions to conserve, increase and conserve water
- Focusing attention on areas at risk including areas prone to overexploitation
- Increase water use efficiency
- Promote integrated management of water resources at the basin level



5- Mission for sustainable agriculture :

Agriculture both contributes to climate change and is affected by climate change. In particular, agricultural practices and processes can result in significant amounts of methane and nitrous oxide, two powerful greenhouse gases, being released. According to the OECD, agriculture contributes a significant share of the greenhouse gas (GHG) emissions that are causing climate change: approximately 17% directly through agricultural activities and an additional 7% to 14% through land use changes. Agriculture is also likely to be severely affected by climate change. Flooding and droughts will be more common and productivity is expected to decrease in certain parts of the world. However, there is significant potential for efficiency savings and technical solutions exist but these must be done in a sustainable manner to ensure that the solution does not cause other socio-economic or environmental problems. They must also be tailored to individual regions and farming systems. This Special Issue aims to contribute to the state-of-art regarding climate friendly options for sustainable agriculture. Of interest are original manuscripts focusing on the impacts of climate change on agricultural production and the broad sustainability of adaptation techniques.

