

A Note on Carbon Space as Development Space

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Impact on Developing Countries

- If developed countries cut slowly, less carbon space will be left for the developing countries
- If carbon space is limited, developing countries will
 - Incur higher cost per unit of energy to lower emissions
 - Have to limit energy consumption
- This is why developed countries need to cut right now and make deep cuts

Comparative Figures

Countries	Per Capita at (\$)	Per Capita Consumption (kgoe)	Per Capita Consumption (KWhr)	Per Capita Emissions (CO₂ Tons)
India	2,600	528	542	1.3
China	5,085	1,484	2,332	4.3
Germany	33,183	4,026	7,184	9.5
US	43,031	7,766	13,651	20

Chart

Map

How to use

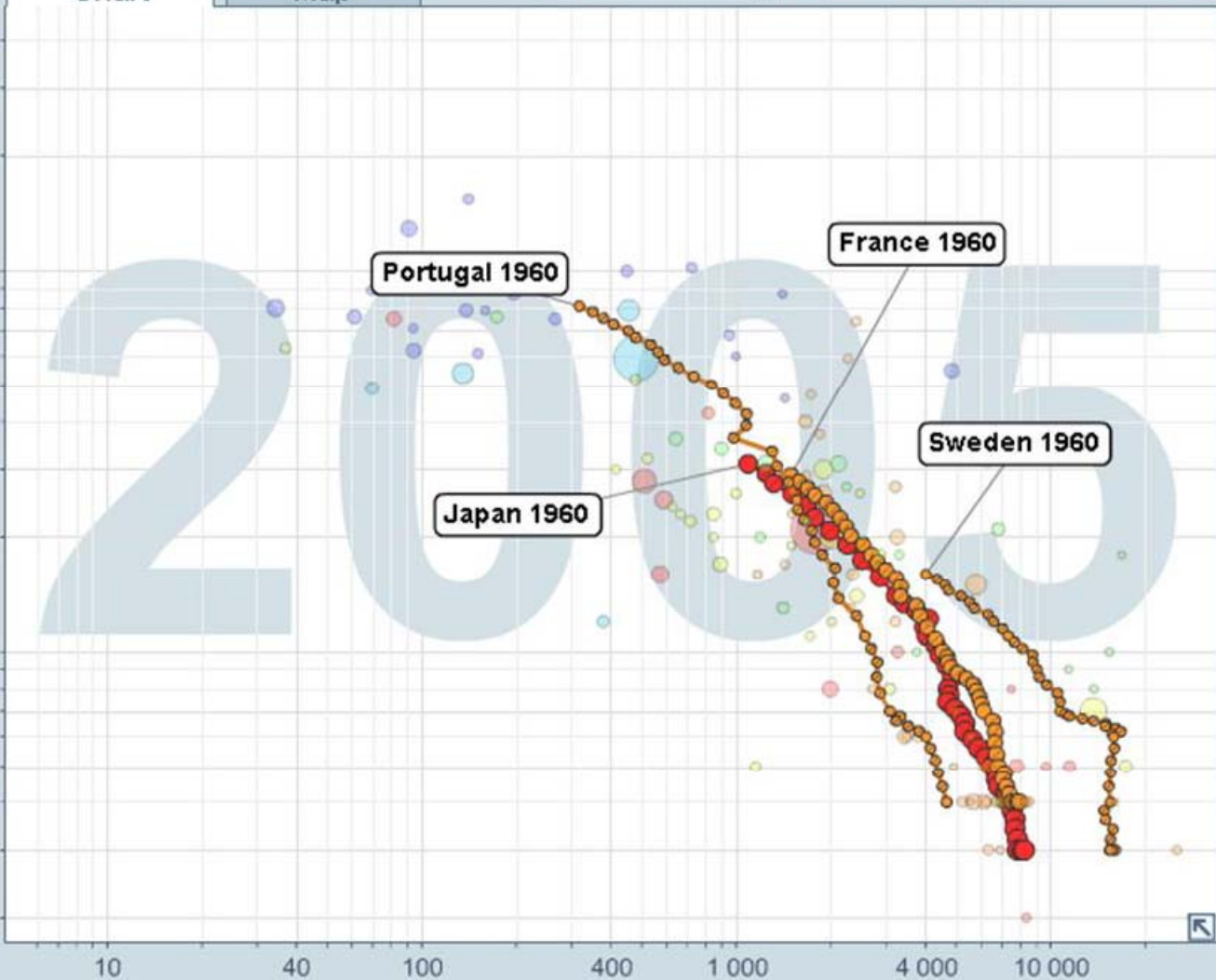
Share graph

Normal view

log

Infant mortality rate (per 1,000 births)

Various sources



Electricity consumption, per person

log

World Development Indicators

Play

1960 1965 1970 1975 1980 1985 1990 1995 2000 2005

Trails

Color

Gapminder Geogra...

Geographic regions



Select

- Hungary
- Iceland
- India
- Indonesia
- Iran
- Iraq
- Ireland
- Israel
- Italy
- Jamaica
- Japan
- Jordan
- Kazakhstan

Deselect all

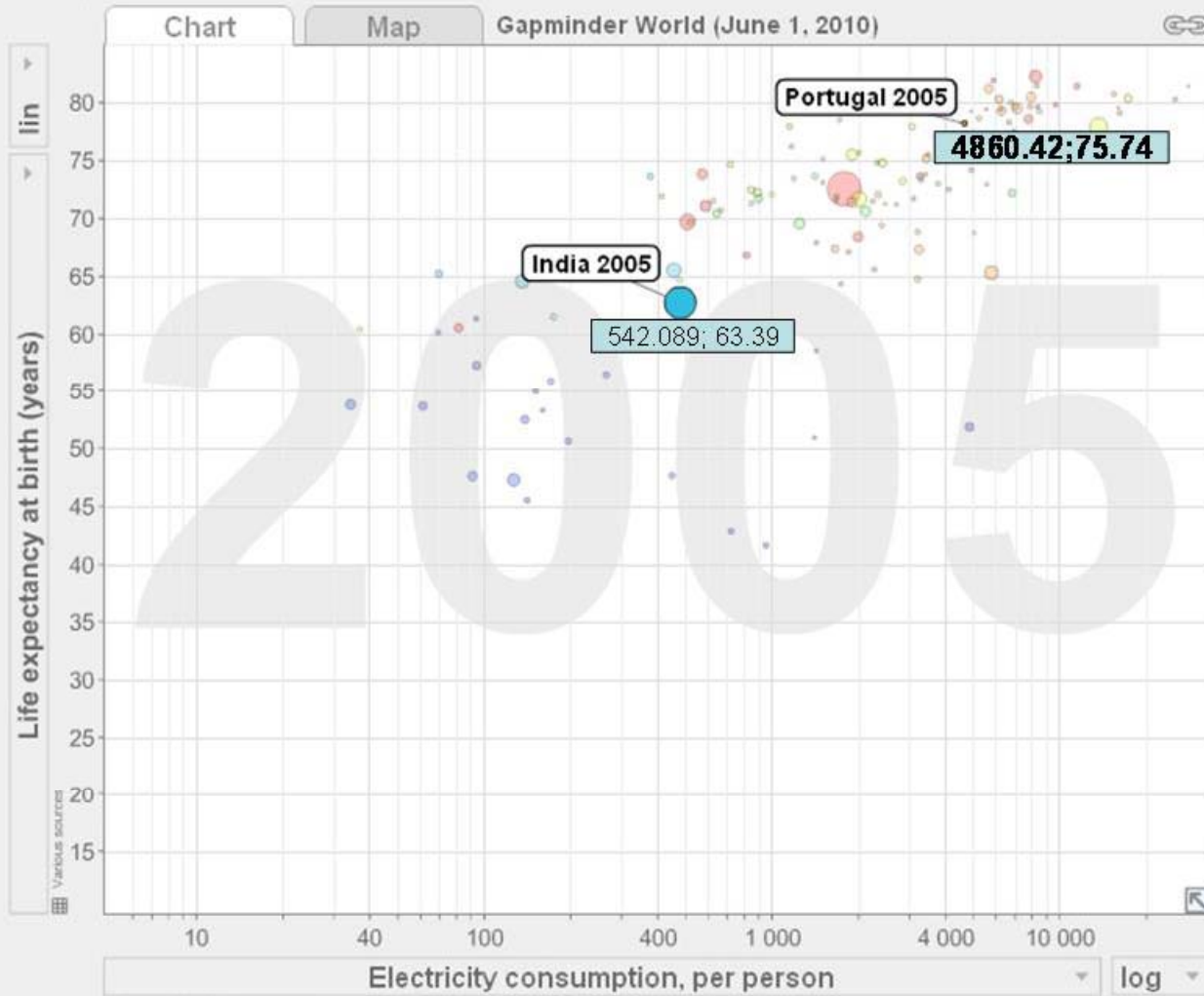
Size

Various sources

Population, total

1.46 B

[New example] +



Color Gapminder Geogra

Geographic regions



Select

- North Korea
- Norway
- Oman
- Pakistan
- Panama
- Paraguay
- Peru
- Philippines
- Poland
- Portugal
- Qatar
- Romania
- Russia

Deselect all

Size Various sources

Population, total

1.46 B



India's Energy Projection

8% Rate of Growth

Years	Electricity (Kwhr)	Population (Billion)	Total (BKWH)
2007	542	1.12	607
2020	1208	1.37	1651
2035	3427	1.53	5237
2038	4256	1.55	6597
2040	4907	1.57	7694

India's Energy Projection

9.1% Rate of Growth

Years	Electricity (Kwhr)	Population (Billion)	Total (BKWH)
2007	542	1.12	607
2020	1378	1.37	1883
2035	3910	1.53	5974
2038	4855	1.55	7526

Low Carbon Path: Costs

Item	Cost/MW (\$ Million)	PLF	Cost/KWhr (Cents)
Coal Fired Plant	1.2	80%	6.3
Nuclear Plant (Imported)	7.5	80%	25.3
Solar	4.5	25%	56

Thank You

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