

# Climate Change and Sustainable Development:

*What are the Implications of the Paris Agreement for Africa's Sustainable Development Agenda*

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# Introduction

- The adoption of a binding climate change agreement which addresses the key pillars of the Bali framework and is based on the principle of Common but Differential Responsibilities
- A strong commitment to keep temperature increase below 1.5 degrees C.
- An emphasis on the importance of adaptation for Africa, and
- Additional and adequate finance, including a strong commitment to capitalize the Global Climate Fund (GCF)

# To What Extent does the Paris Agreement Represent African Goals?

- The Paris agreement's main aim is to keep a global temperature rise this century well below 2 degrees Celsius and to explore opportunities to increase the level of ambition by limiting the temperature increase to 1.5 degrees Celsius above pre-industrial levels
- What are the implications of “well below 2 degrees C for Africa?
- A significant demand by Africa at COP 21 was the need for a legally binding agreement based on the principle of common but differentiated responsibilities.
- Enlightened self-interest

# Enlightened self-interest?

Why are they doing this [agreeing to their pledges]? Frankly, none of them are doing it to save the planet. ***Let us be very clear.*** They're doing it for what I think is a ***much more powerful political driving force***, which is for ***the benefit of their own economy.***

*—UN climate chief Christiana Figueres,  
(CNN, 2 December 2015). (my emphasis)*



# The Tragedy of the Commons

Imagine an open pasture shared by multiple cattle owners. Each owner increases their herd to maximize their benefits. With no agricultural controls this is "logical" since the benefit is enjoyed by the individual and the impacts are shared by all. This leads to the ultimate overgrazing of the pasture.

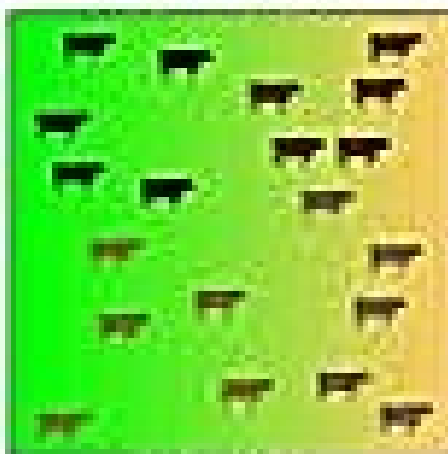
Shared Resource

Sustainable Use

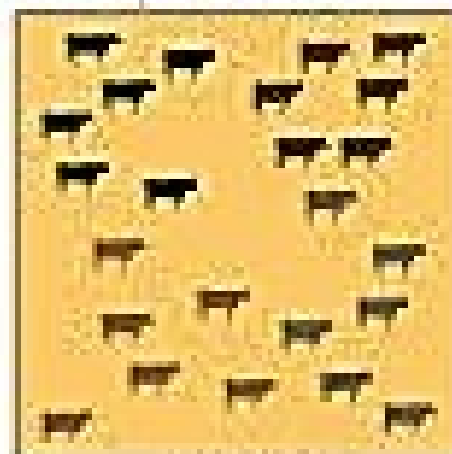
Depleted Resource



40 Acres (16 hectares)  
132000' (400m<sup>2</sup>)



20 Cows  
Carrying Capacity



20+ Cows  
Tipping Point

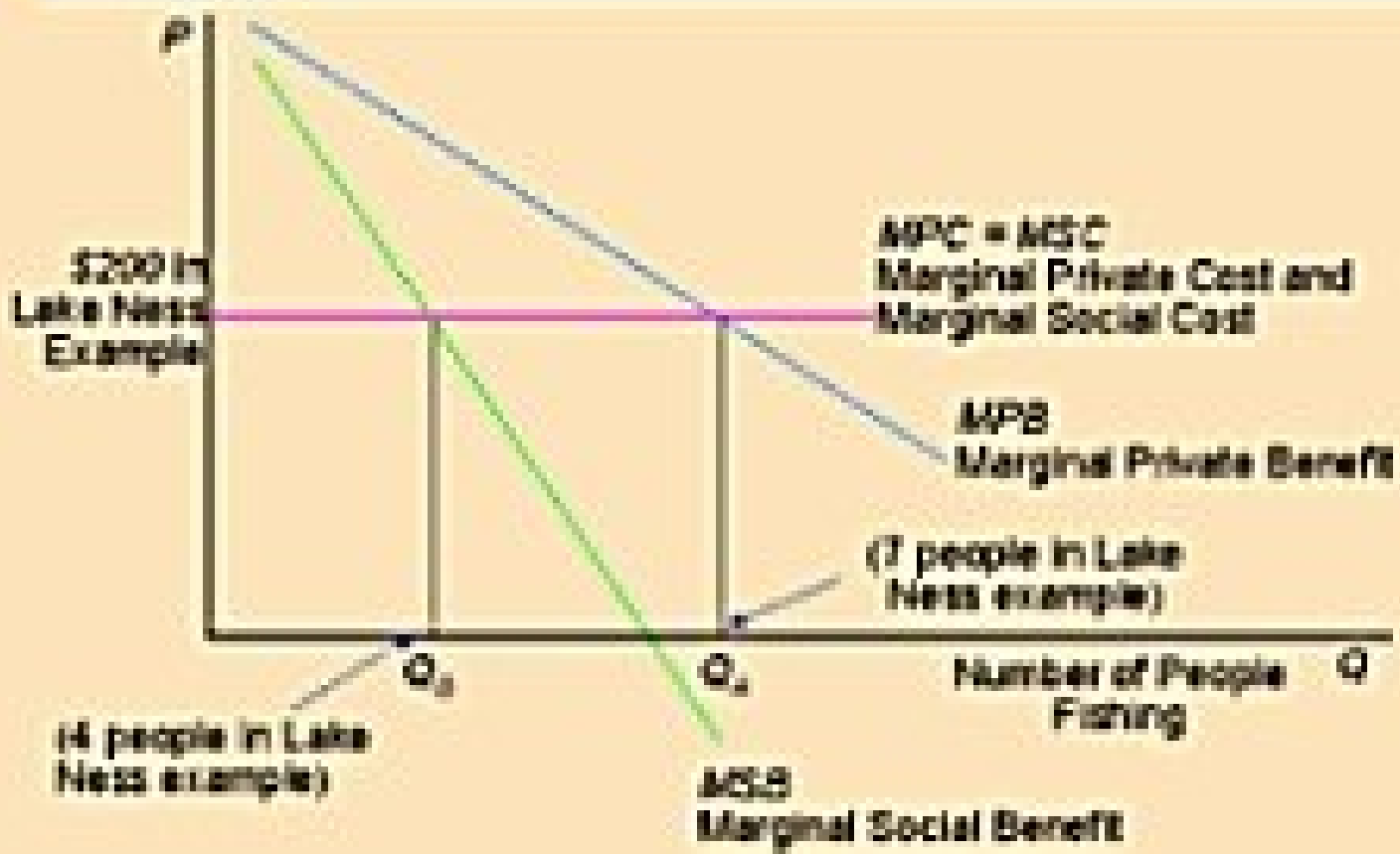
Atmosphere CO<sub>2</sub> + Ozone

The Tragedy of the Commons applies to numerous environmental, economic and social phenomena and has particular relevance to greenhouse gas regulation related to global warming.

Image credit: commons.wikimedia.org

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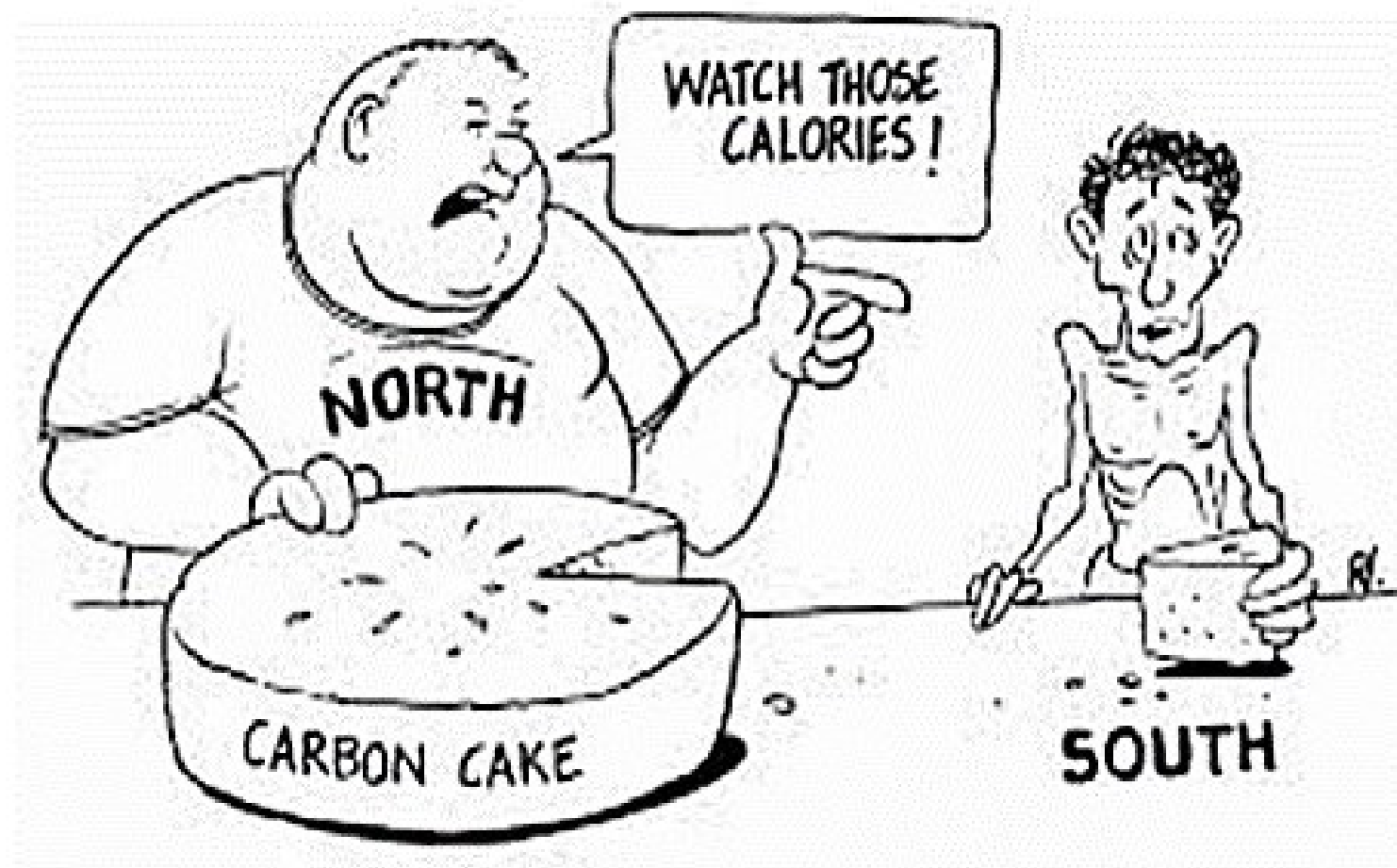
# Tragedy of the Commons



# Nationally Determined Commitments and Sustainable Development in Africa

- By the end of COP21 a record 187 countries, representing approximately 95% of GHG emissions, had presented their INDCs.
- The outcome of these pledges would be to emit 723 Gt of CO<sub>2</sub> by 2030
- That is out of the 1000 Gt CO<sub>2</sub> budget limit that must be respected by any 2°C scenario.
- This optimistic outcome increases CO<sub>2</sub> emissions to 40 Gt per year. At that rate there would be only seven years of CO<sub>2</sub> emissions left in the budget.
- This means that current pledges place every 2°C scenario far beyond reach.





# Decarbonization and Clean Energy

What are the possibilities for Africa in the context of the Paris agreement?

### ***Inequities in Global Income, Oil Consumption, and Population (% Share)***

<u>Region</u>	<u>Population</u>	<u>Gross National Income</u>	<u>Oil Consumption Per Capita</u>
<b>Sub-Saharan Africa (SSA)</b>	<b>1.5</b>	<b>1.2</b>	<b>3.4</b>
Latin America	8.6	4.5	5.8
Middle East & North Africa	4.7	10.6	7.1
North America	6.7	32.8	29.5
High Income	15.7	78.9	59.2*

\* OECD's Oil Consumption Share.

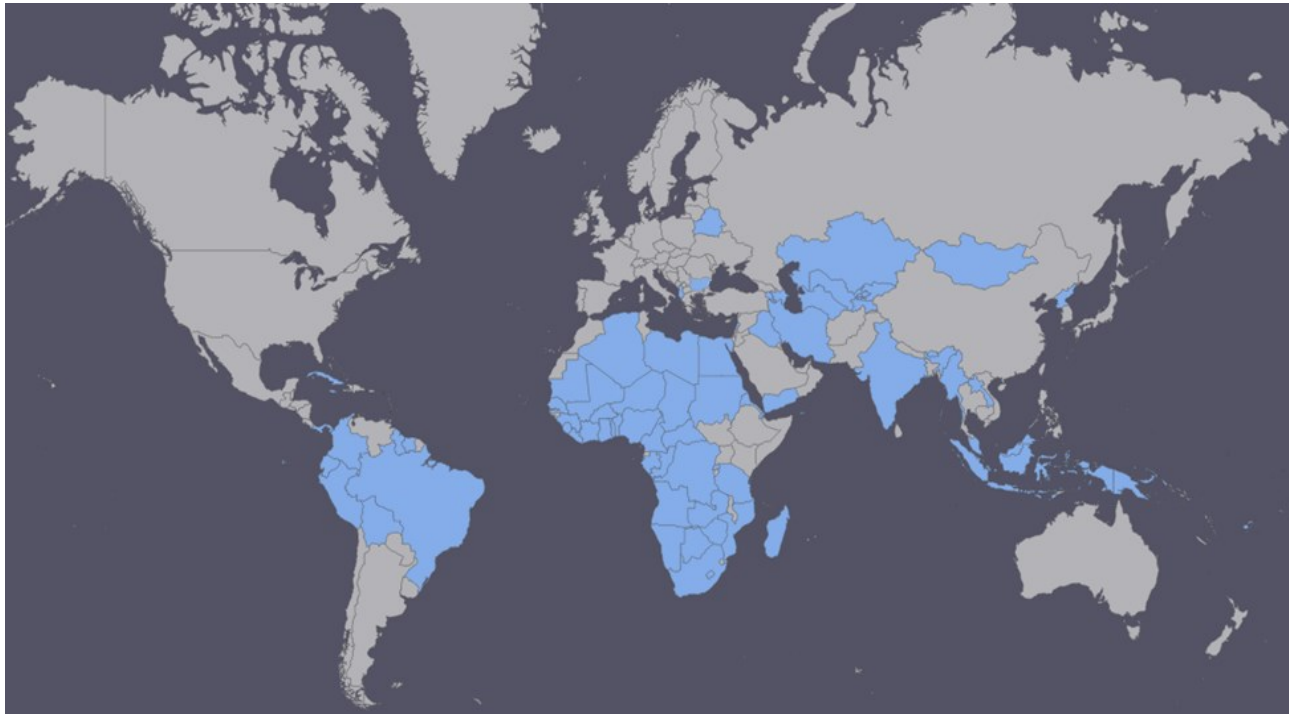
*Data Sources: World Development Report 2007: Income Data (WB, 2007); and BP (2006).*

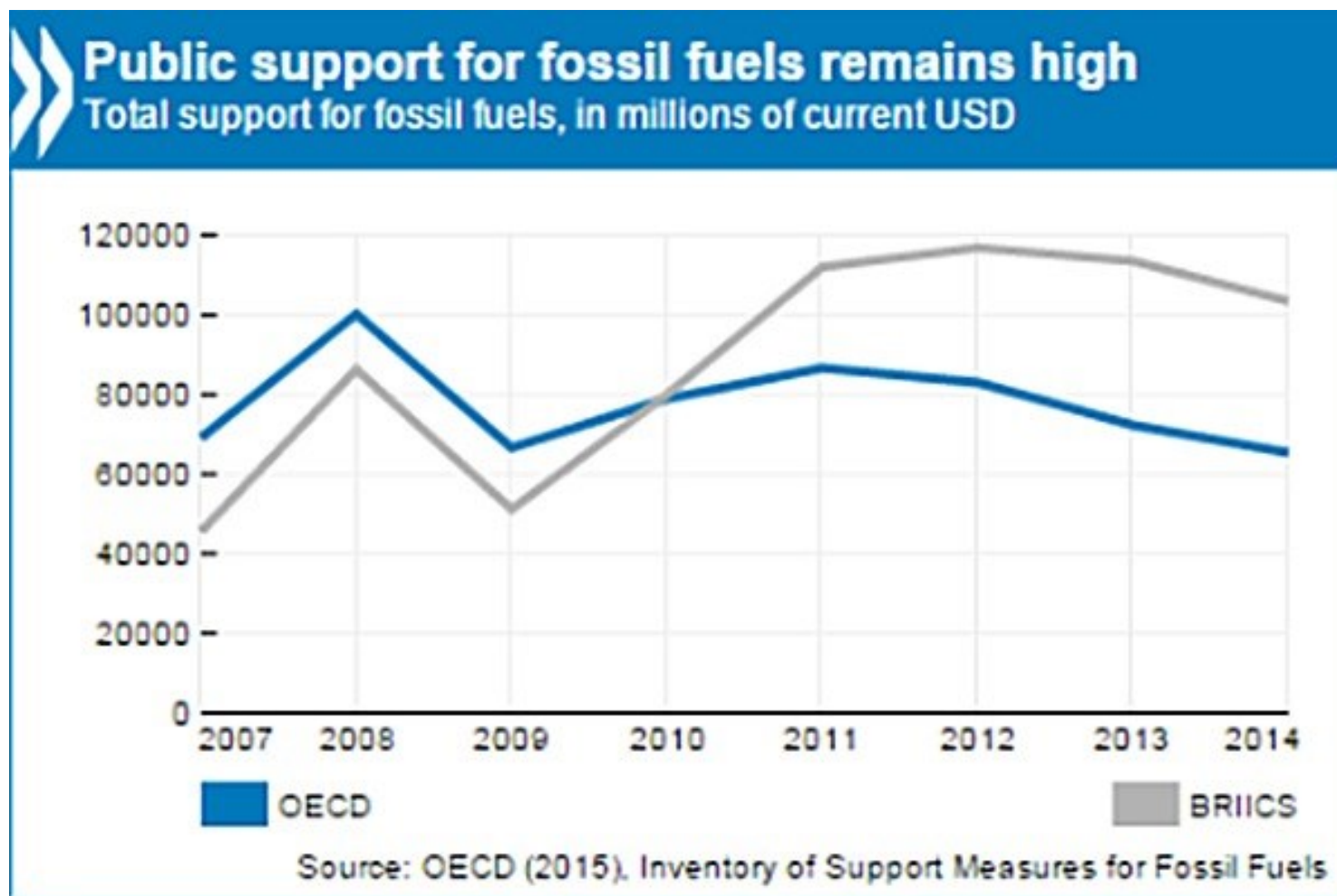
***Proved Crude Oil Reserves by Region, 1980 to 2006 (Billion Barrels)***

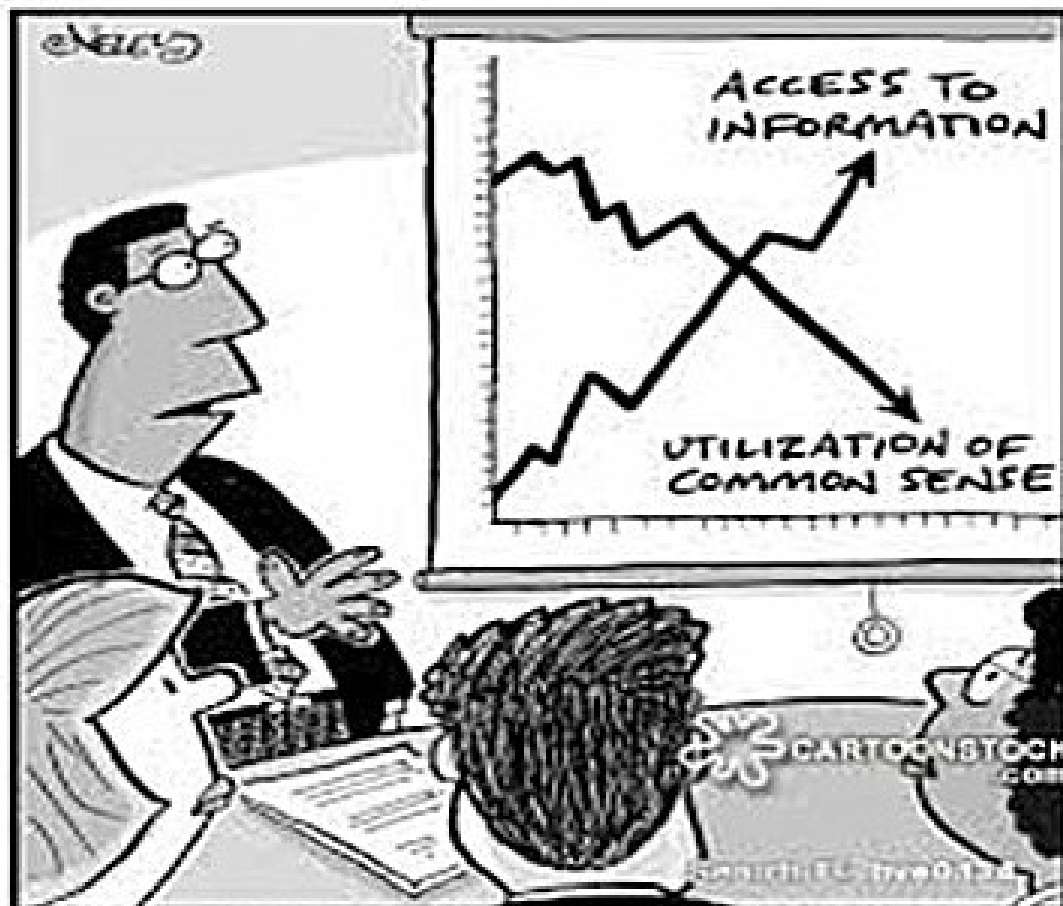
<b>Region</b>	<b>1980</b>	<b>1985</b>	<b>1990</b>	<b>2000</b>	<b>2005</b>	<b>2006</b>	<b>% of total in 2006</b>
Africa	53.3	57.0	58.7	93.4	114.3	117.2	9.7
North America	92.5	101.5	96.3	75.6	60.7	59.9	5.0
South & Cent. America	26.7	62.9	71.6	97.9	103.2	103.5	8.6
Europe & Eurasia	98.4	78.6	80.3	114.1	145.2	144.4	12.0
Middle East	362.4	431.3	657.7	691.0	742.7	742.7	61.5
Asia Pacific	33.8	39.1	36.3	42.6	40.5	40.5	3.4
World	667.1	770.4	1,000.9	1,114.7	1,209.5	1,208.2	100
of which OECD	109.2	118.6	115.1	100.0	81.9	79.8	6.6
OPEC	434.6	535.8	765.9	840.5	914.5	914.6	75.7
Non-OPEC	150.5	172.0	171.7	180.8	176.4	174.5	14.4

*Data Source: BP Statistical Review of World Energy 2007 (BP, 2007)*

# Countries with high levels of resource dependence







*"Assuming present trends continue, the odds are quite good that we'll become the best-informed extinct species on the planet!"*

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