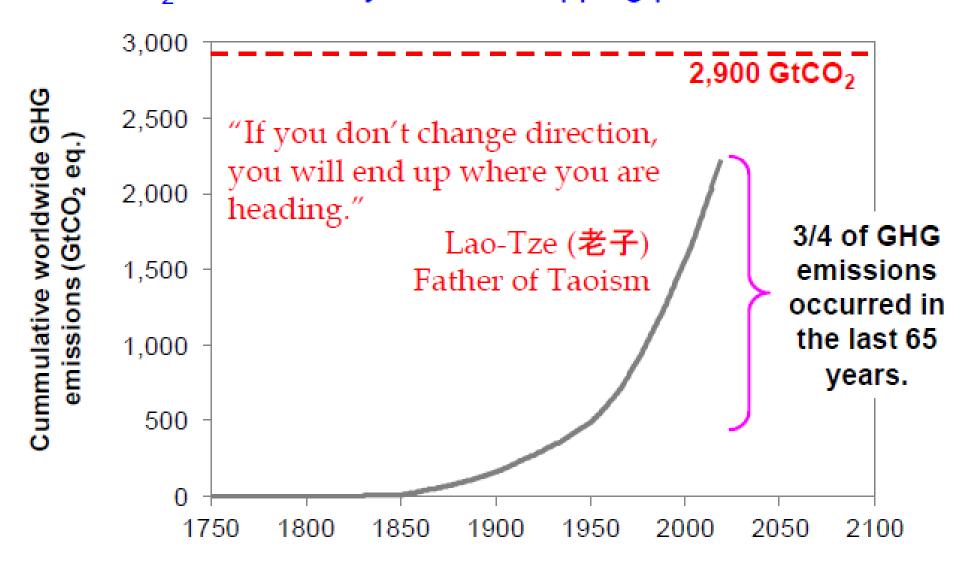
## 9° Conferenza nazionale su CHIMICA&ENERGIA

Quale energia al 2030 con l'aiuto della chimica

Apertura dei lavori

The U.N. goal to keep temperature rise well below 2  $^{\circ}$  C requires we stay below 2,900 GtCO<sub>2</sub> cumulative emissions. Half-life of added CO<sub>2</sub> is  $\sim$  10,000 years if no tipping points are reached.



## The gasoline-powered internal combustion engine rapidly replace horse powered vehicles.

Easter morning, 1900

5<sup>th</sup> Avenue New York





Easter morning, 1913

5<sup>th</sup> Avenue New York

The transition to the automobile required a oil-gasoline supply chain, paved roads, and other infrastructure.

A serious environmental pollution issue hastened the transition. The ~160,000 horses in New York in 1880 were producing 3 - 4 millions pounds of horse manure and 40,000 gallons urine a day.