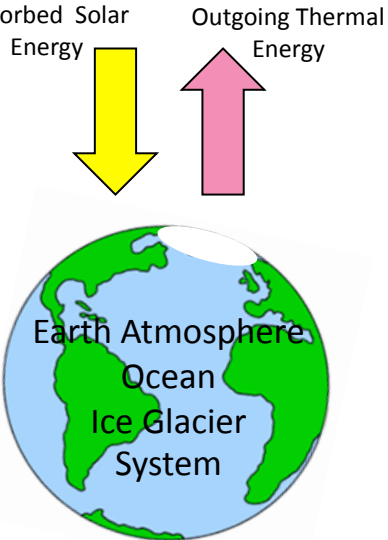


# Imbalances: drivers of Global Warming and the US Budget Deficit

Preindustrial

Absorbed Solar Energy      Outgoing Thermal Energy

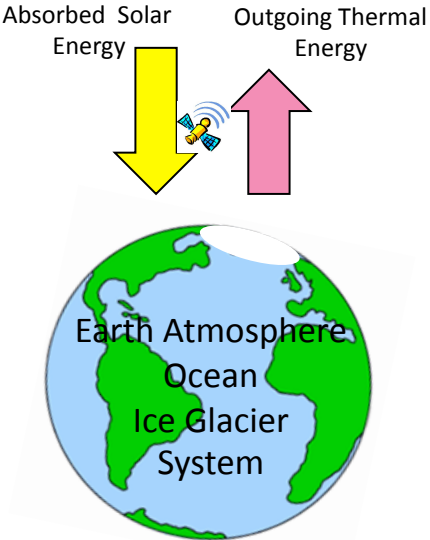


**Energy Balance:**  
 Constant Air Temperatures  
 Constant Ocean Heat Content  
 Constant Glacier / Sea Ice extent

When there is balance between absorbed Solar Energy and Outgoing Thermal Energy, air temperatures and ocean heat content are constant....

Today, 20<sup>th</sup> 21<sup>th</sup> Cen.

Absorbed Solar Energy      Outgoing Thermal Energy

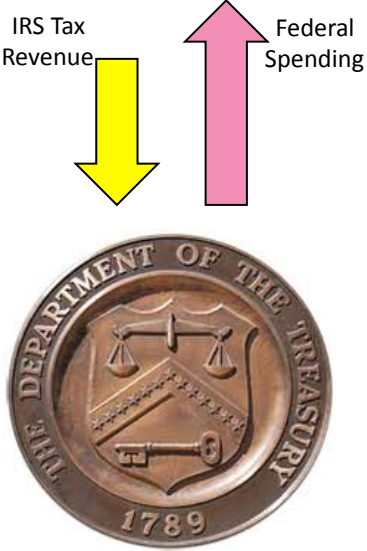


**Energy Imbalance:** Surplus  
 Rising Air Temperatures  
 Increasing Ocean Heat Content  
 Melting Glaciers and Sea Ice

But today Greenhouse Gases reduce the Outgoing Thermal Radiation causing a surplus of energy, resulting in rising air temperatures and increasing Ocean Heat Content. Satellite instruments measure both absorbed solar and outgoing thermal energy – they see the imbalance! Also, Oceanographers measure the rising Ocean heat content since 1957.

Today

IRS Tax Revenue      Federal Spending



**Budget Imbalance:** Deficit  
 Borrowing / Printing Dollars

The US Budget is also imbalanced. But here the Treasury has too much outgoing money (Federal Spending) resulting in a Budget Deficit.

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 (more at [temperaturetrends.org](http://temperaturetrends.org))

