



FONDAZIONE
PER LO SVILUPPO
SOSTENIBILE

Sustainable Development Foundation

The green economy era: World, Europe, China and US

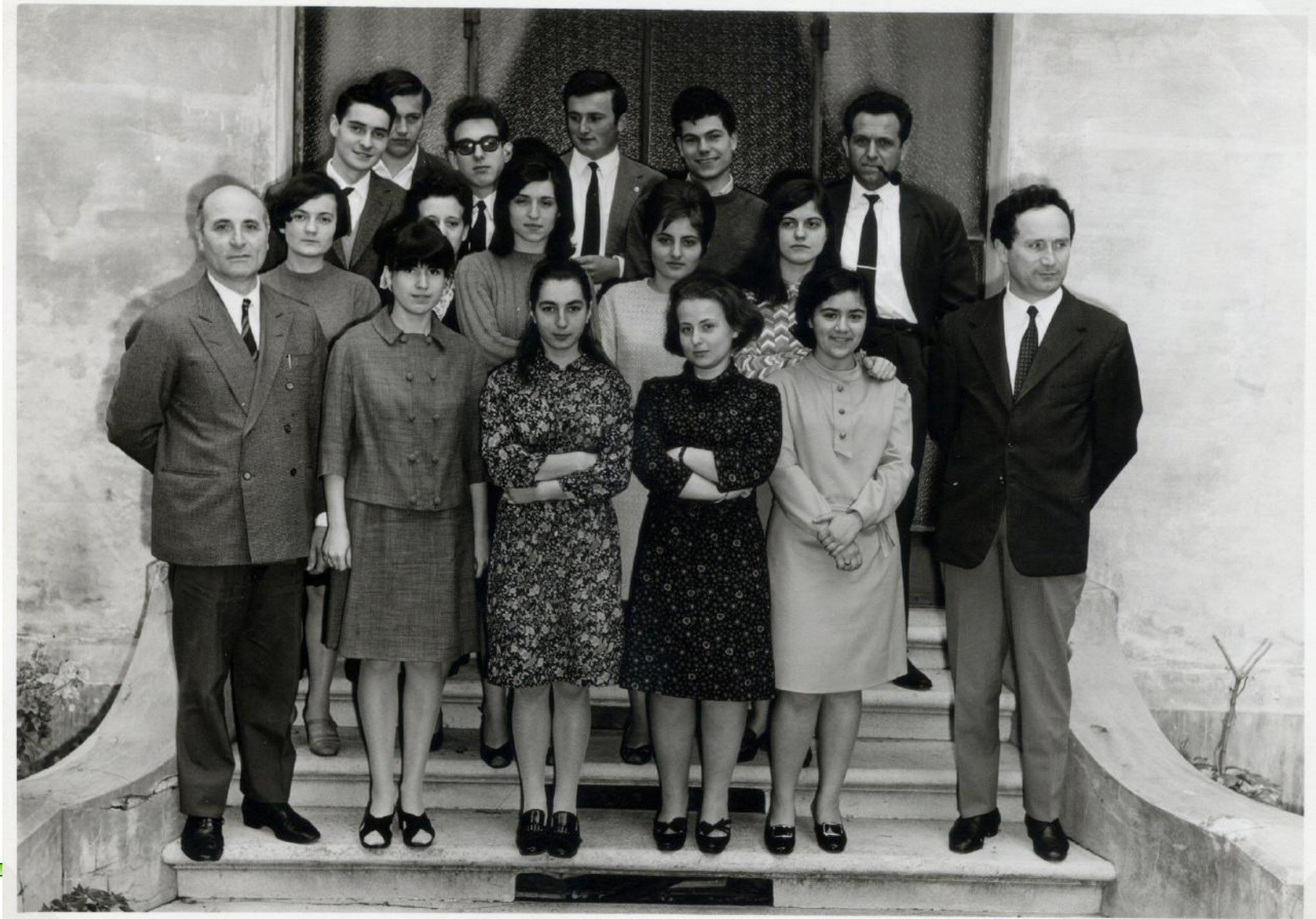
Raimondo Orsini

Fondazione per lo sviluppo sostenibile

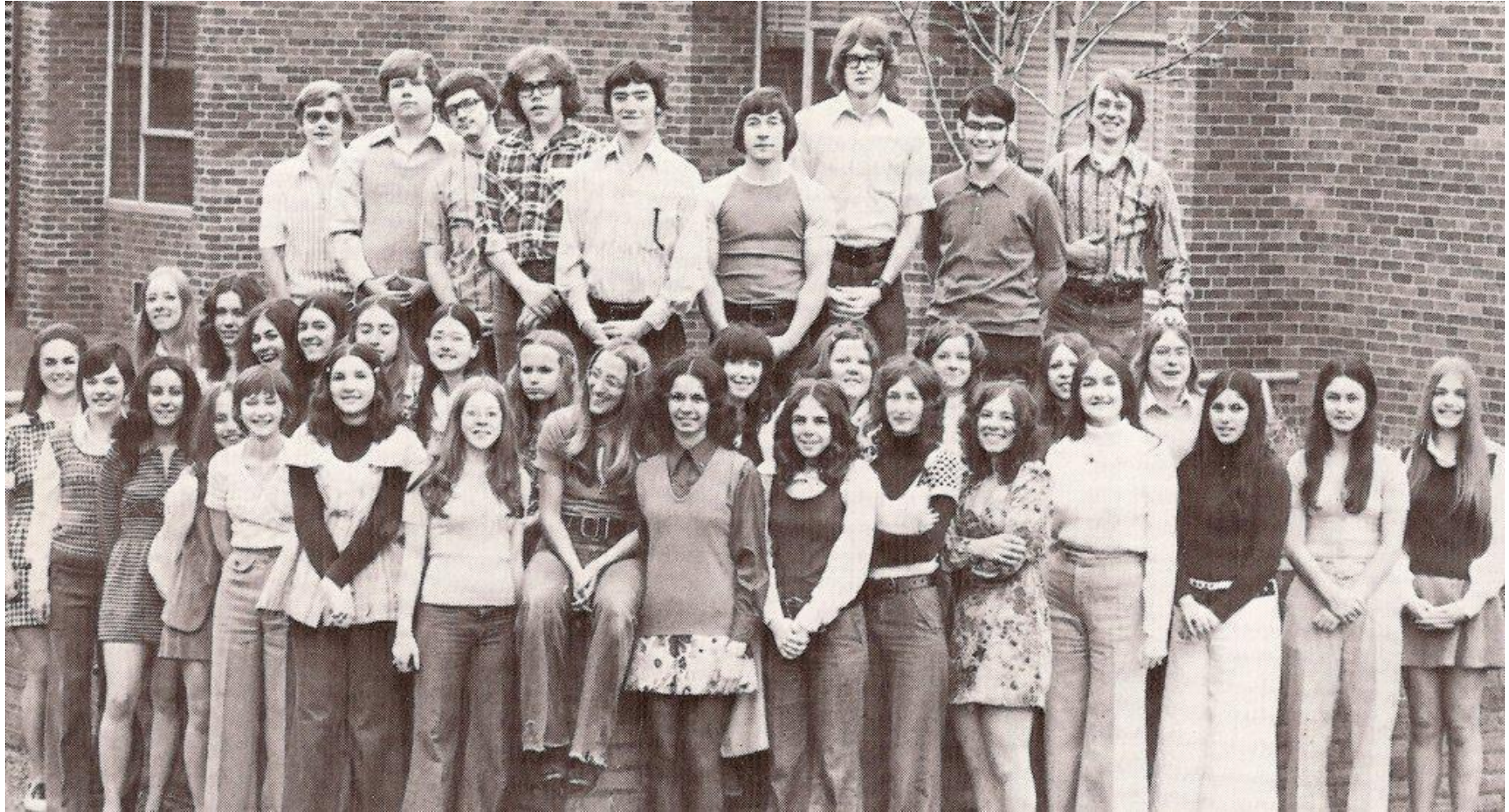
www.fondazionevilupposostenibile.org



A classroom in 1967



A classroom in 1969



A music band in 1966



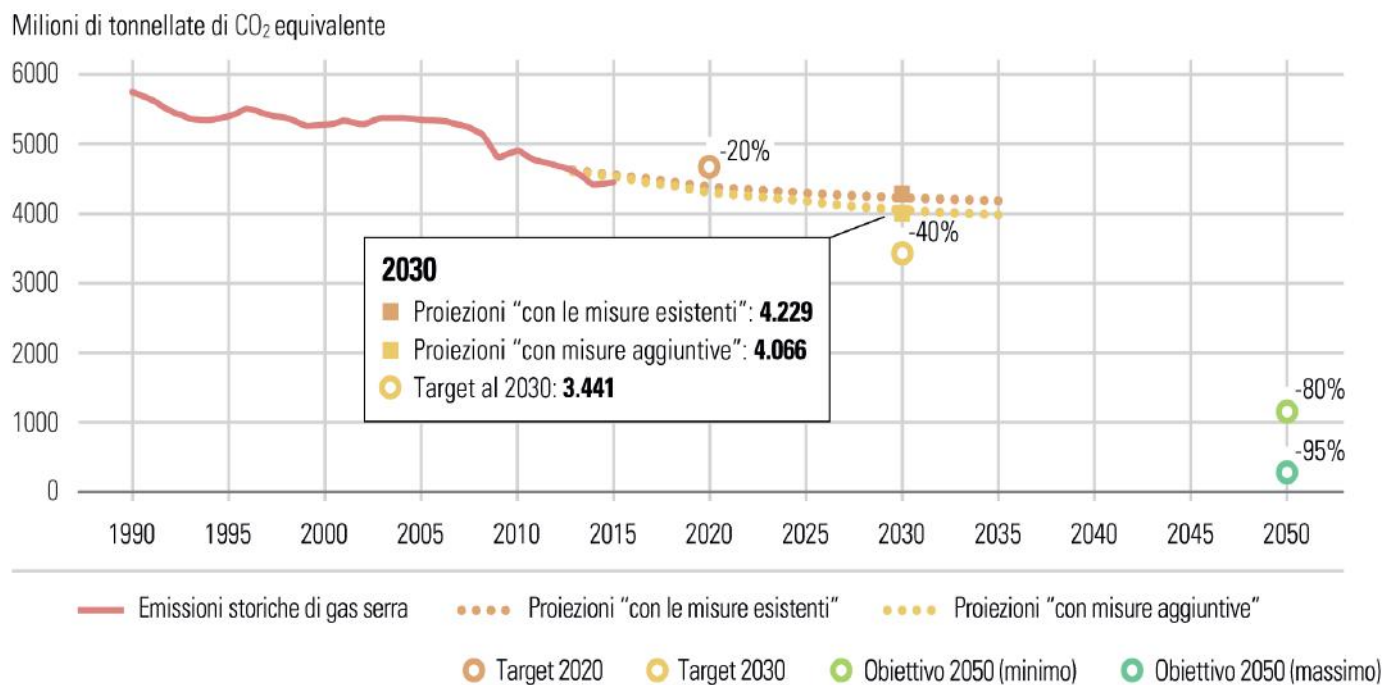




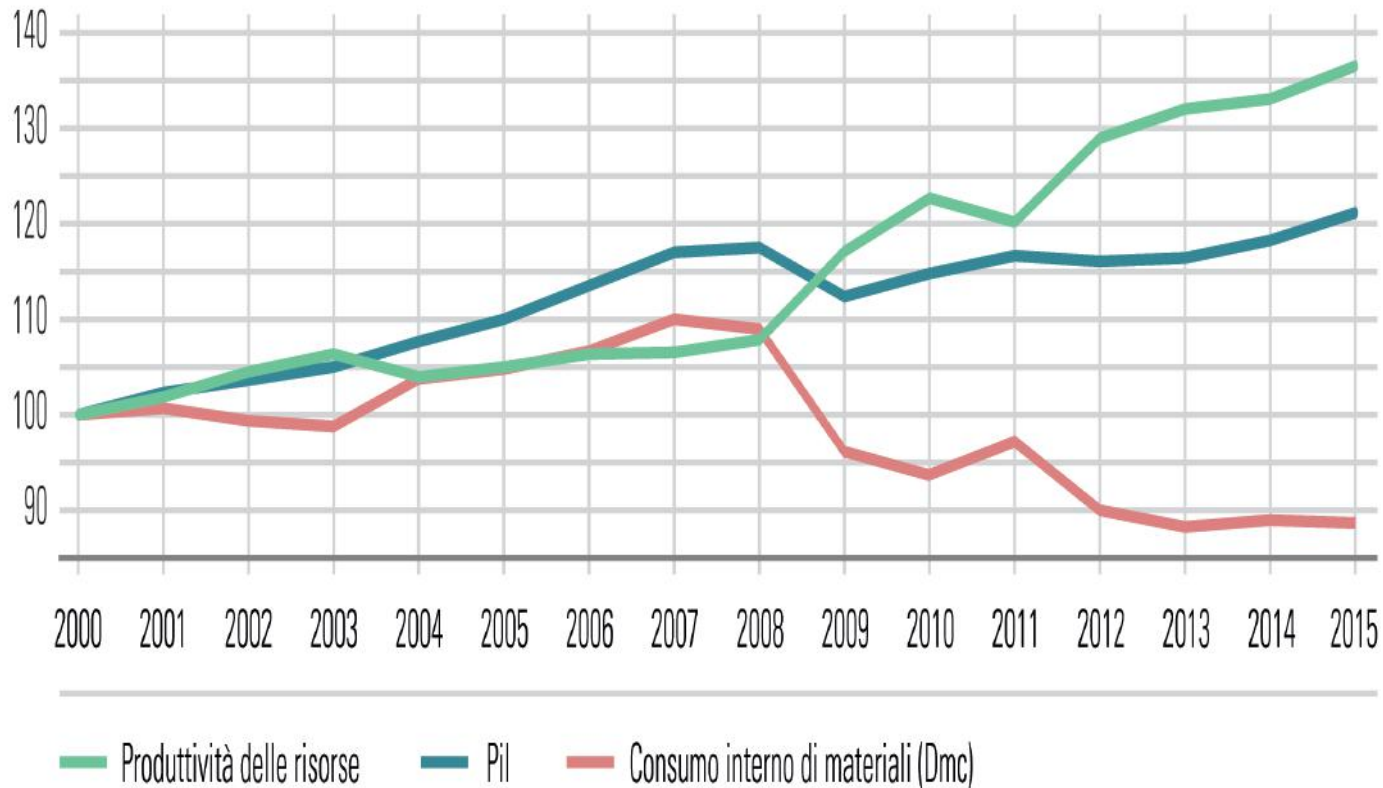


While Europe met well in advance its 2020 Climate and Energy package targets, the new 2030 Climate & Energy Framework sets a target (at least a 27% share for renewable energy and an indicative energy savings target of 30%) **that will not possibly meet the GHG emissions cut target of 40%.**

It is widely agreed that the implementation of the Paris Agreement will require a review of the EU 2030 targets: **the EU will maintain the world leadership on climate change only if it will implement this review on time** (as pushed for by France and Germany).



We are also on the eve of the adoption of a **new important directive on waste management and circular economy**, aiming at making EU economy the most efficient one in the world in resource use, meaning greener and more competitive, by boosting waste reduction and reuse, setting new challenging recycling targets and reducing incineration and waste disposal in landfill.

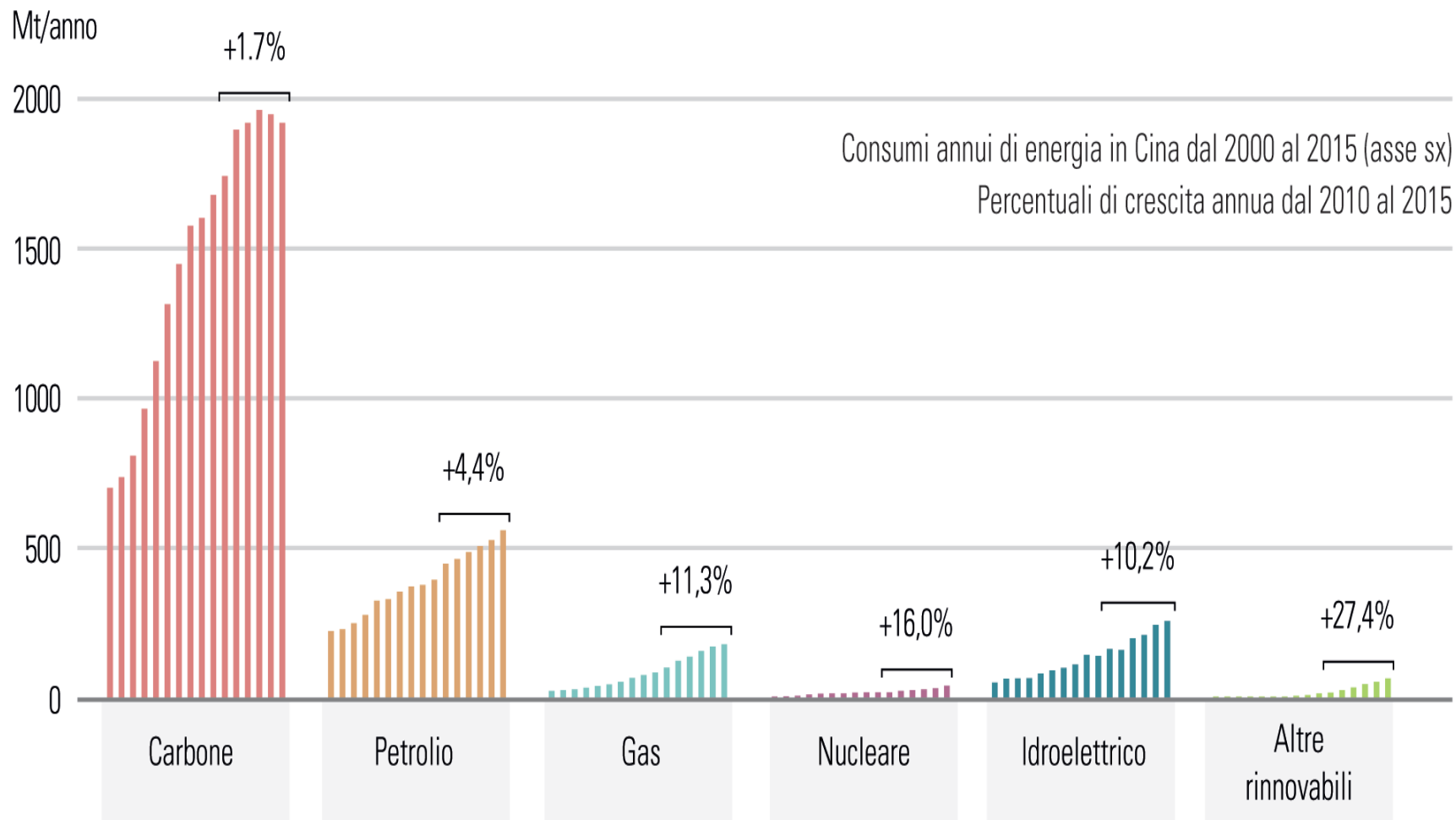


In the past, China has focused on an accelerated, export-based, low quality and high environmental impact growth model, with huge use of coal as prevailing source of energy. This growth model not only made China a world economic power, but it also made this country **the top world GHG emitter (29% of CO2 world emissions), with total emissions higher than the United States and per capita emissions higher than Europe.**

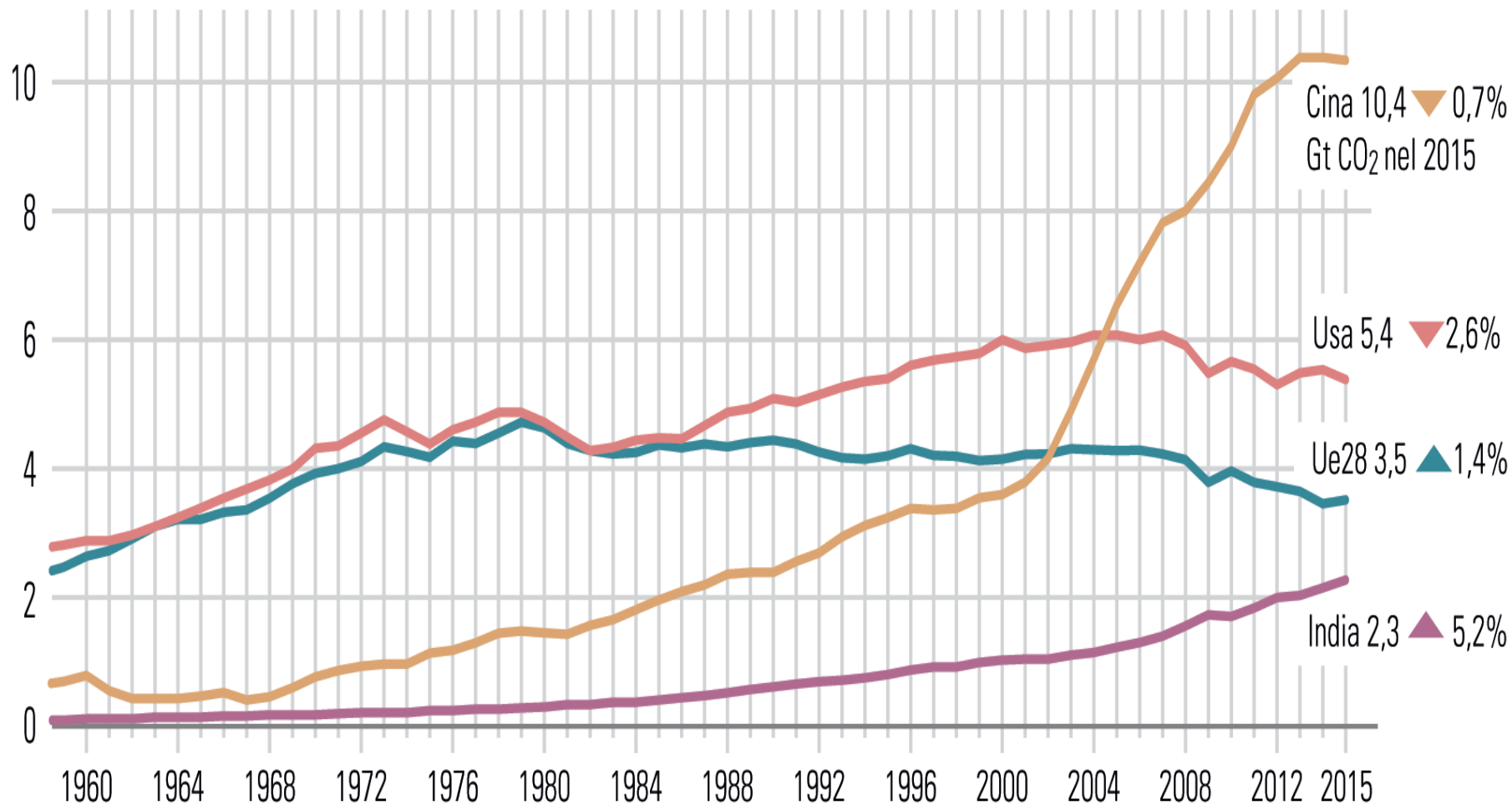
Now China is apparently willing to change: **coal use is diminishing and renewable energy is increasing.** While **GHG emissions in the country have not increased since 2014**, China submitted an inadequate implementation plan for the Paris Agreement, and it plans to continue to increase greenhouse gas emissions until reaching a peak in 2030 and start decreasing afterwards.

This trend would make virtually impossible to keep the trajectory for containing global warming well below 2°C, as set by the Paris Agreement. On the other hand, recent studies suggest that **China could reduce its emissions well before 2030**, thanks to economic growth and technological advancements.





Emissioni CO₂ (GtCO₂/anno)



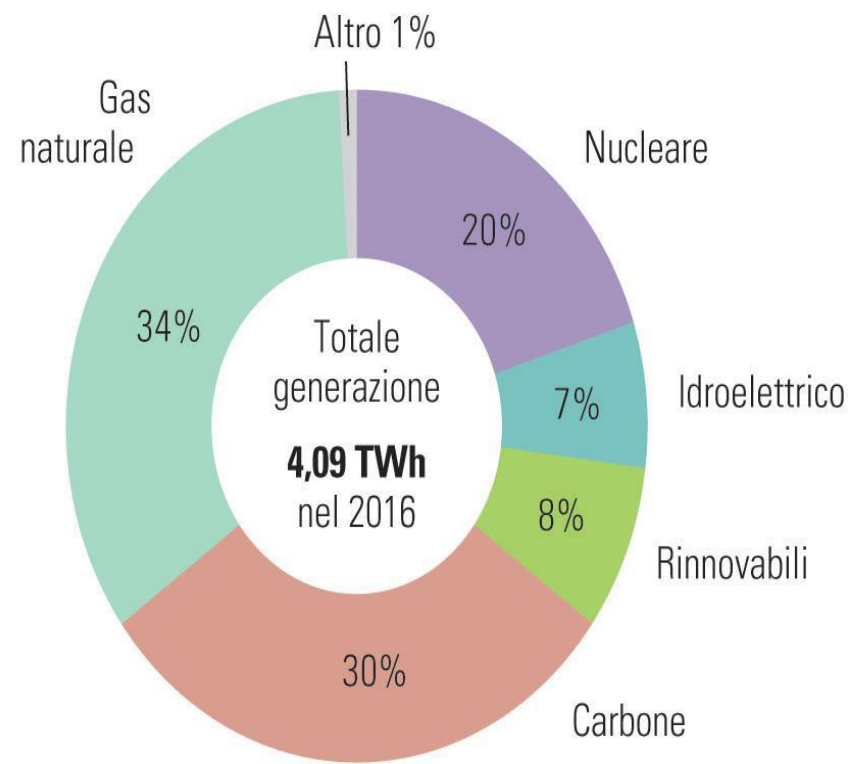
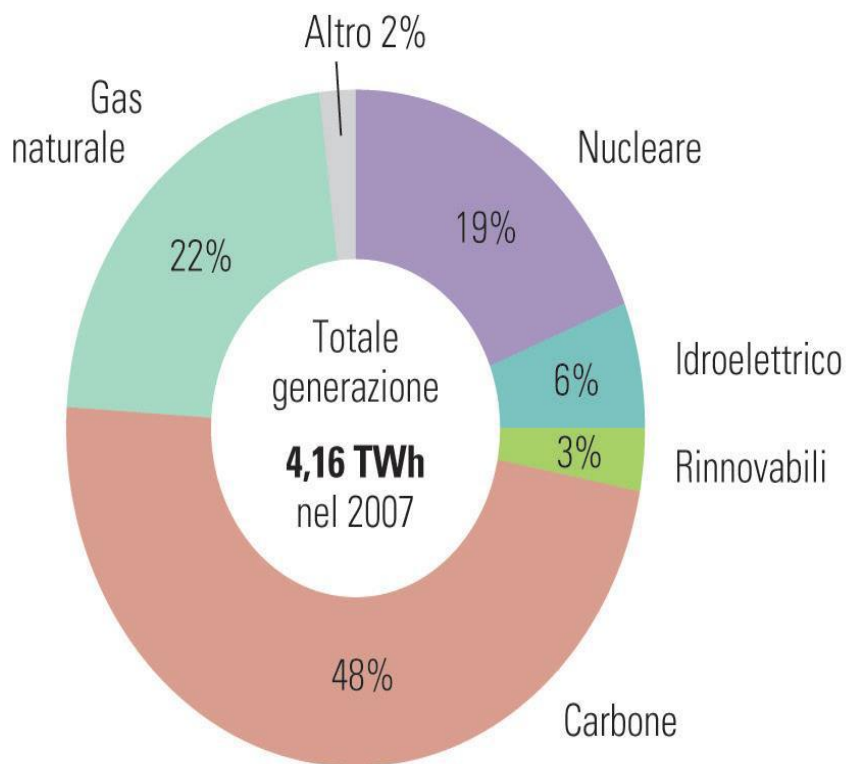
For the green economy and climate change global policies it is of great importance to start evaluating possible effects of President Trump's decision, officially announced at G7 Summit in Taormina last June, to withdraw the United States from the Paris climate change Agreement. The effects of this decision are not quite predictable.

Approximately 40% of GHG emissions in the United States are produced by **States that officially declared their intention to implement the Paris Agreement. In June 2017, the United States Conference of Mayors**, representing 1,408 cities with populations of 30,000 or more, not only supported the Paris Agreement, but also proposed **targets that are more ambitious.**



indice (1990=100)





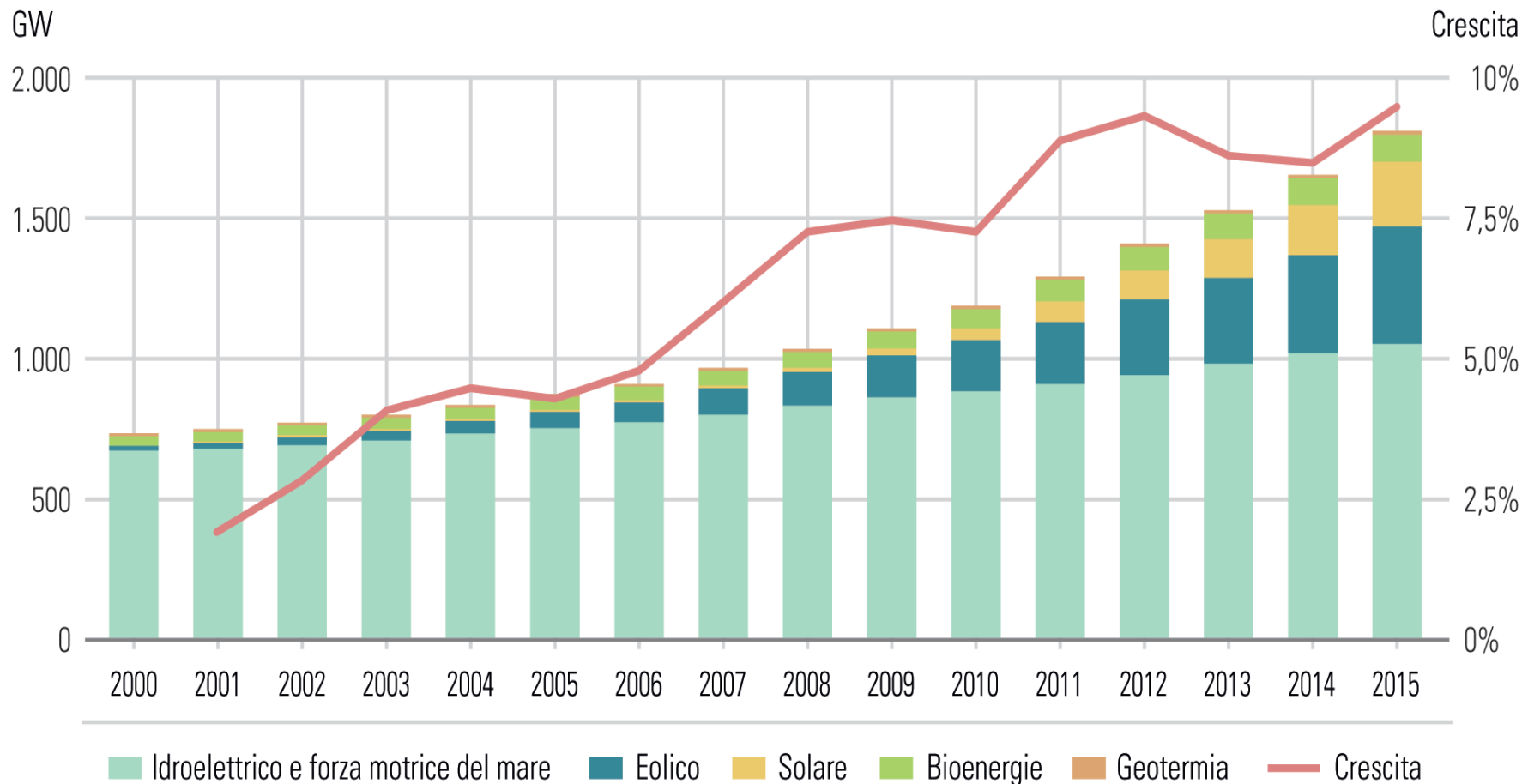
At the moment Trump's statements on the Paris Agreement do not seem to be producing any tangible effects on the concrete economic and technological measures for climate change mitigation that are being implemented in the United States.

Investments in **renewable energy** in the US are currently growing: in March and April 2017, solar and wind energy exceeded 10% of electricity demand for the first time.

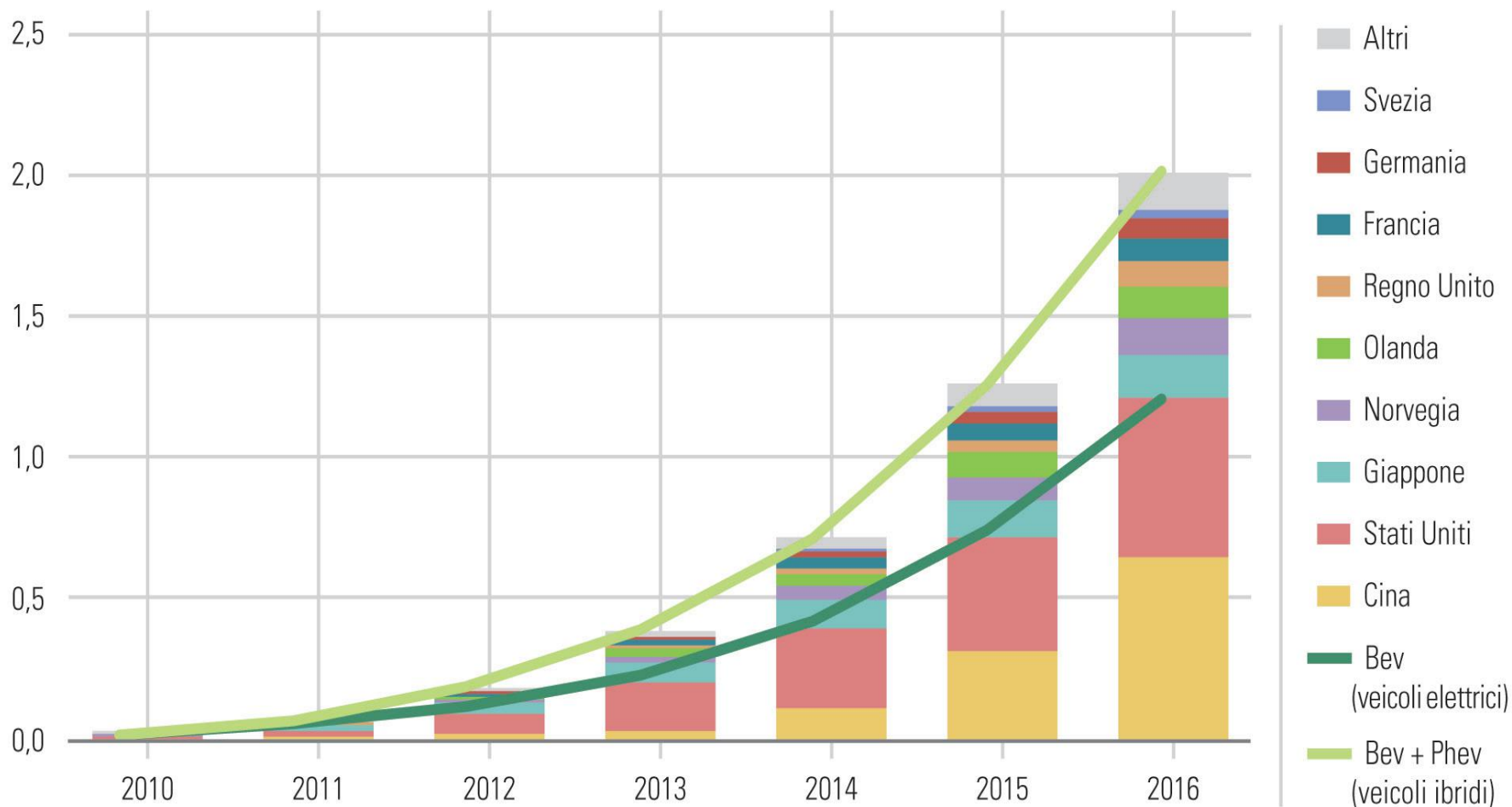
The United States is still the world leader in **biofuels production**, as well as in **energy efficiency technologies**. **Green bonds** emissions in 2016 were 80 times higher than in 2012, reaching 38.4 billion dollars.

In addition, the Administration showed some hesitations and put forward ideas of renegotiating the withdrawal as well as the possibility of renegotiating the Agreement itself: this means the Government is acknowledging the difficulties in implementing a decision that would imply an **isolated position**, since the Paris Agreement was, and still is, supported by almost all countries.





Stock di auto elettriche (milioni)



In 2017, the **International Energy Agency (IEA)** assessed 26 energy technologies tendencies in the 2°C scenario. **Renewable energy sources, electric vehicles and electricity storage** are growing at a good pace and are expected to continue to do so.

Energy saving and efficiency in the industry should increase at a higher rate because the final energy consumption trend in this sector would still be too high. While gas consumption is increasing, further improvement is needed in order for it to contribute, together with renewable sources, to **replace coal** that is still the main source of energy worldwide (40%). Less efficient coal plants should be closed and new plants without carbon capture and storage (CCS) should not be opened, although CCS projects stopped because of lack of investment. **New generation biofuels** should increase by 25 times by 2025. The average **energy consumption in the building sector** should decrease by at least 10% by 2025 and renewable thermal energy should increase by 32% by 2025 compared to 2014.



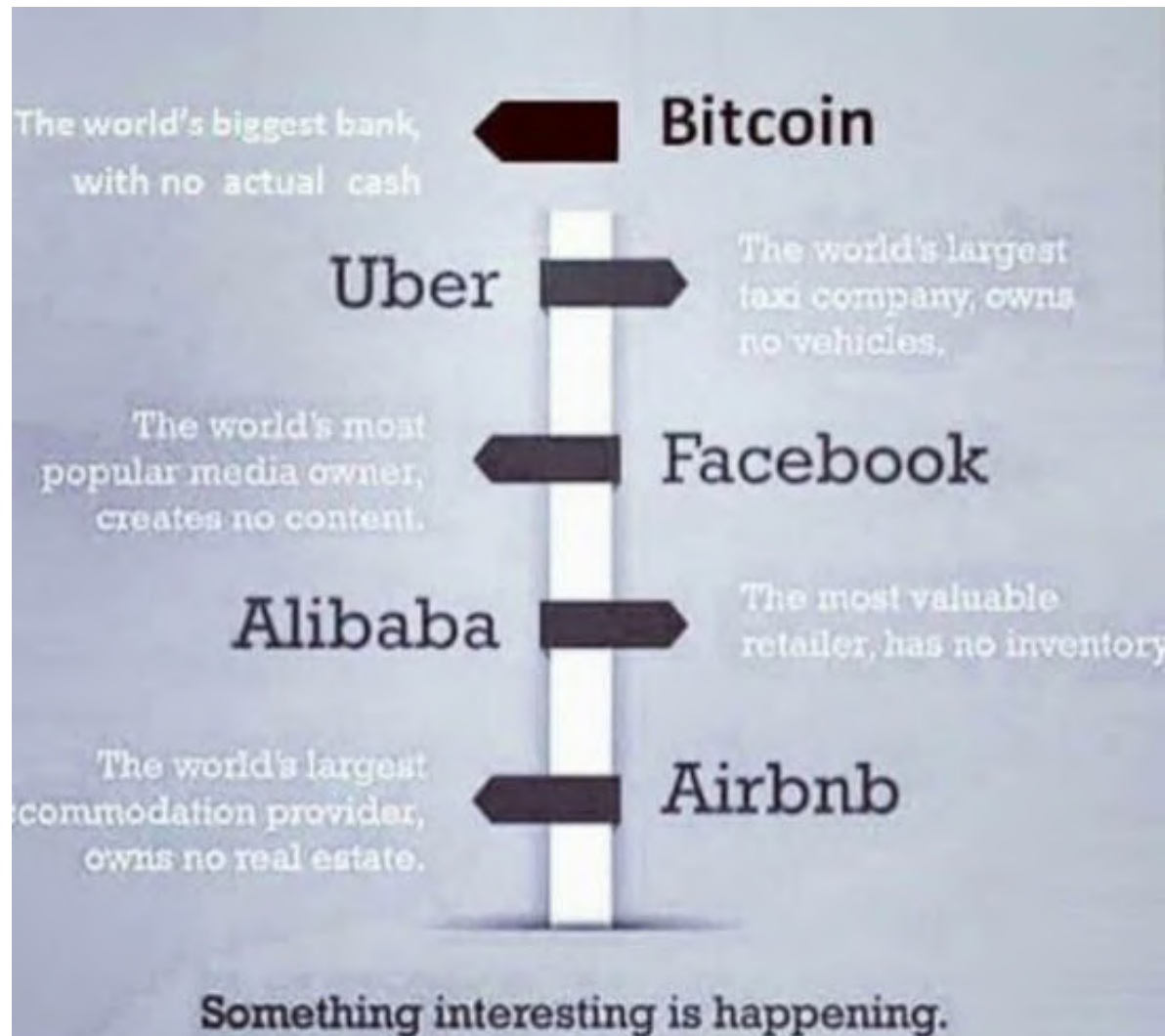
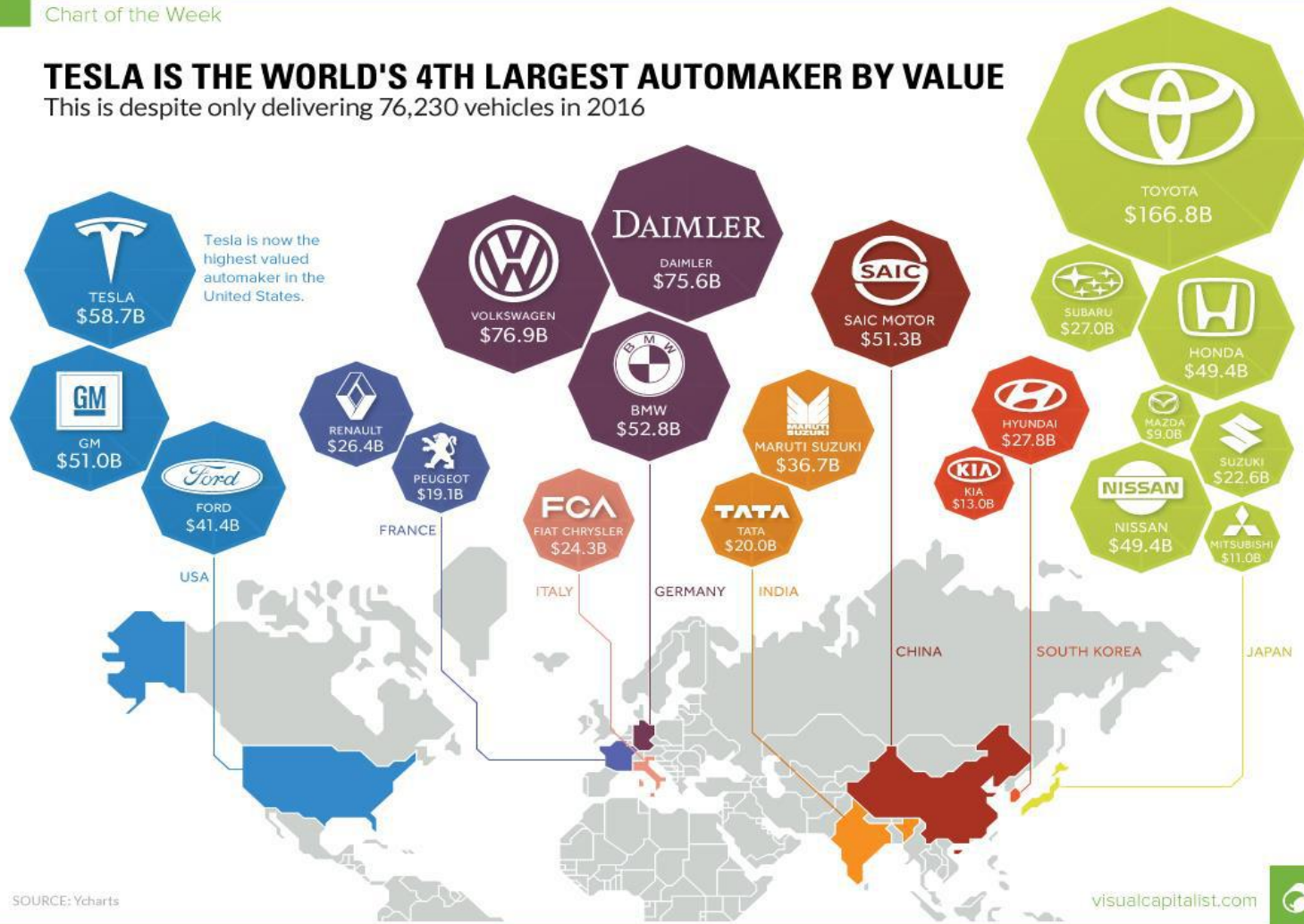


Chart of the Week

TESLA IS THE WORLD'S 4TH LARGEST AUTOMAKER BY VALUE

This is despite only delivering 76,230 vehicles in 2016







Examples of lasting innovations



Colonel Albert Hope

**1901:
500 electric cars**



“.....It’s cleaner and less noisy.
Furthermore nobody will willingly sit
atop an explosion”



08 novembre 2017

STATI GENERALI della GREEN ECONOMY

**EUROPA, CINA E USA:
IL FUTURO DELLA GREEN ECONOMY
NEI NUOVI EQUILIBRI MONDIALI**

ore 09.30 • 12.30

**Promossi dal Consiglio Nazionale della Green Economy
in collaborazione con**

