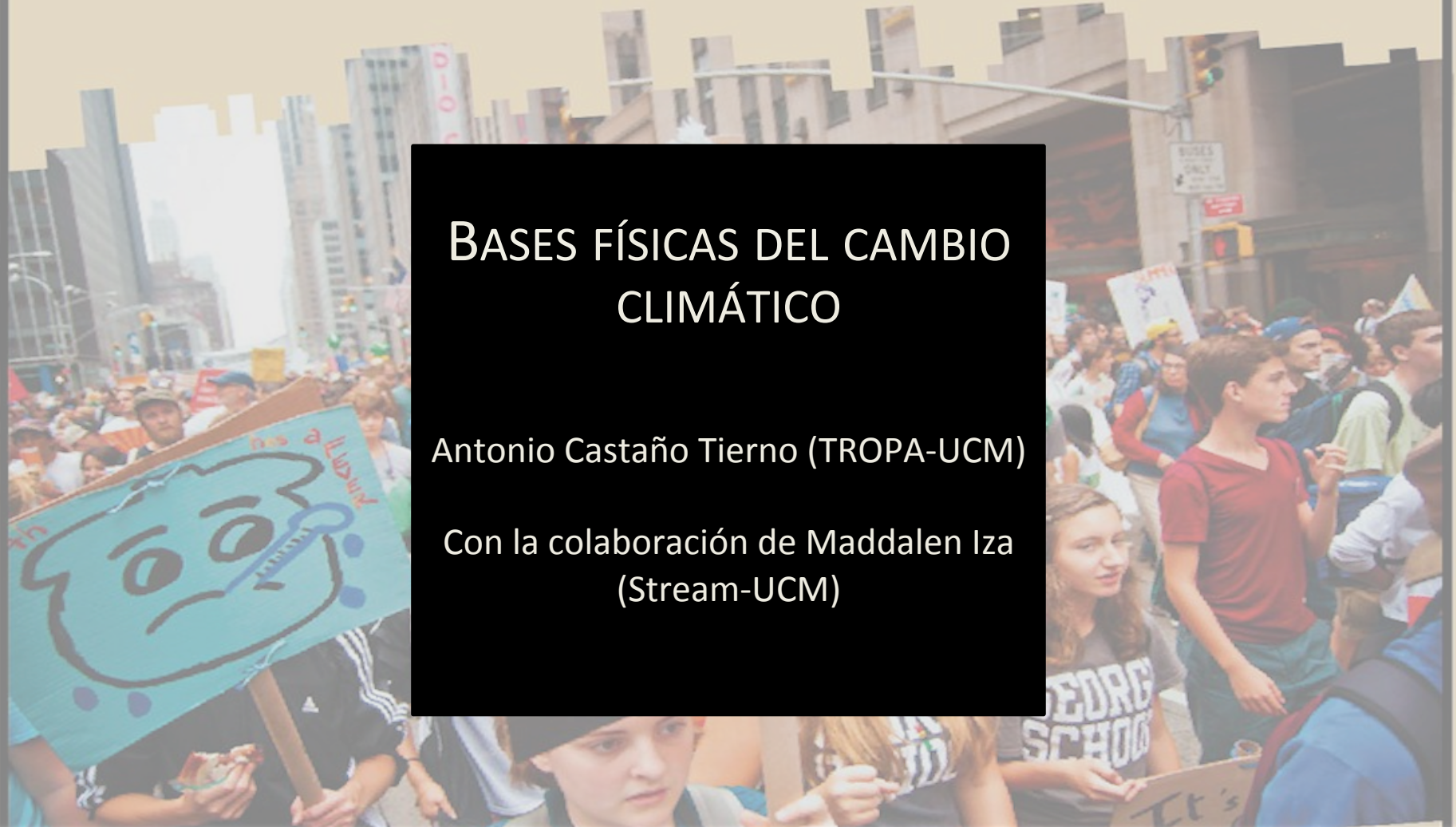


# LOS MOVIMIENTOS SOCIALES FRENTE AL CAMBIO CLIMÁTICO

## BASES FÍSICAS DEL CAMBIO CLIMÁTICO

Antonio Castaño Tierno (TROPA-UCM)

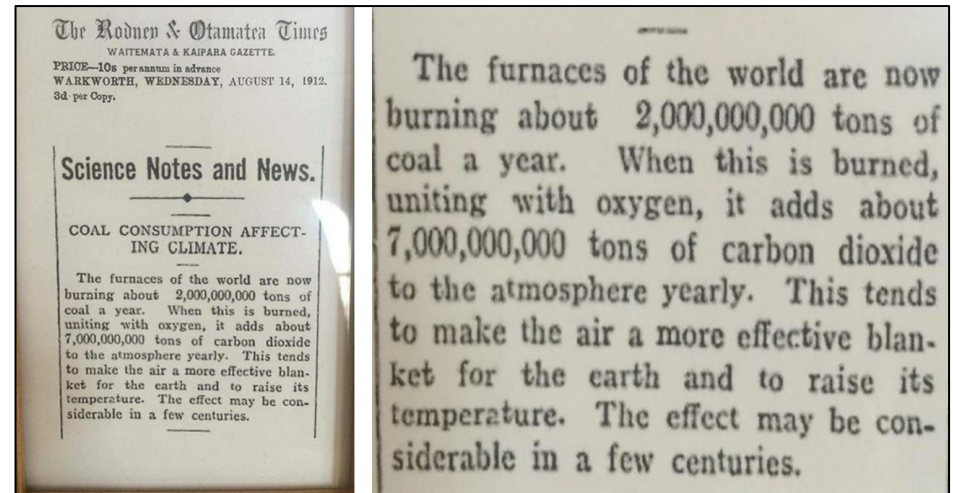
Con la colaboración de Maddalen Iza  
(Stream-UCM)



## ¿Por qué el cambio climático?

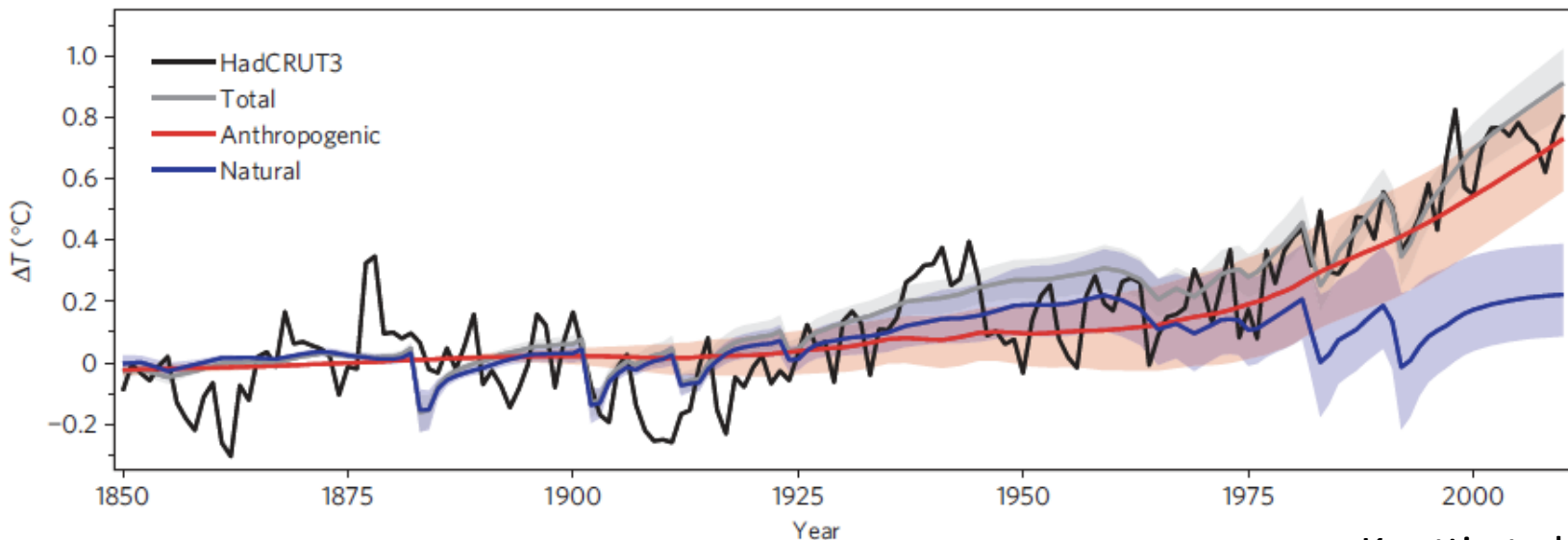
El aumento de CO<sub>2</sub> en la atmósfera produce un calentamiento del planeta (Arrhenius, 1904).

La mayor parte del calentamiento entre 1850 y el presente se debe a la actividad humana (IPCC, 2012)



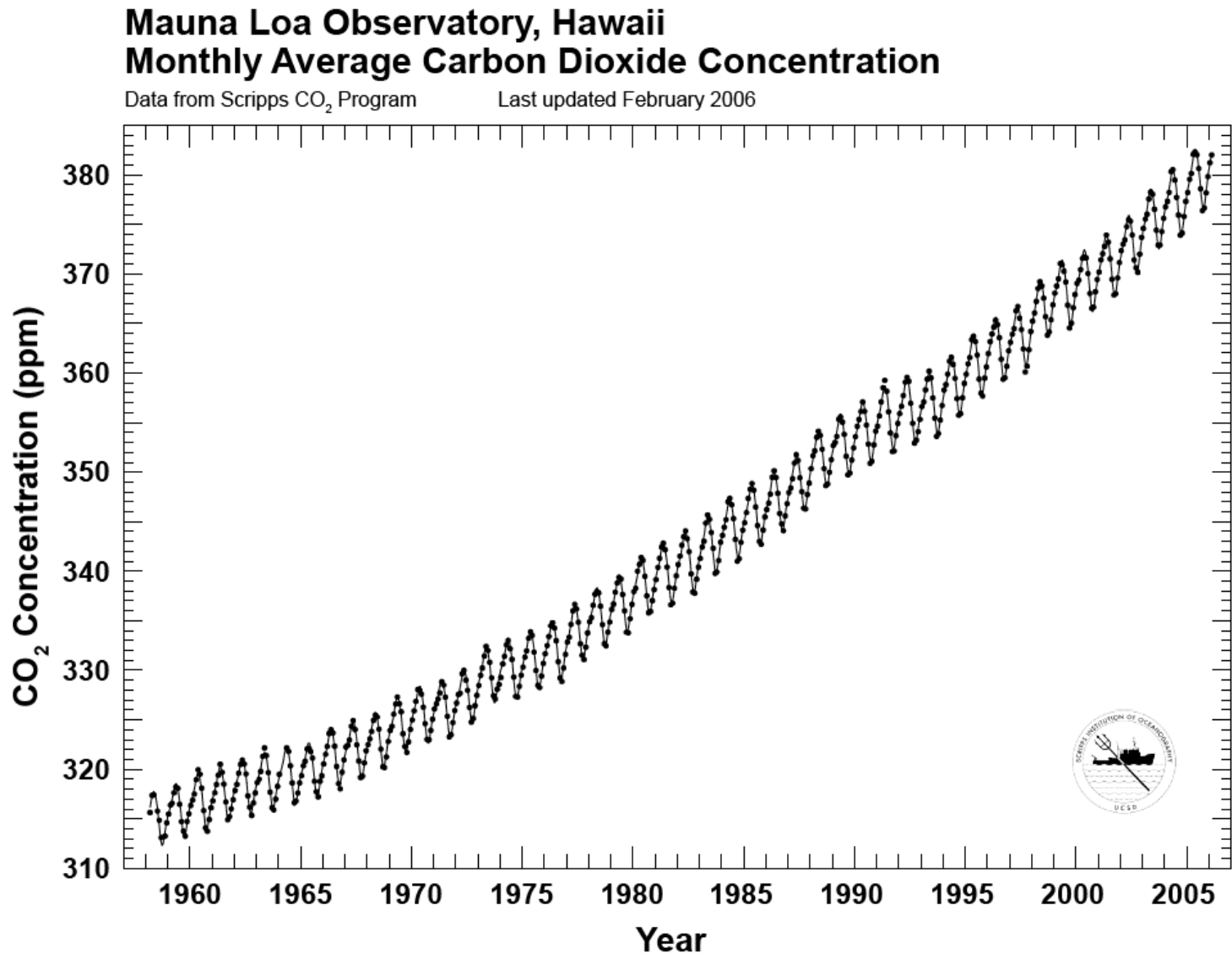
a

Global mean temperature anomaly w.r.t. 1850–1900



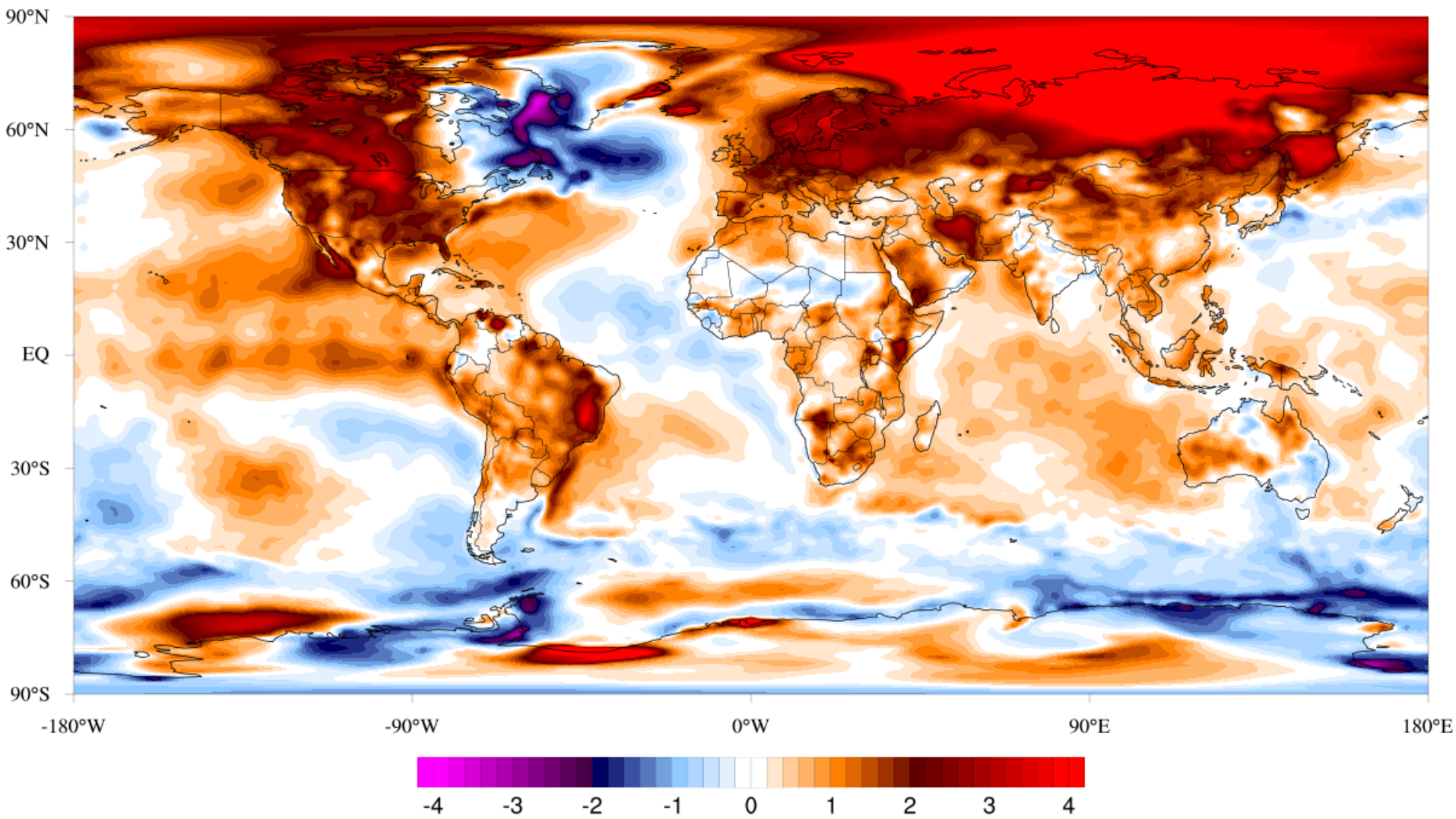
Knutti et al. 2010

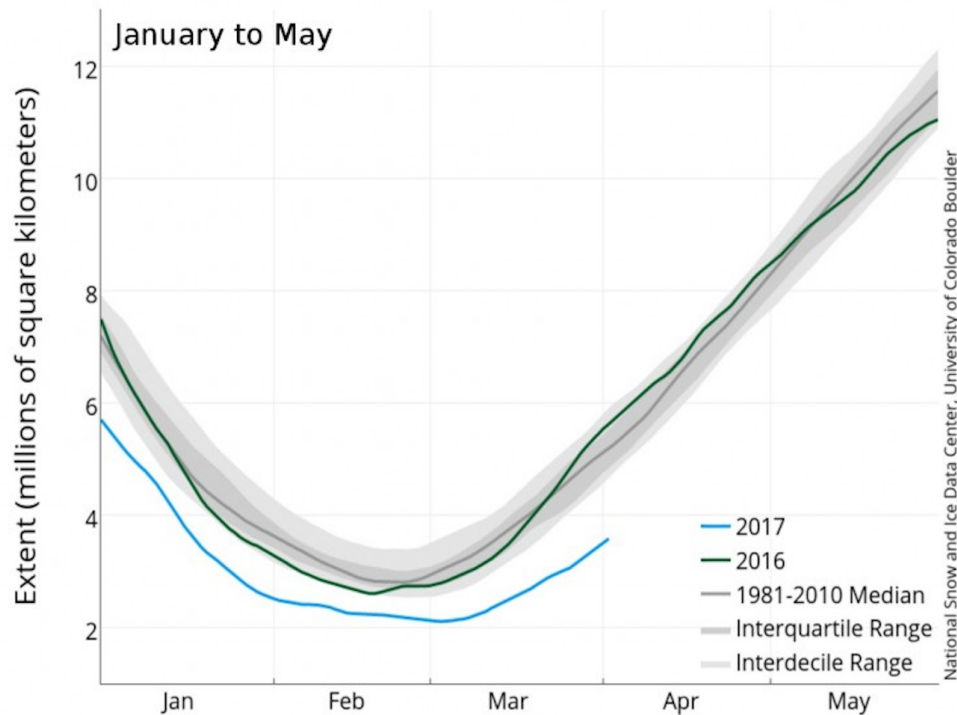
## Concentración de CO<sub>2</sub>



Temperature Anomaly at 2 meters (°C)  
ERA-Interim

Ann 2015 minus 1979



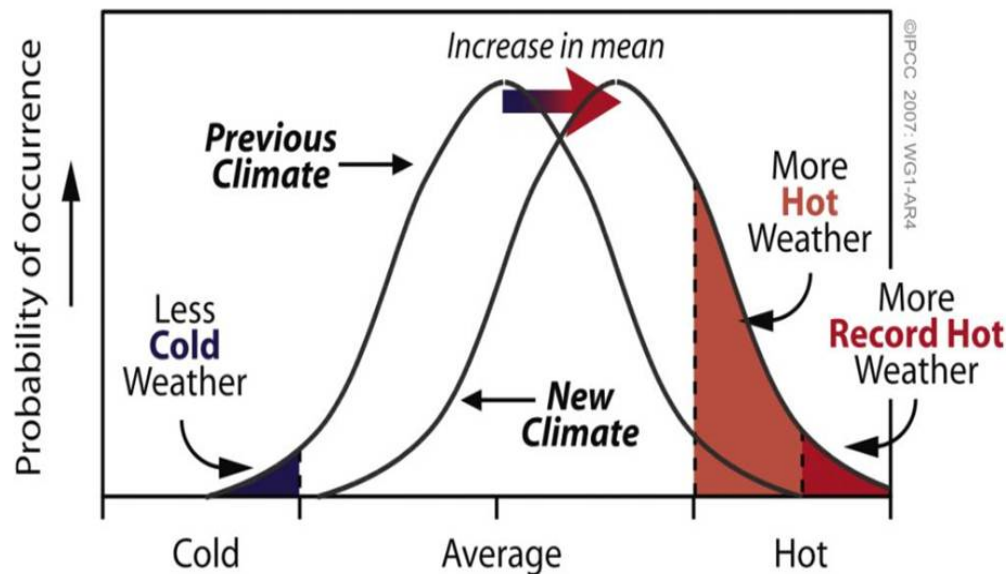


Updated: 02 Apr 2017

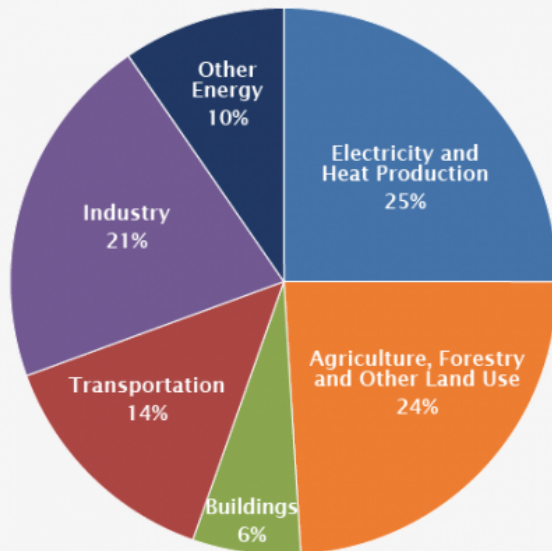
Consecuencias (brevemente)

← Deshielo de los polos  
y aumento del nivel del mar

Más calor y más olas de calor



## Global Greenhouse Gas Emissions by Economic Sector



## Reparto de las emisiones

### Per Capita Emissions for Top 10 Emitters

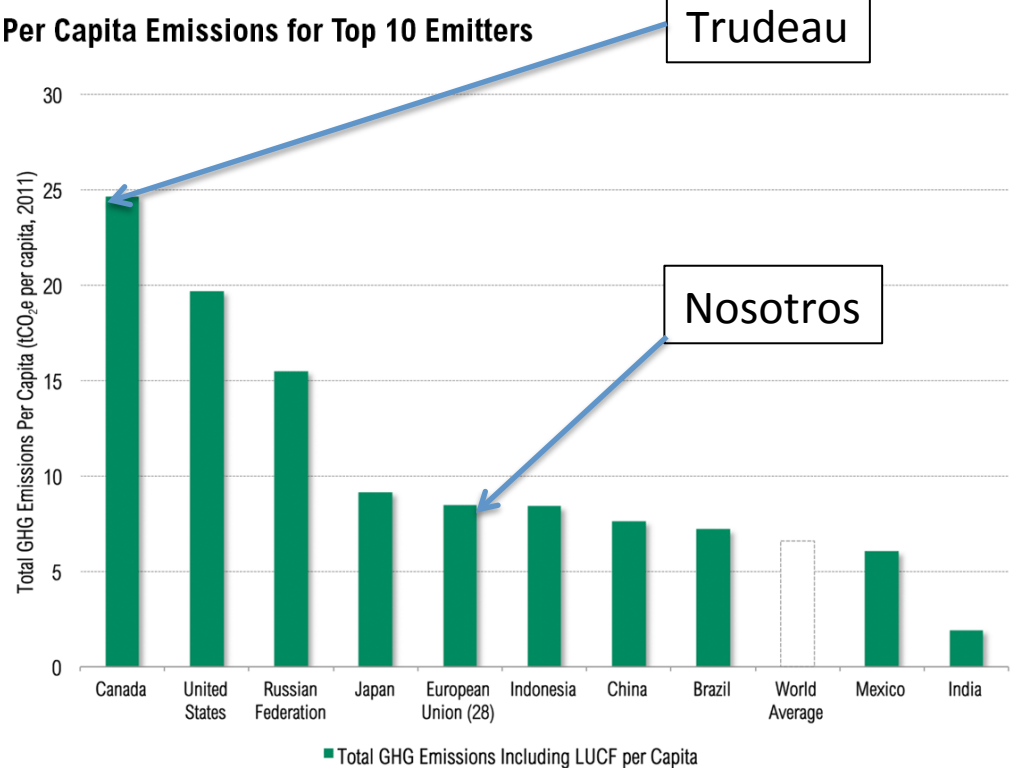
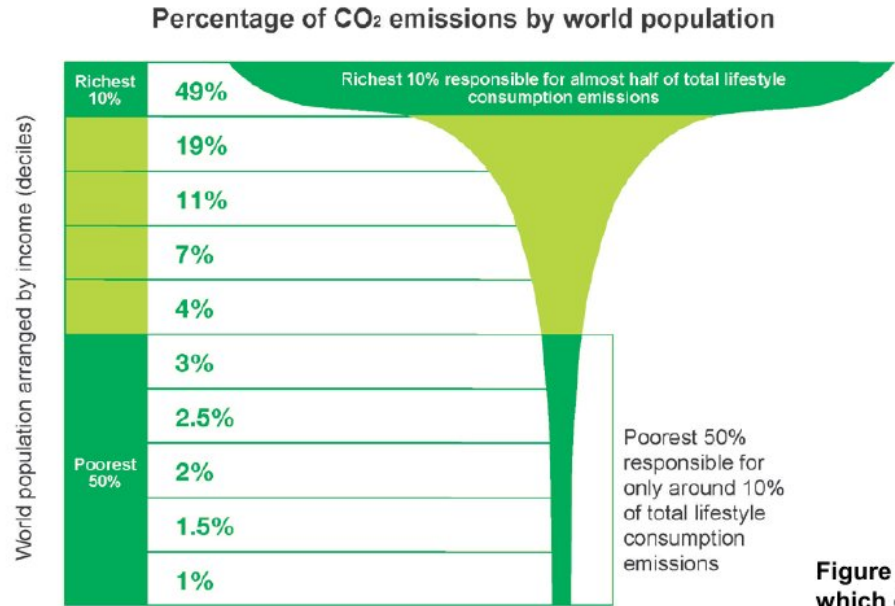


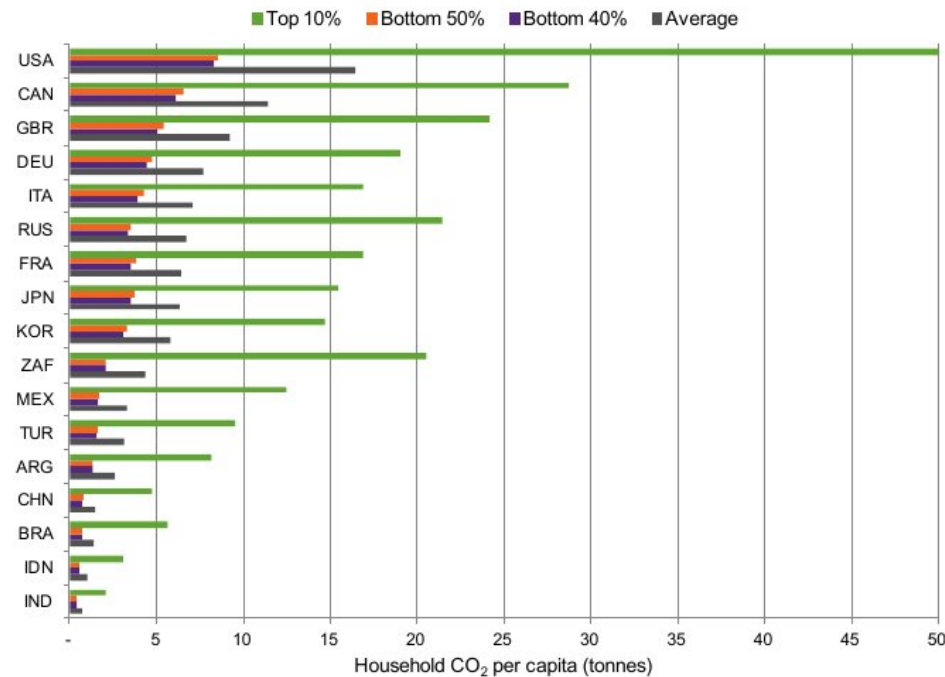
Figure 1: Global income deciles and associated lifestyle consumption emissions



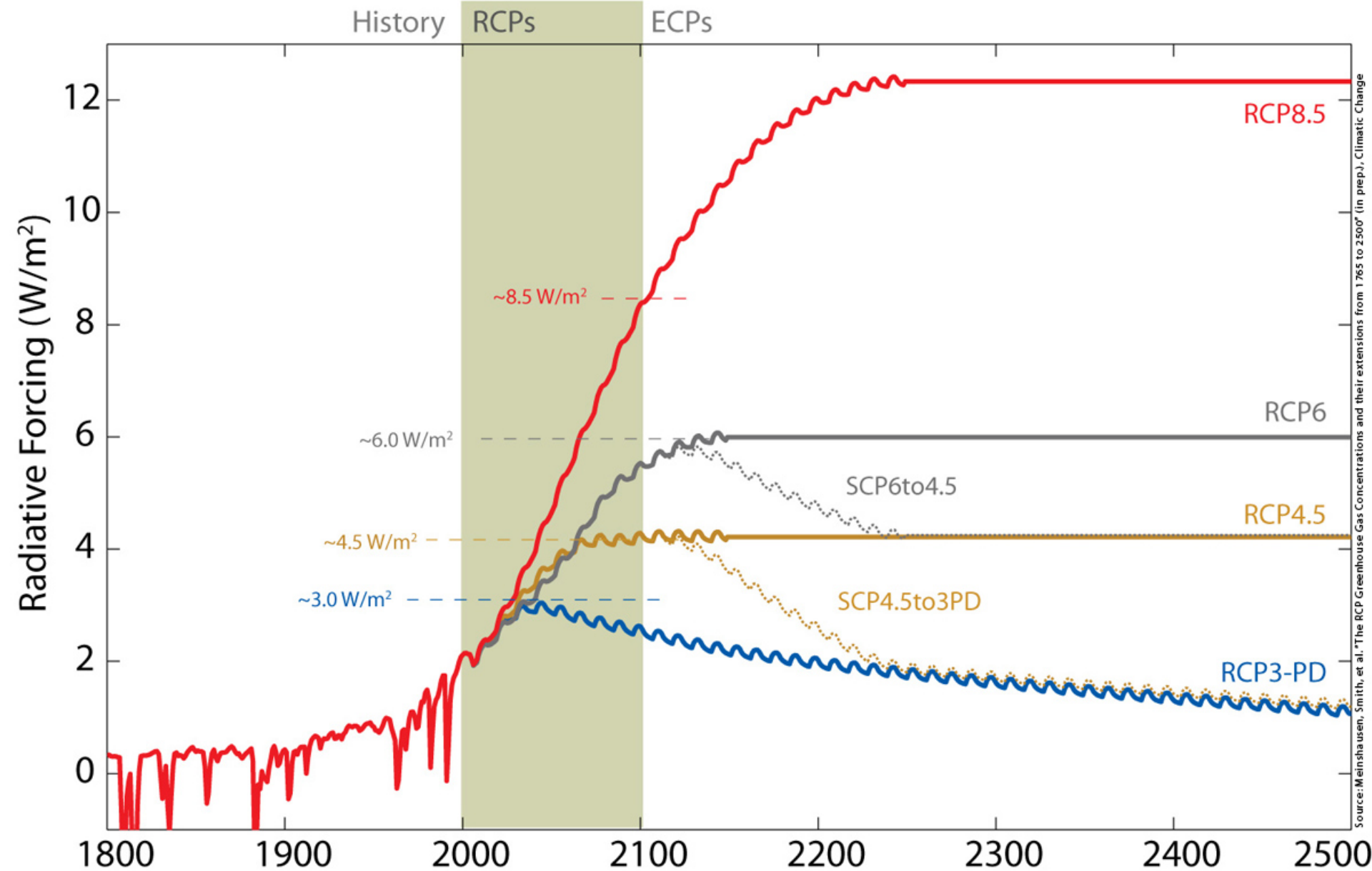
Source: Oxfam

## Reparto de las emisiones

Figure 4: Per capita lifestyle consumption emissions in G20 countries for which data is available



## Varios futuros



## ¿Otro futuro?

### CARBON CRUNCH

There is a mean budget of around 600 gigatonnes (Gt) of carbon dioxide left to emit before the planet warms dangerously, by more than 1.5–2°C. Stretching the budget to 800 Gt buys another 10 years, but at a greater risk of exceeding the temperature limit.

