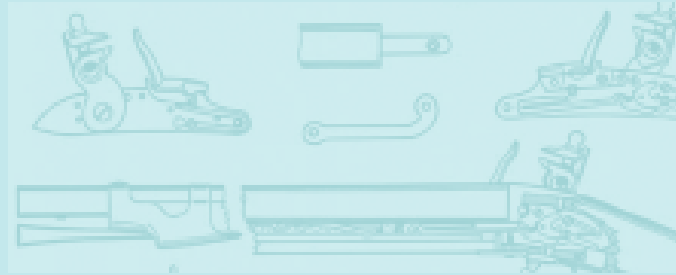
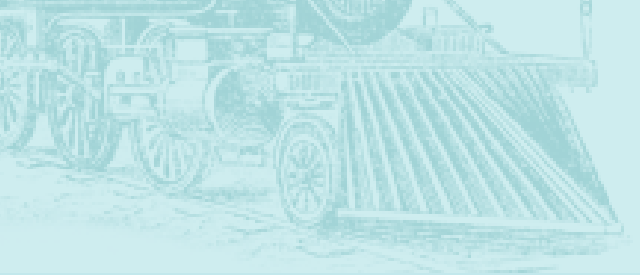


The *Energy*
INNOVATION
IMPERATIVE

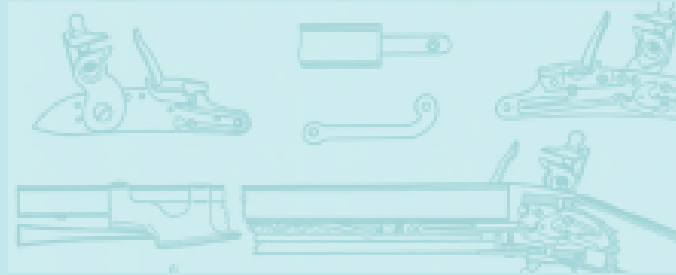
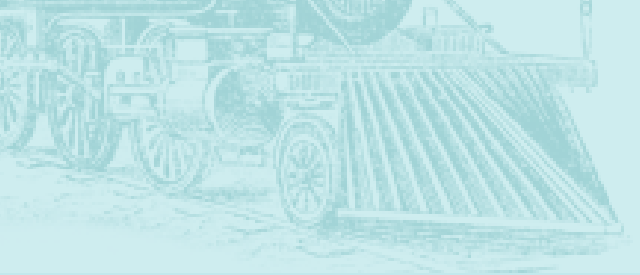




ACT ONE

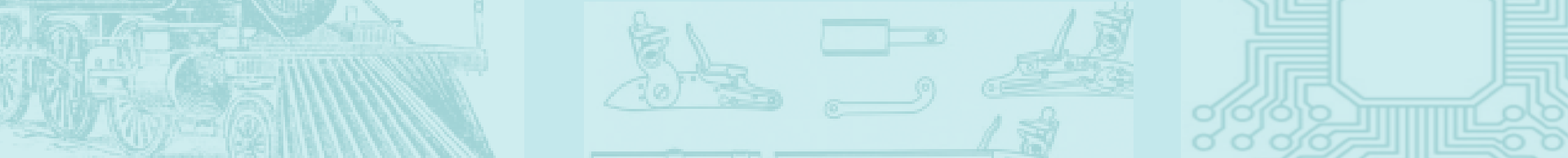
WHERE *Good*
TECHNOLOGIES
COME FROM





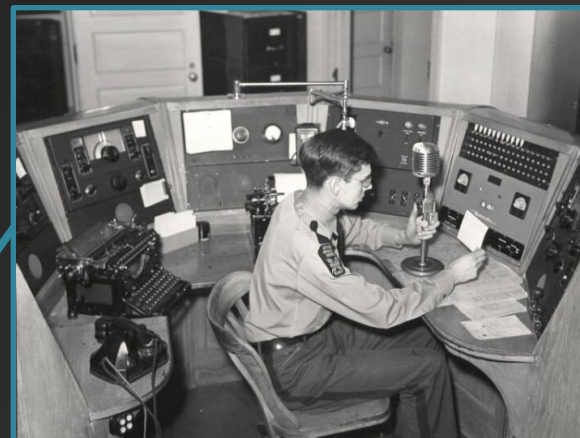
AMGEN[®]



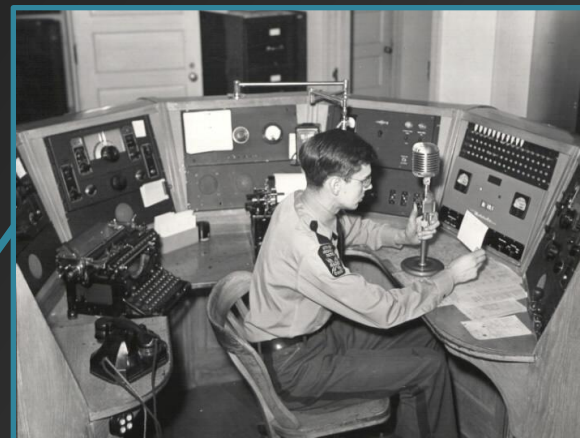




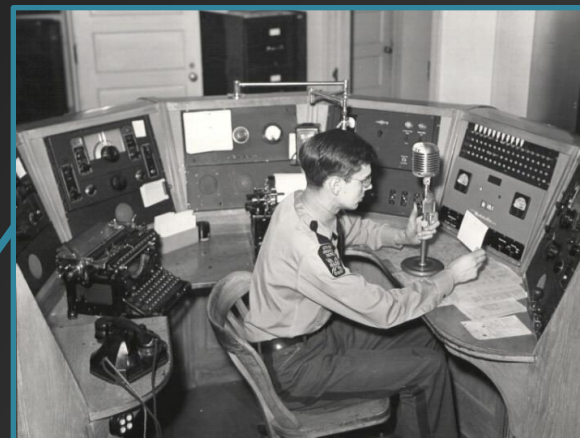
ARPANET



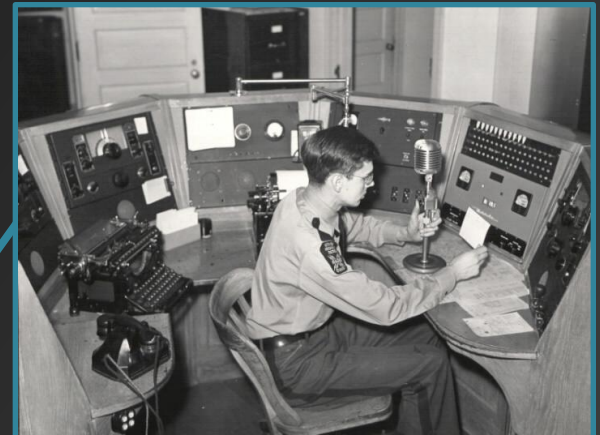
ARPANET



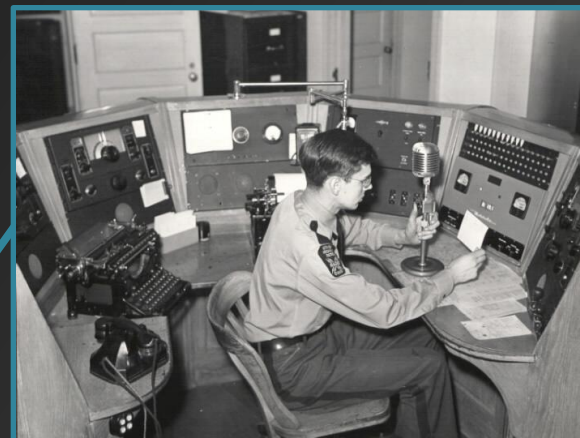
ARPANET



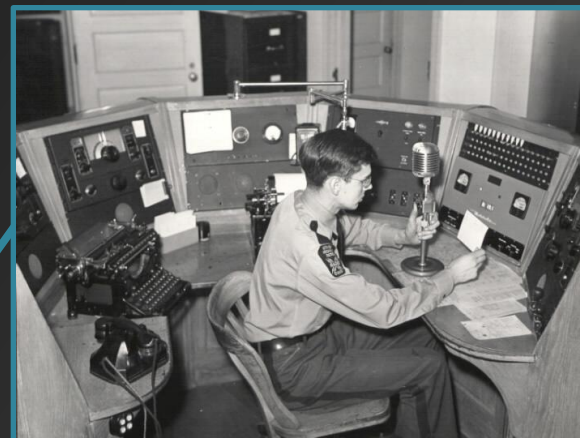
ARPANET



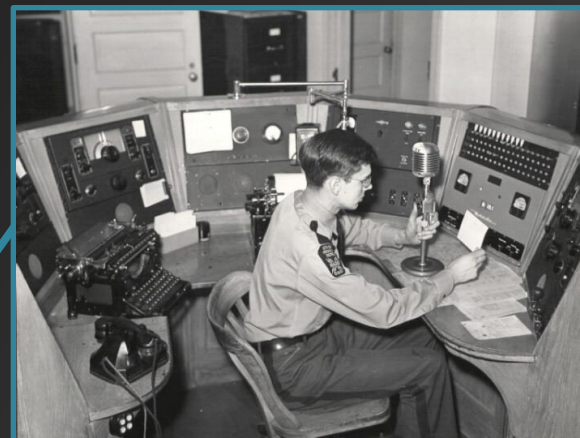
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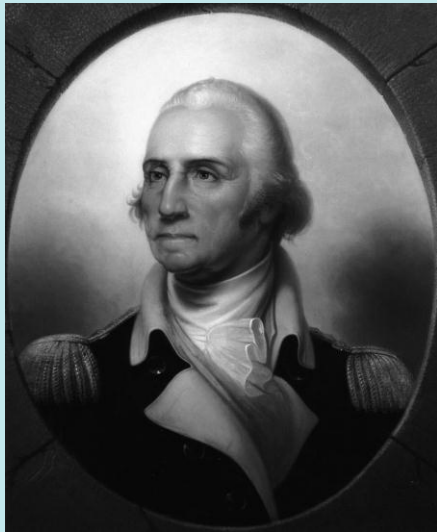


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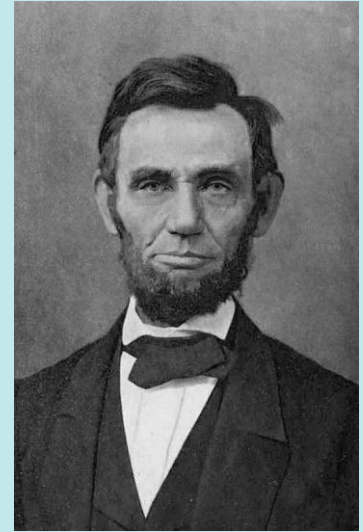
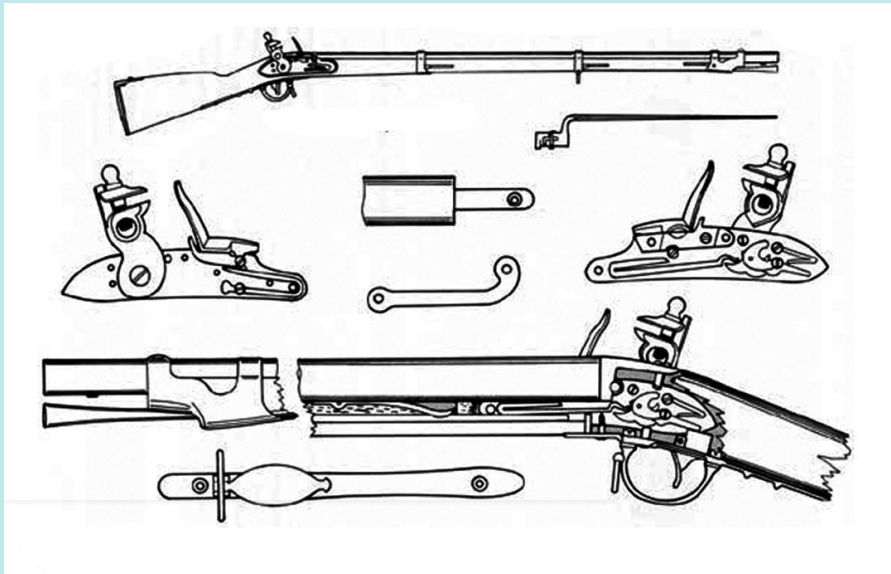


ARPANET

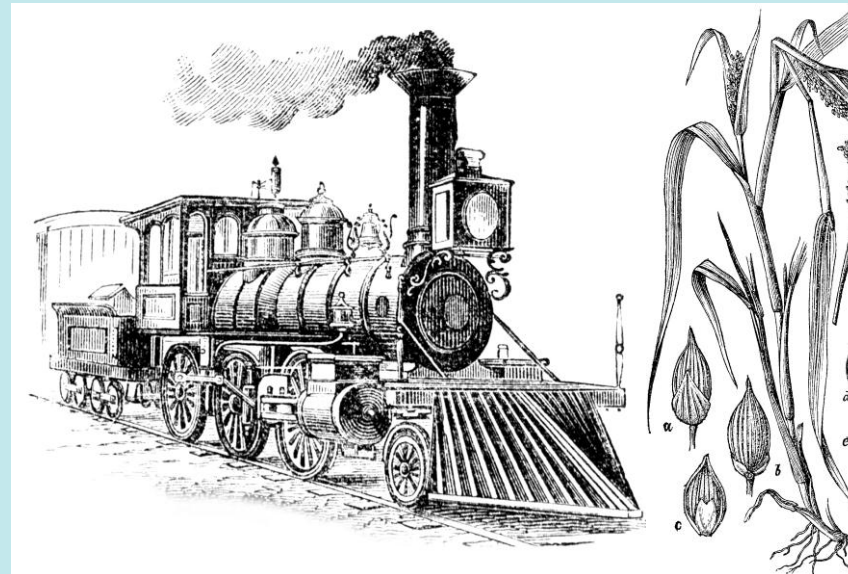


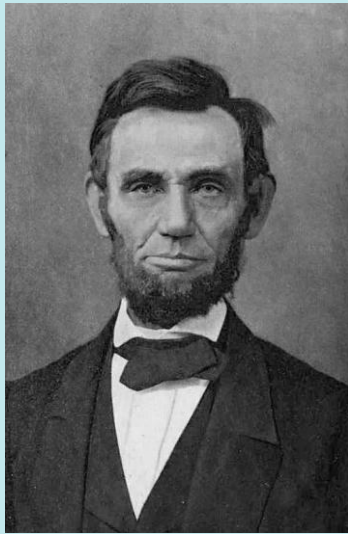


1794

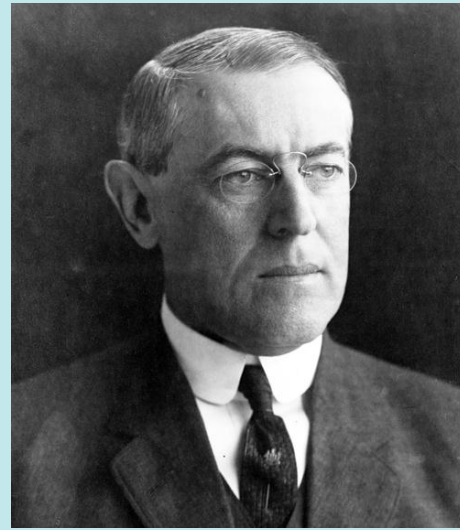


1862





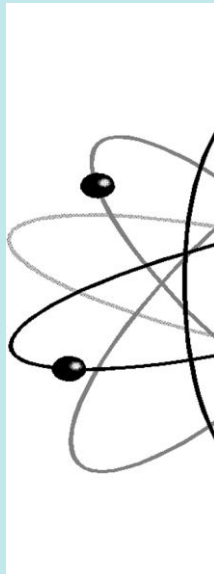
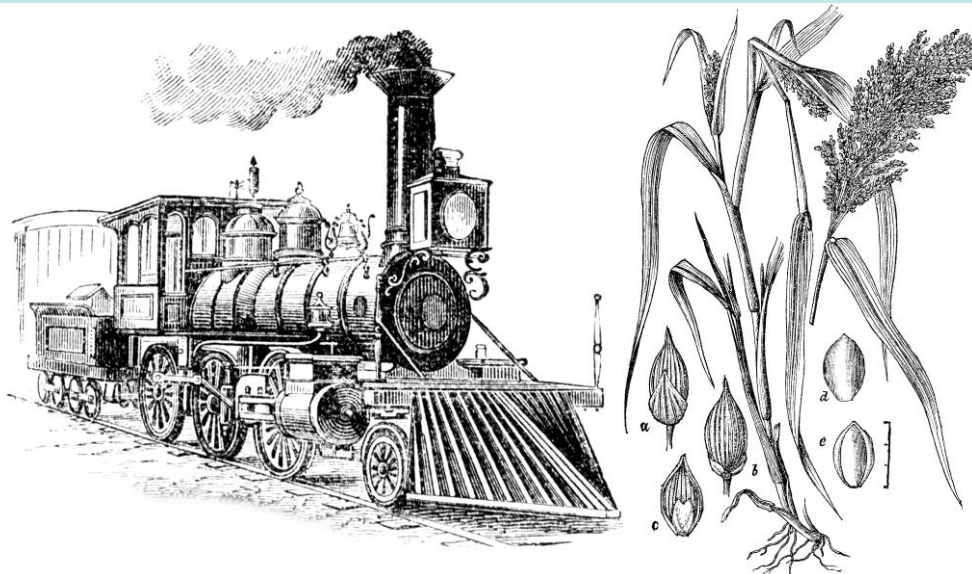
1862

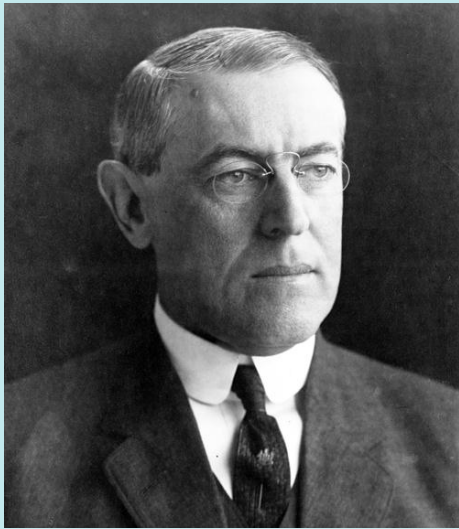


1915



19

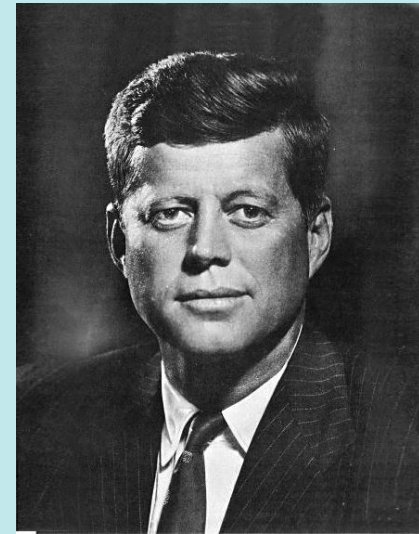
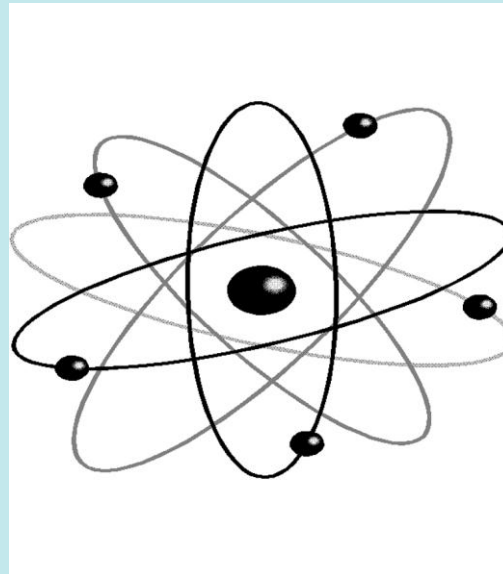




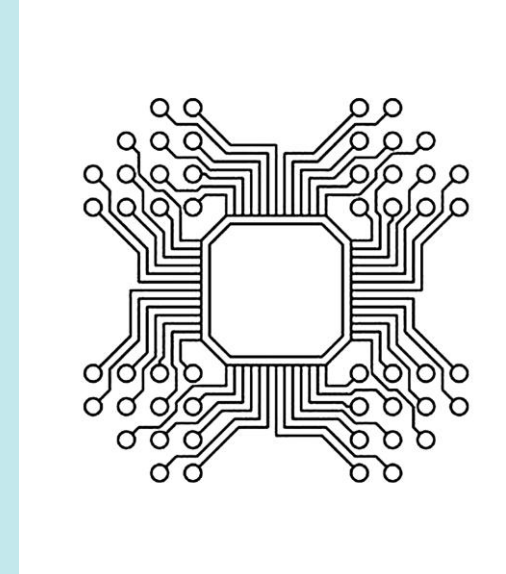
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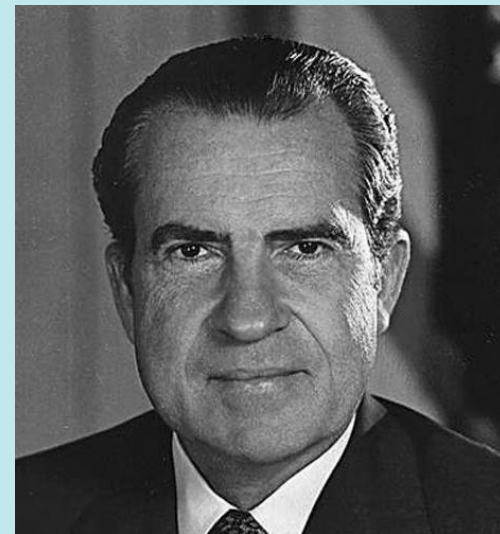
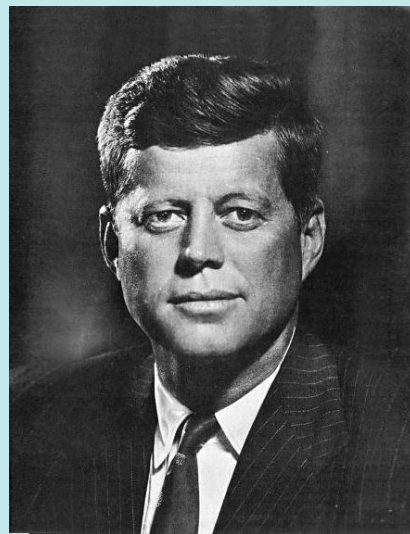


1953



1961

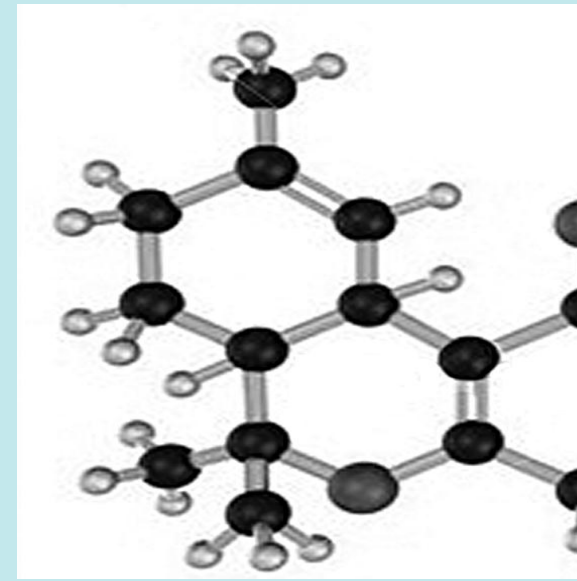
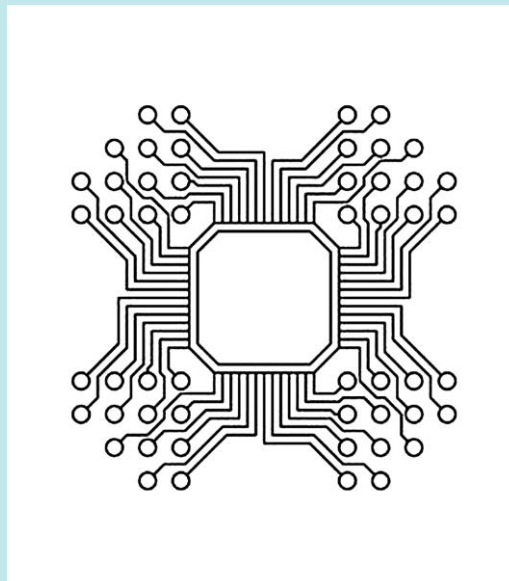
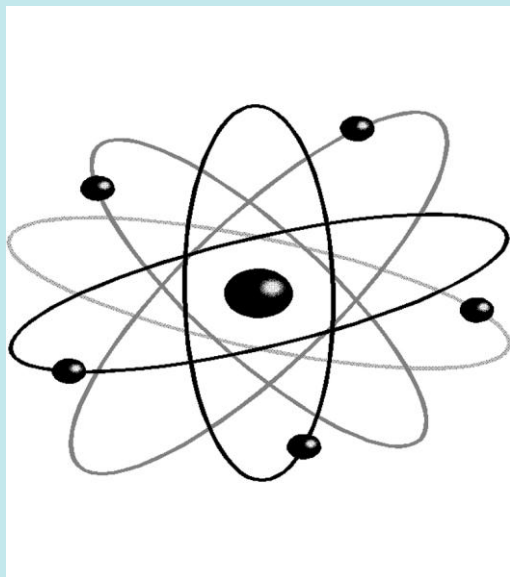


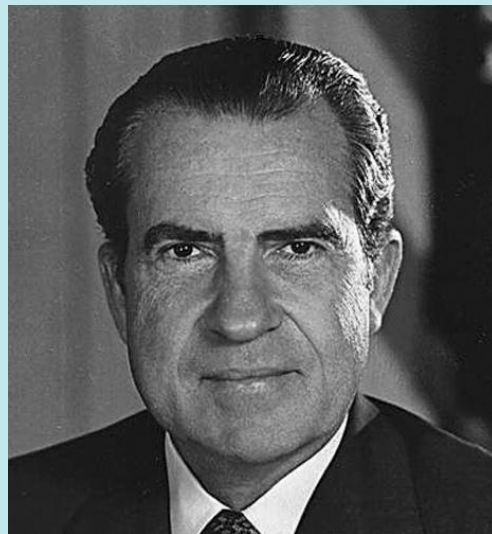
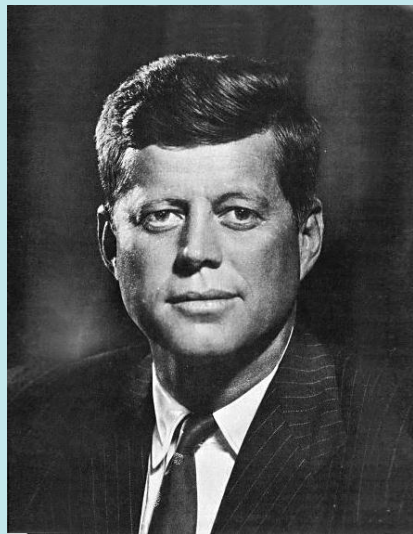


1953

1961

1971



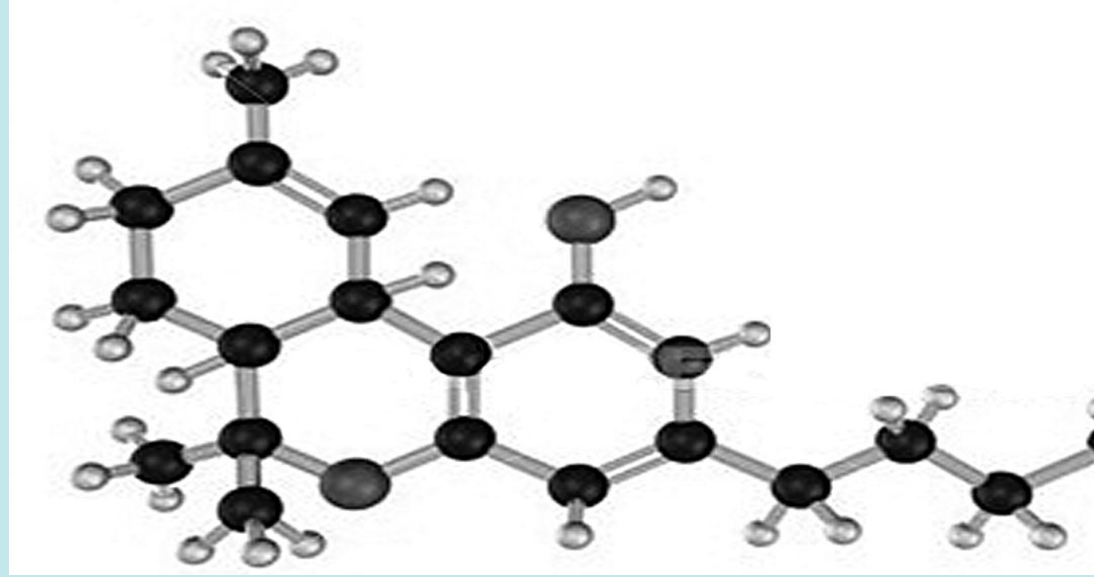
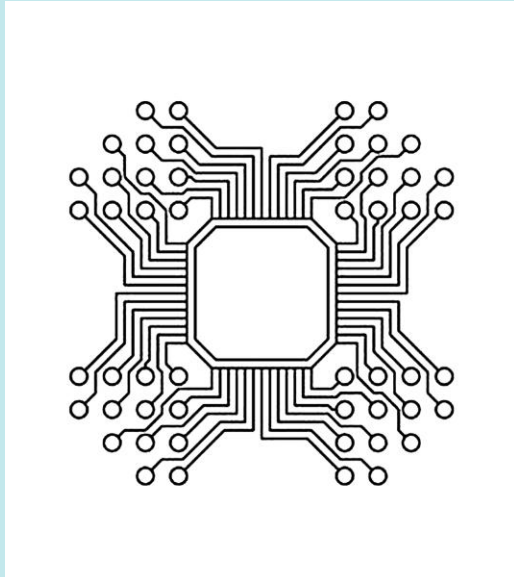
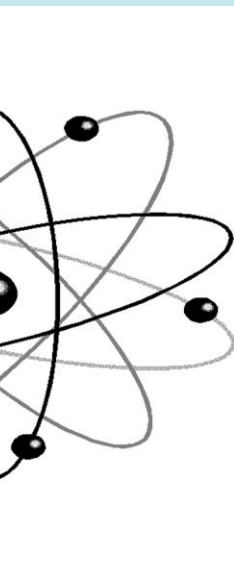


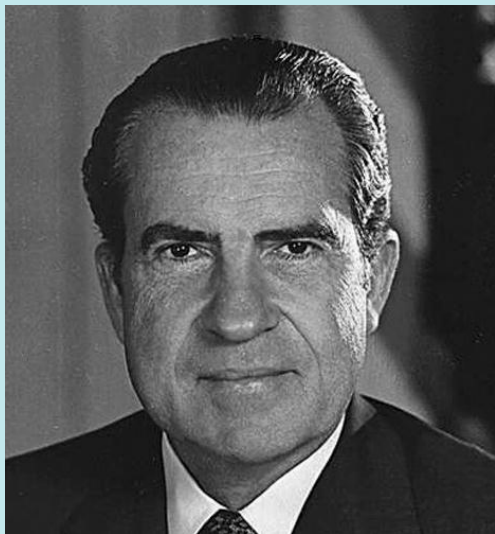
1953

1961

1971

1995

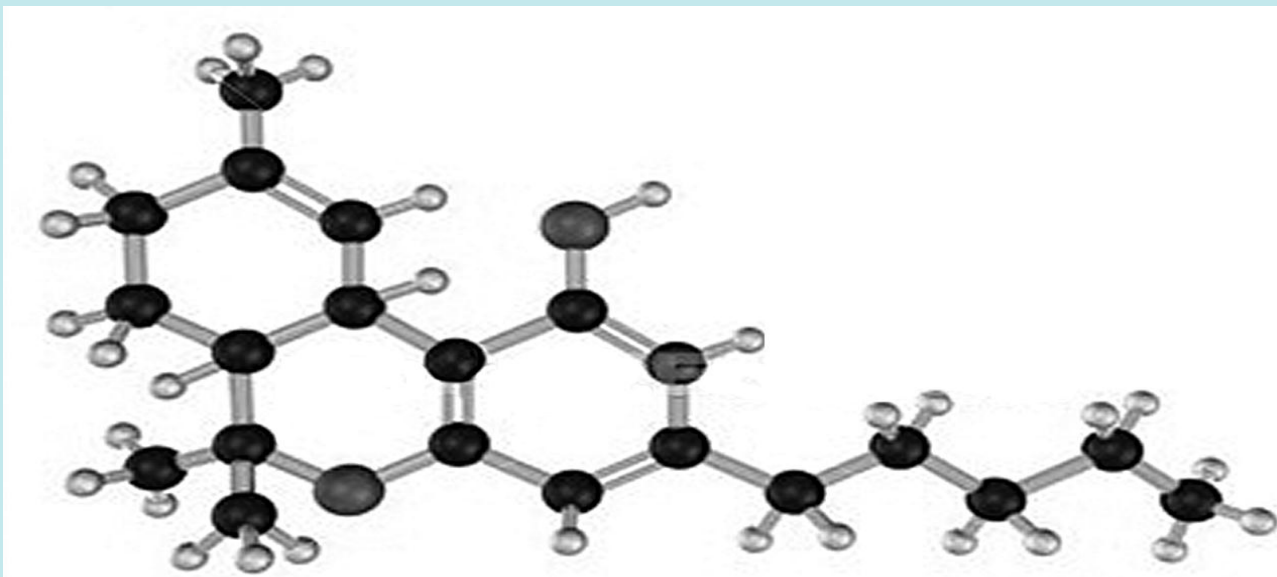
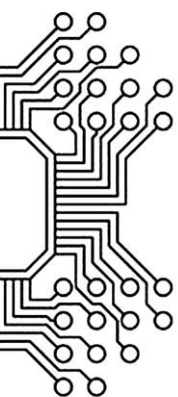




1

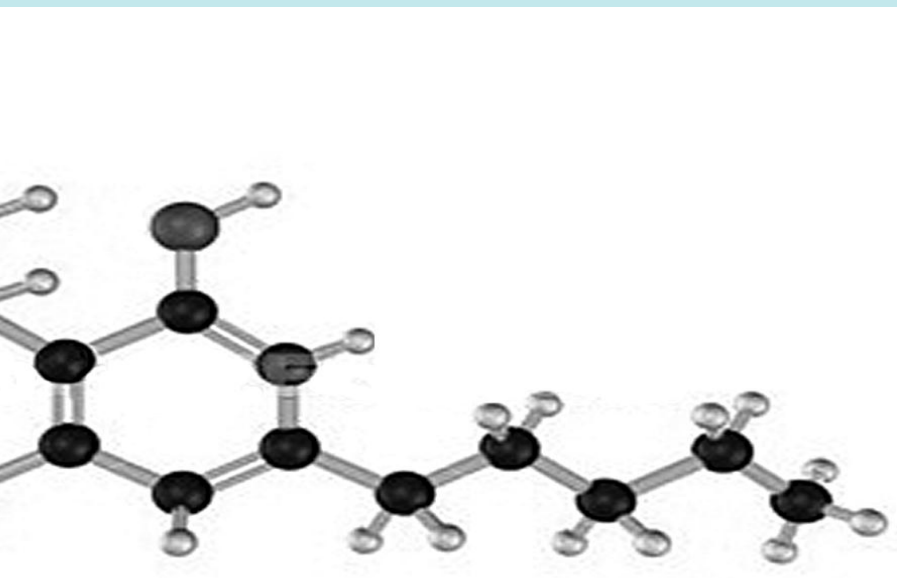
1971

1995-2008





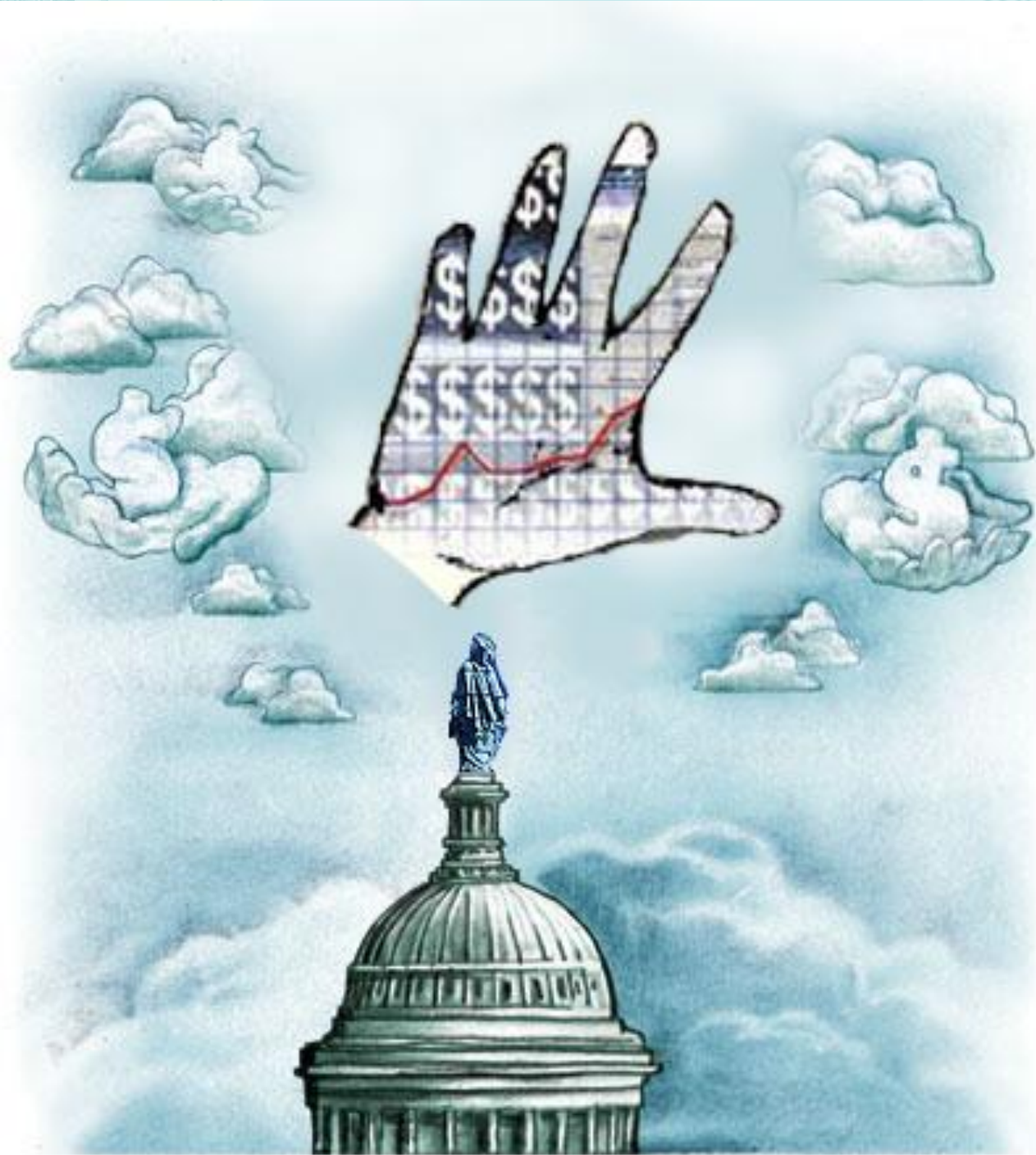
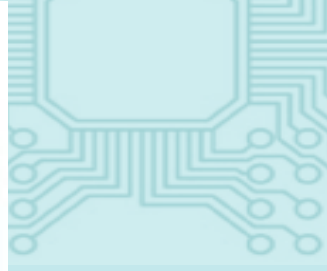
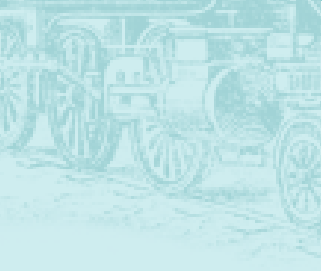
1995-2008

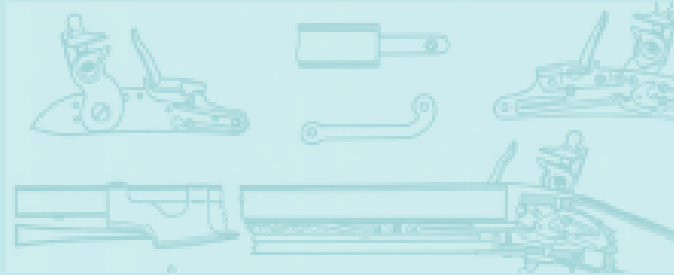
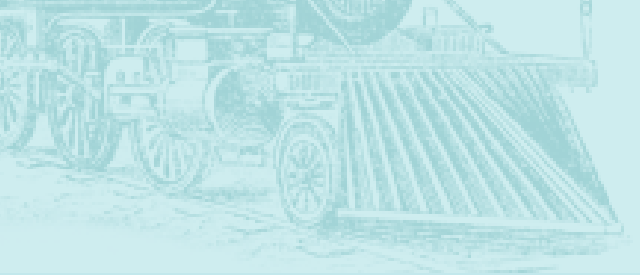


Investor
in
Innovation



Demandi
ng
Customer

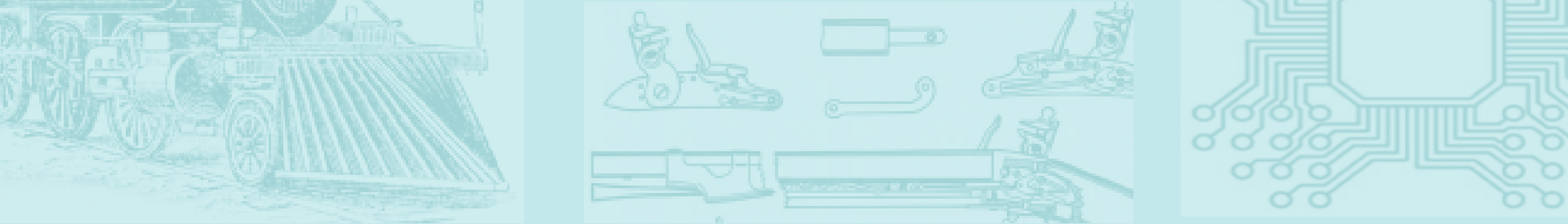




ACT TWO

Making *Clean*
ENERGY CHEAP



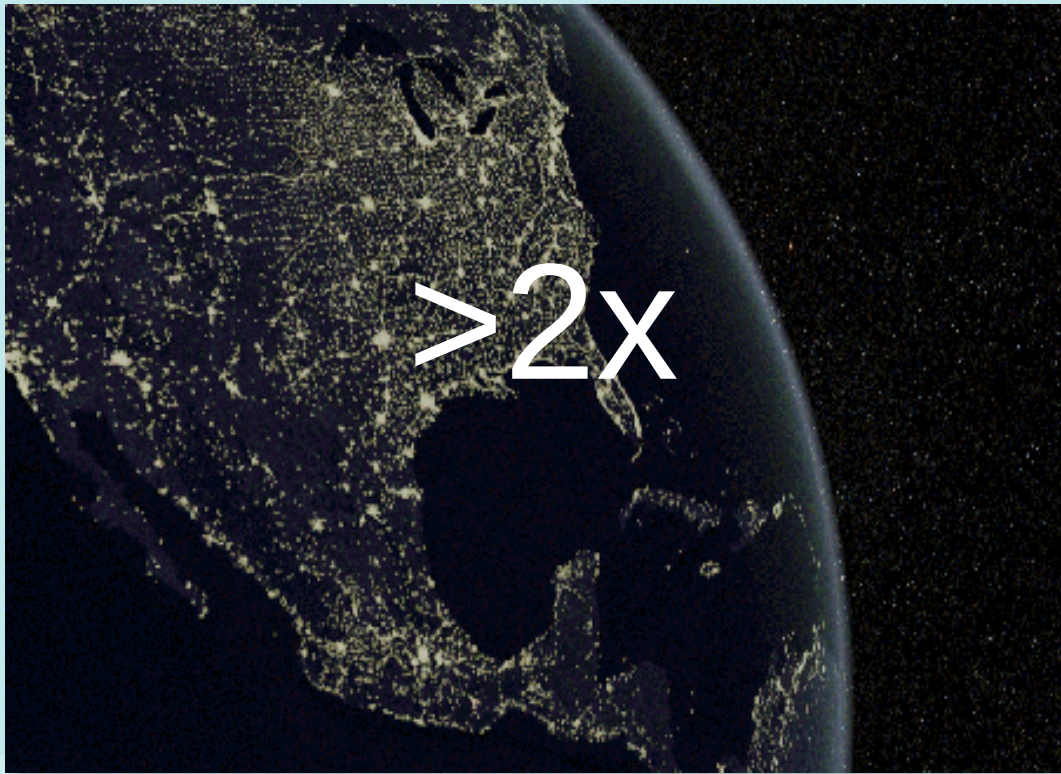


POPULATION

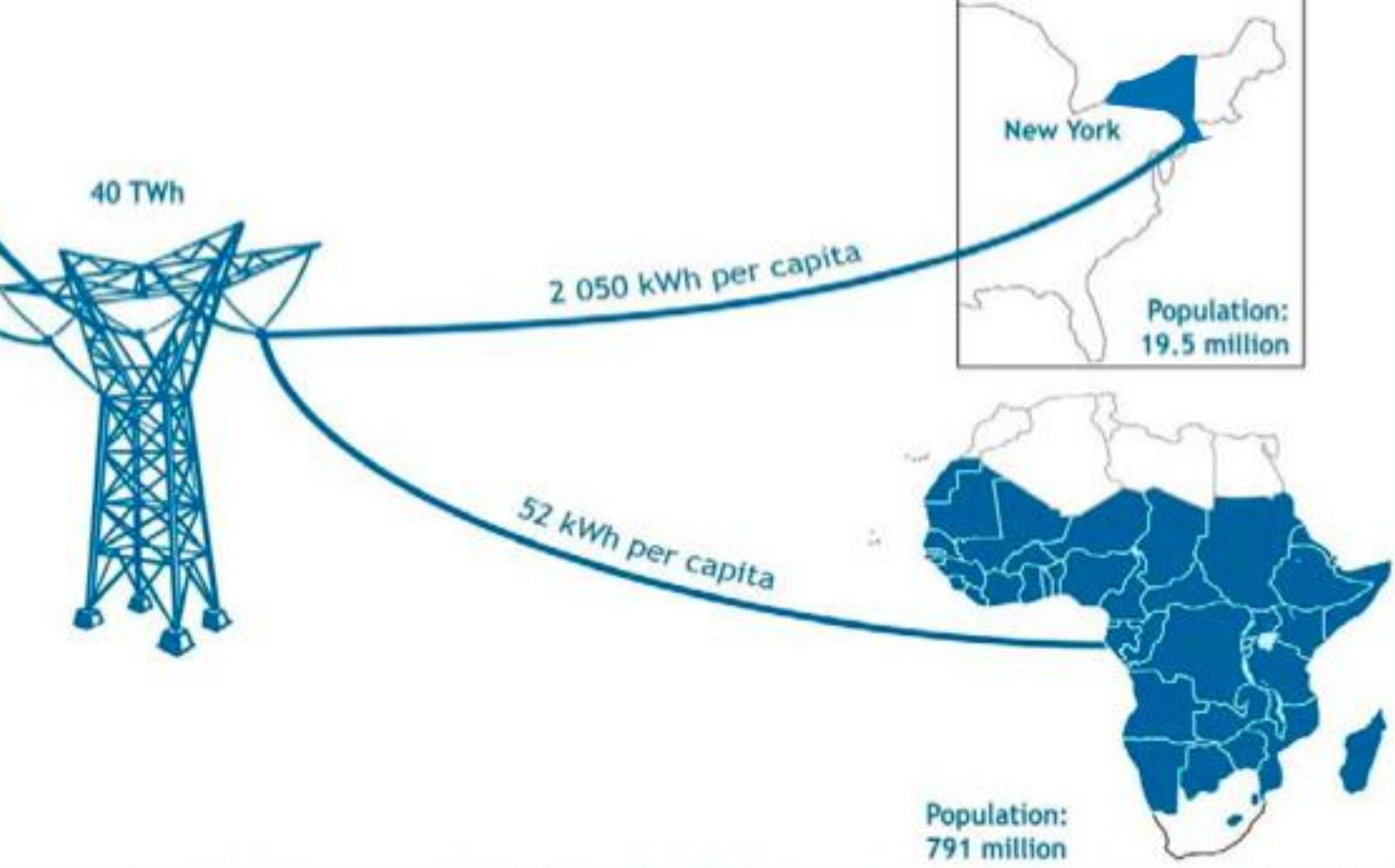


1.5x

ENERGY



>2x



40 TWh

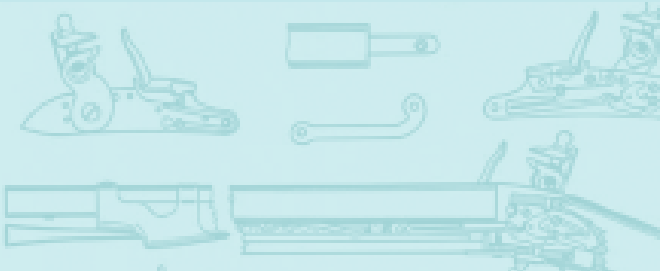
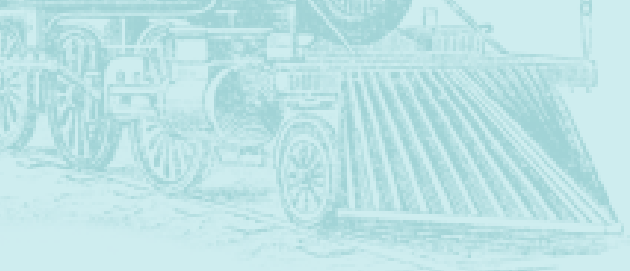
2 050 kWh per capita

New York

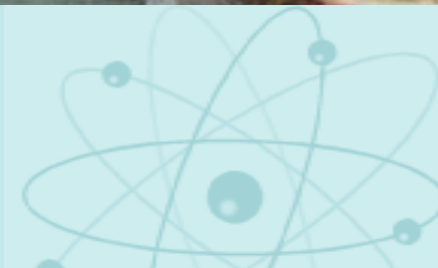
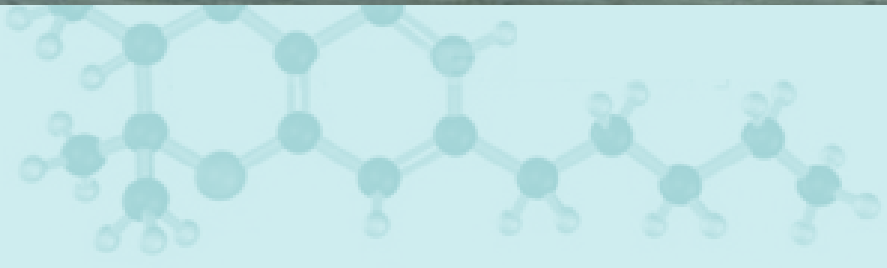
Population:
19.5 million

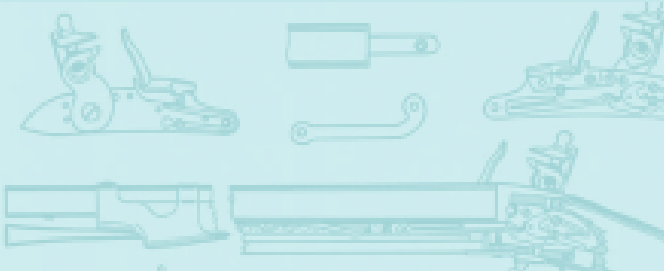
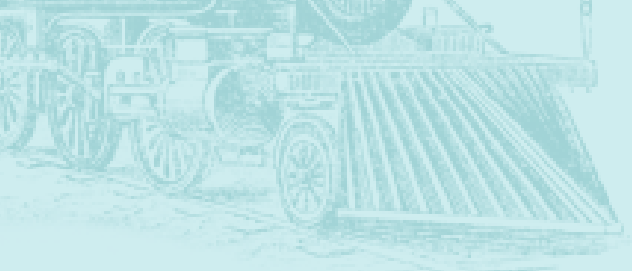
52 kWh per capita

Population:
791 million

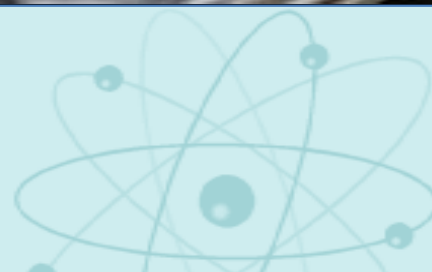
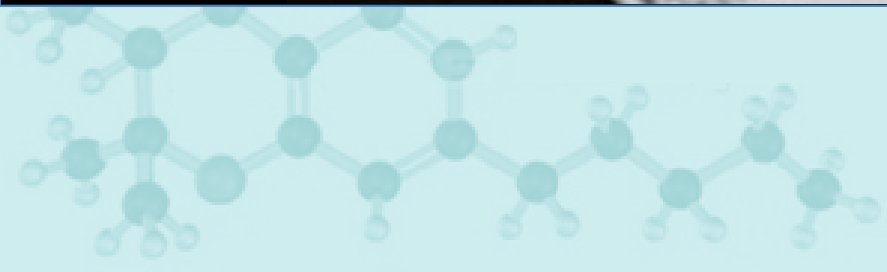


- **13,200 Deaths**
- **20,000 Heart Attacks**
- **9,700 Hospitalizations**
- **\$100b Economic Toll**





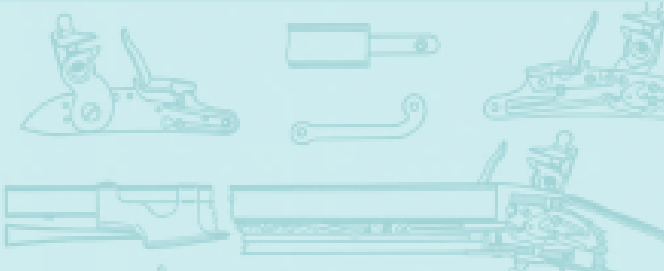
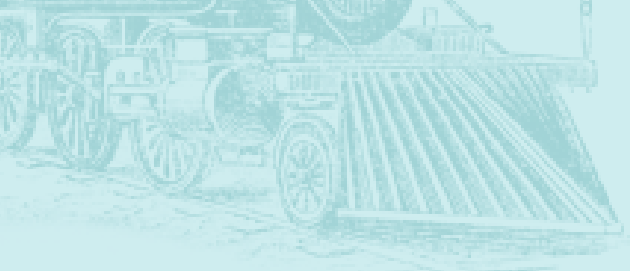
\$1.4 Billion Per Day



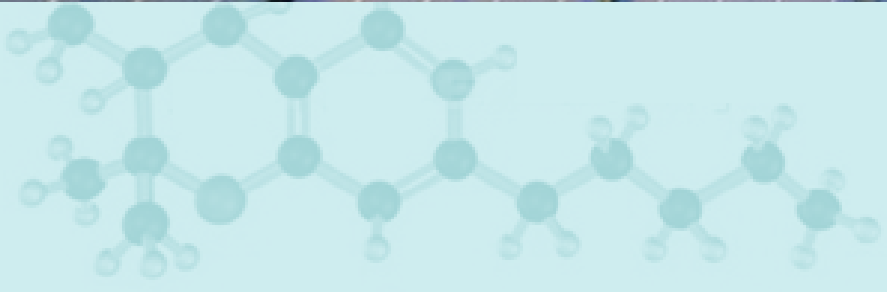


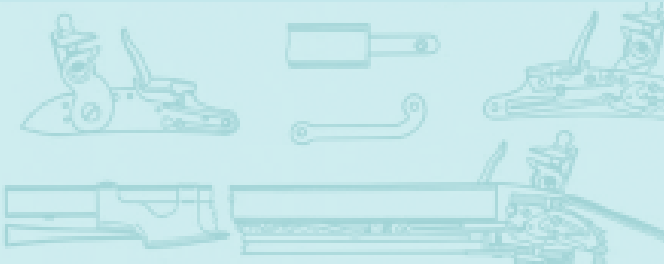
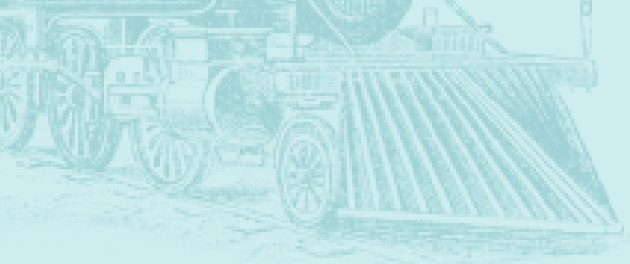
CO_2



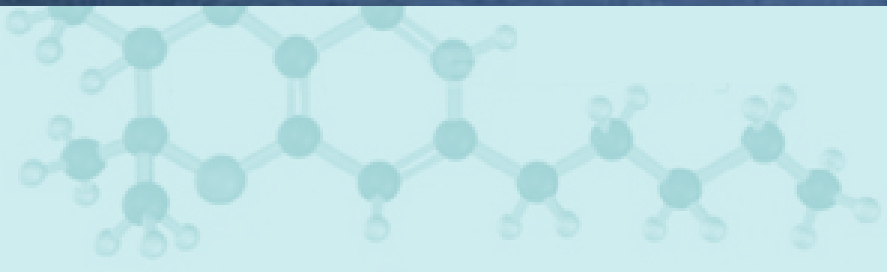


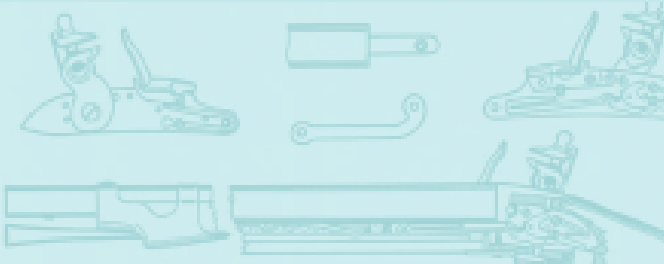
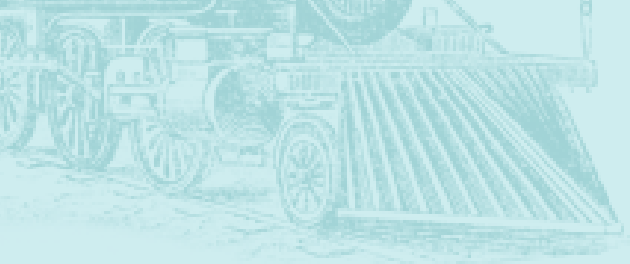
7:00
7:00



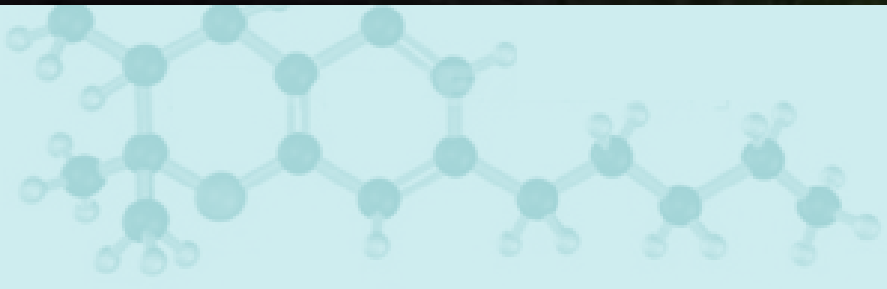


6-7x





Two Days



We must develop

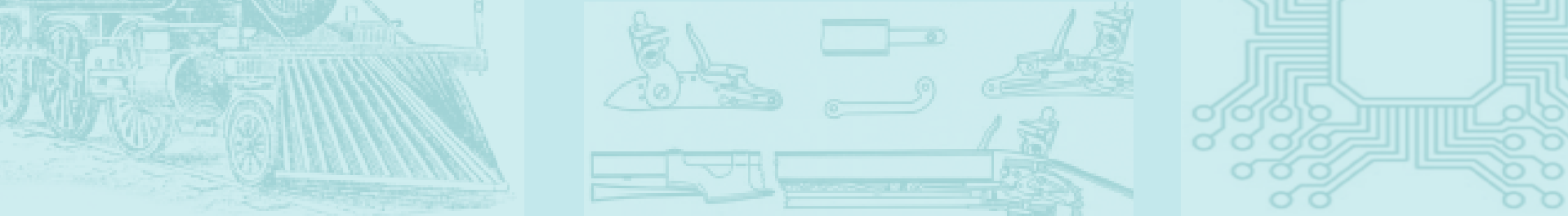
CLEAN

CHEAP &

**MASSIVELY
-ABLE**

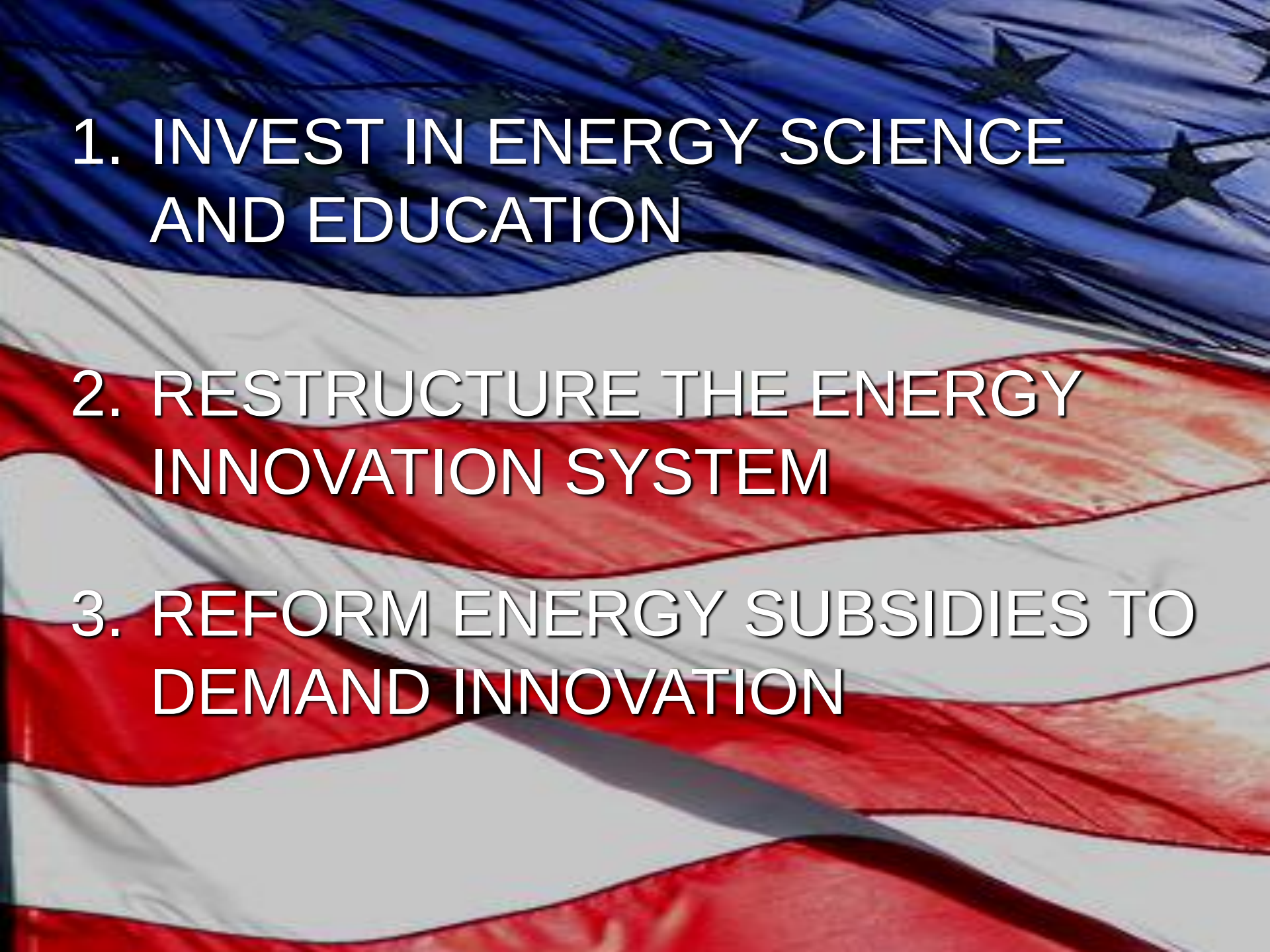
-energy technologies-----





AMERICAN INNOVATION



The background of the slide is a close-up, slightly blurred image of the United States flag, showing the blue field with white stars and the red and white stripes. The flag appears to be waving, creating a sense of motion.

1. INVEST IN ENERGY SCIENCE
AND EDUCATION

2. RESTRUCTURE THE ENERGY
INNOVATION SYSTEM

3. REFORM ENERGY SUBSIDIES TO
DEMAND INNOVATION



The background features a collage of light blue illustrations. At the top left is a steam locomotive. To its right are various mechanical parts and tools. Further right is a circuit board. At the bottom left is a molecular structure. At the bottom center is a stylized atomic model. At the bottom right is a vintage tractor.

The *Energy* INNOVATION IMPERATIVE

Jesse Jenkins

Breakthrough Institute

jesse@theBreakthrough.
org

<http://theBreakthrough.org>





WHERE *Good* TECHNOLOGIES COME FROM



GEORGE WASHINGTON

Interchangeable
Parts

1794



ABRAHAM LINCOLN

Railroads &
Agricultural Research

1862



DWIGHT EISENHOWER

Nuclear
Power

1956



JOHN F. KENNEDY

Microchips

1961



RICHARD NIXON

Biomedical
Research

1971

CASE STUDIES IN AMERICAN INNOVATION

December 2010

Breakthrough
Institute Report:

<http://bit.ly/AmericanInnovation>

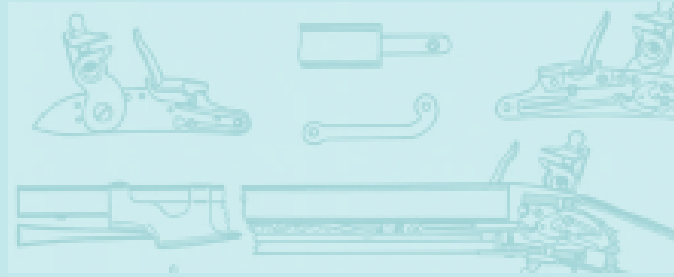
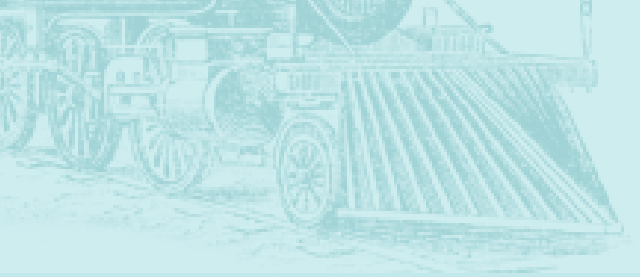
POST-PARTISAN POWER

**HOW A LIMITED AND DIRECT APPROACH TO ENERGY INNOVATION
CAN DELIVER CLEAN, CHEAP ENERGY,
ECONOMIC PRODUCTIVITY AND NATIONAL PROSPERITY**

**Steven F. Hayward, Resident Scholar, American Enterprise Institute,
Mark Muro, Senior Fellow, Metropolitan Policy Program, Brookings Institution,
Ted Nordhaus and Michael Shellenberger, Cofounders, Breakthrough Institute**

Breakthrough
Institute Report:

[http://bit.ly/PostP
artisanPower](http://bit.ly/PostP
artisanPower)



Stay tuned for more...

Breakthrough Institute
<http://theBreakthrough.org>

