

Sustainable Development Goal - SDG7 Affordable and Clean Energy

Ian Brooks

Module Leader – Sustainable Technologies

University of the West of England

Ian.Brooks@uwe.ac.uk

Objectives

By the end of this session you will

- Understand SDG 7 and the **targets**
- Be aware of the **challenges** for implementing SDG 7
- **Respond** to the biblical and personal challenge



SUSTAINABLE DEVELOPMENT GOALS

1 NO POVERTY 	2 ZERO HUNGER 	3 GOOD HEALTH AND WELL-BEING 	4 QUALITY EDUCATION 	5 GENDER EQUALITY 	6 CLEAN WATER AND SANITATION
7 AFFORDABLE AND CLEAN ENERGY 	8 DECENT WORK AND ECONOMIC GROWTH 	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE 	10 REDUCED INEQUALITIES 	11 SUSTAINABLE CITIES AND COMMUNITIES 	12 RESPONSIBLE CONSUMPTION AND PRODUCTION
13 CLIMATE ACTION 	14 LIFE BELOW WATER 	15 LIFE ON LAND 	16 PEACE, JUSTICE AND STRONG INSTITUTIONS 	17 PARTNERSHIPS FOR THE GOALS 	

Sustainable Development Goal 7

Ensure access to
affordable, reliable,
sustainable and modern
energy for all

Origins

- Millennium Development Goals
 - No reference
- Climate Change
 - Fossil Fuels & Greenhouse Gas emissions
- Agenda 21
 - Promoting sustainable energy and transport systems in human settlements
- Sustainable Energy 4 All (SE4All)

Target 7.1

By 2030, ensure **universal access** to affordable, reliable and modern energy services

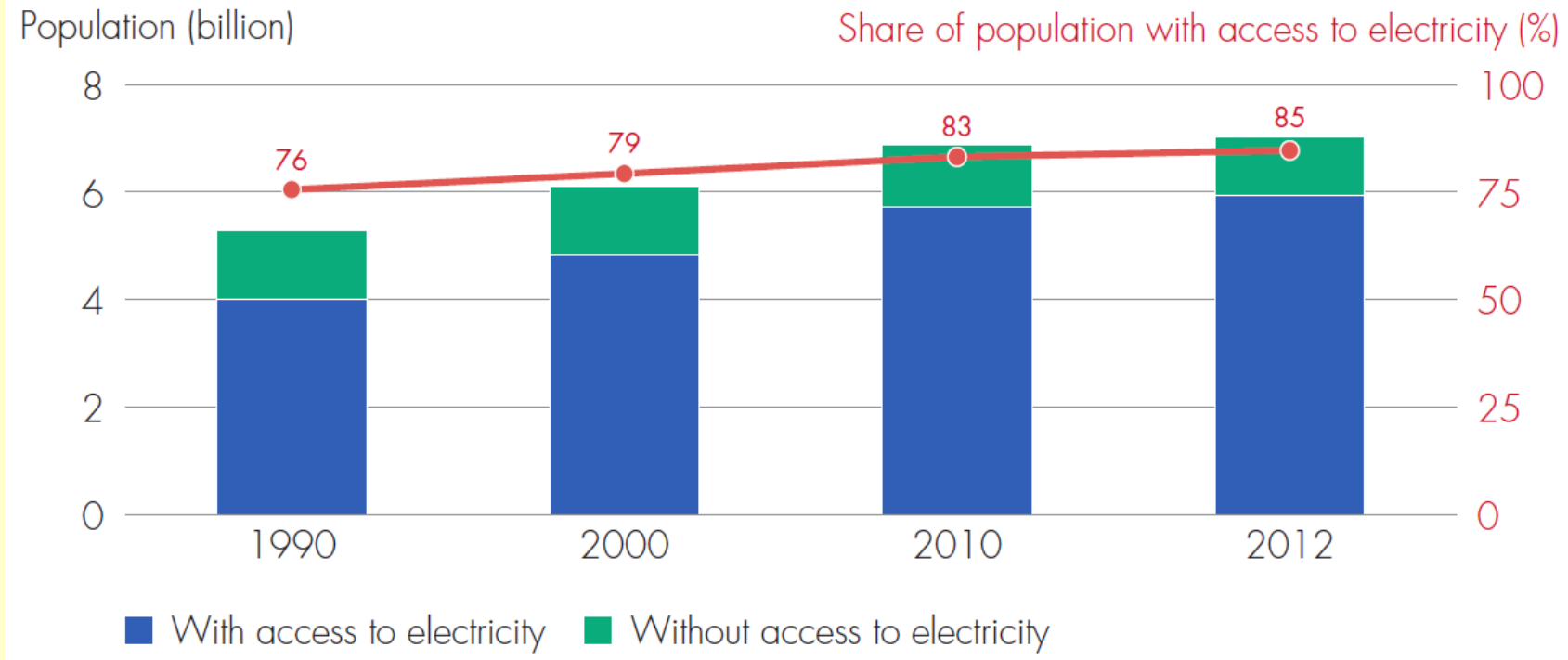
Proposed Measurement

50. Share of the population using modern cooking solutions, by urban/rural

51. Share of the population using reliable electricity, by urban/rural

7.1. Primary energy by type

Target 7.1



\$ bn	Current annual investment (2012)	Required annual investment to meet target
Electrification	9.0	45.0
Non-solid fuel cooking	0.1	4.4

Sources: IEA and World Bank, 2015

Target 7.2

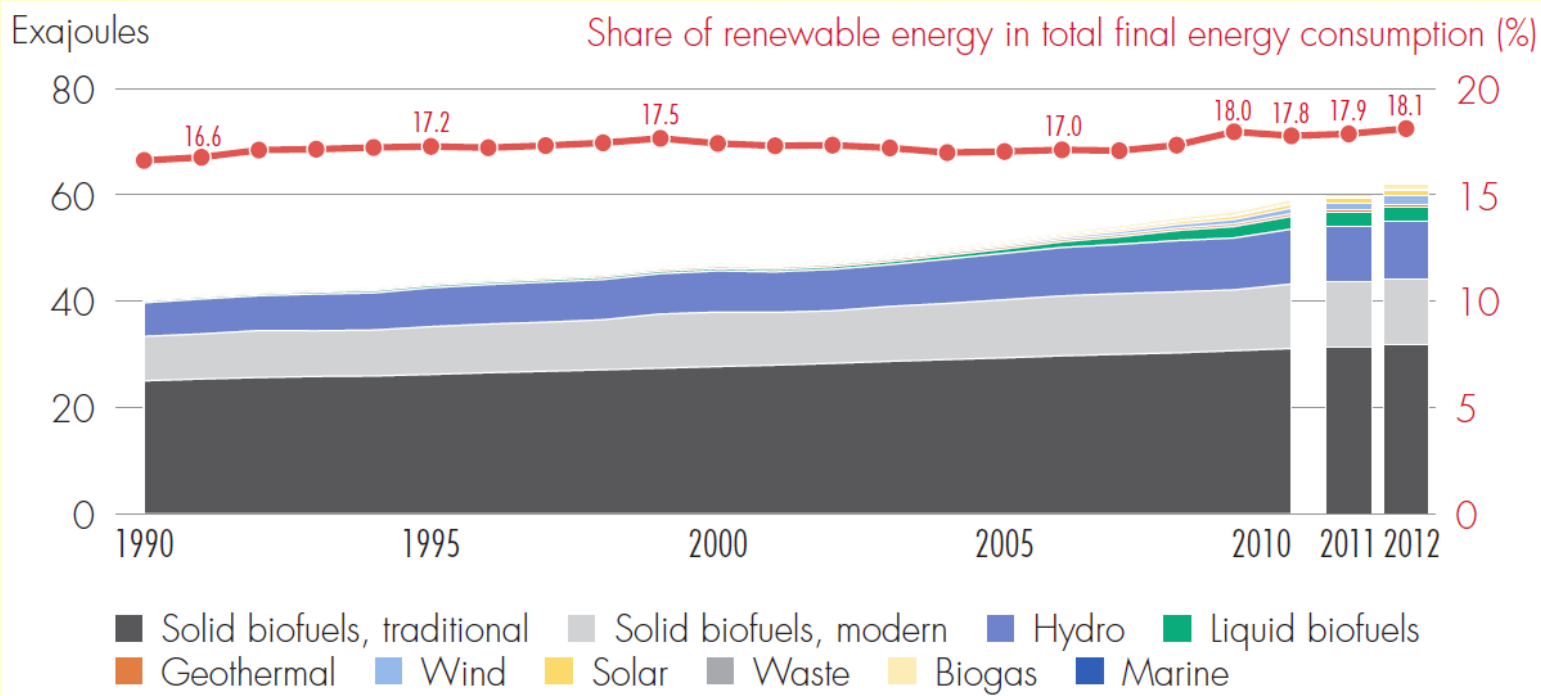
By 2030, increase substantially the share of **renewable** energy in the global energy mix

Proposed Measurement

52. Implicit incentives for low-carbon energy in the electricity sector (measured as US\$/MWh or US\$ per ton avoided CO₂)

7.3. Share of energy from renewables

Target 7.2



\$ bn	Current annual investment (2012)	Required annual investment to meet target
Doubling the share of renewable energy in the global mix	258.0	442.0 – 650.00

Sources: IEA and World Bank, 2015

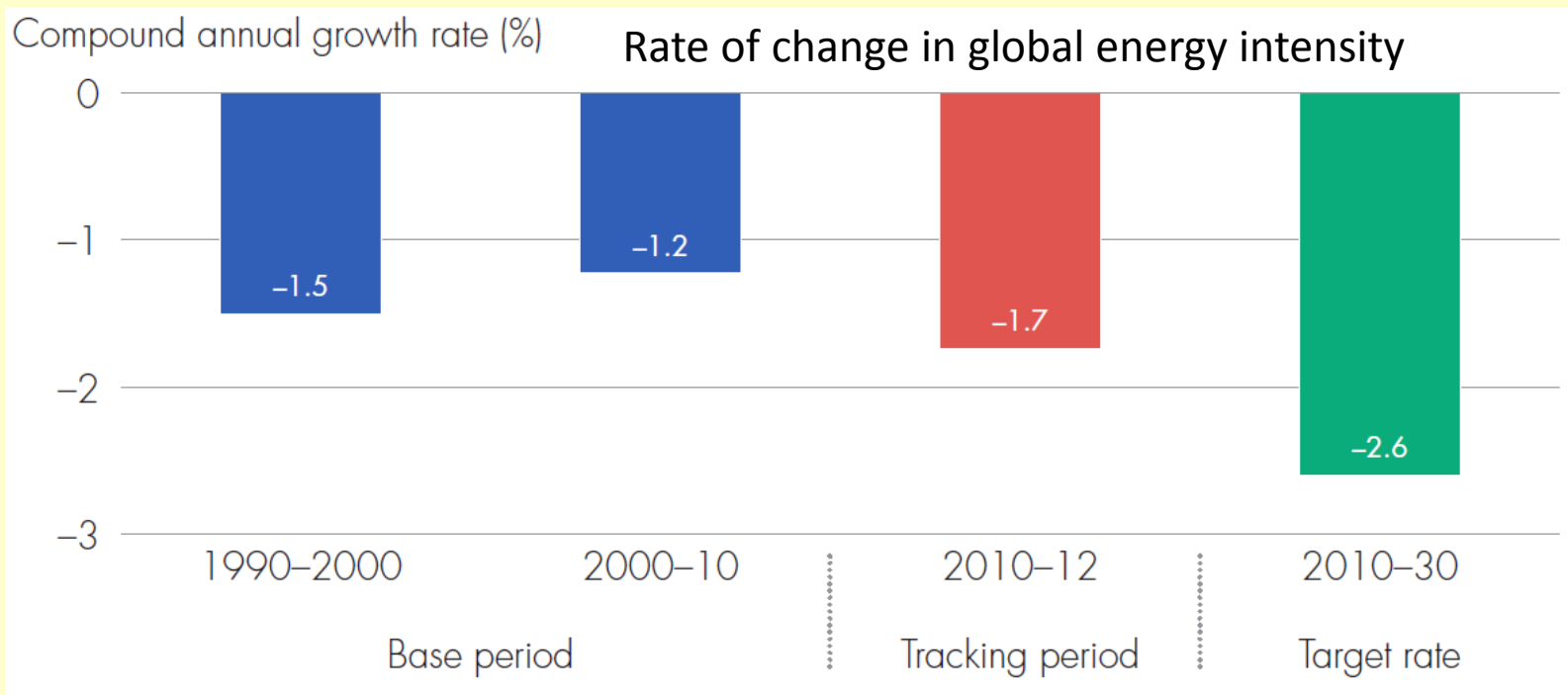
Target 7.3

By 2030, double the
global rate of
improvement in
energy efficiency

Proposed Measurement

53. Rate of primary energy
intensity improvement

Target 7.3



\$ bn	Current annual investment (2012)	Required annual investment to meet target
Doubling the global rate of improvement in energy efficiency	130.0	560.0

Target 7.a

By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology

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Proposed Measurement

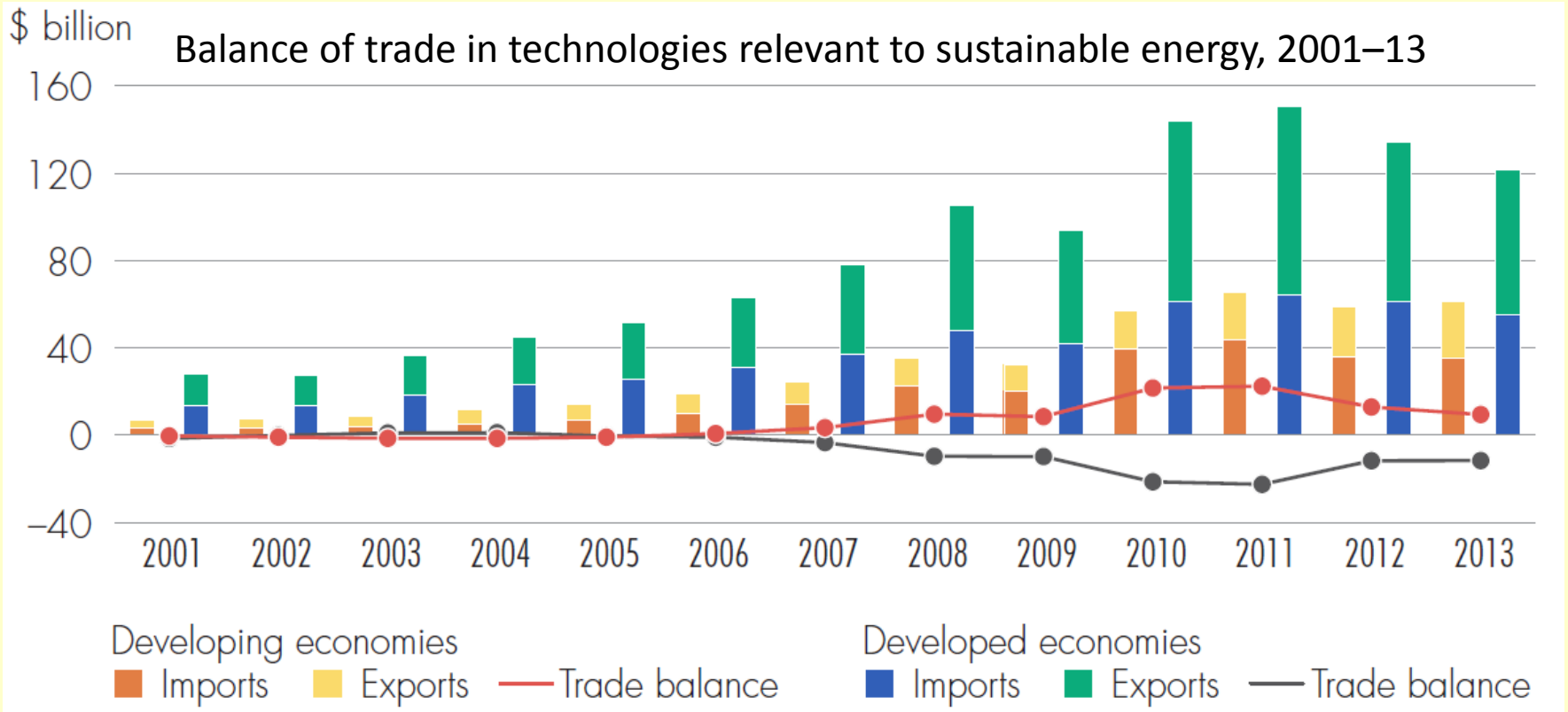
96. Official development assistance and net private grants as percent of GNI

95. Domestic revenues allocated to sustainable development as percent of GNI, by sector

97. Private net flows for sustainable development at market rates as share of high-income country GNI, by sector

7.2. Fossil fuel subsidies (\$ or %GNI)

Target 7.a



- review of tariff and nontariff barriers to trade
- indicators for scientific journal citations and engineering qualifications

Target 7.b

By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States, and land-locked developing countries, in accordance with their respective programmes of support

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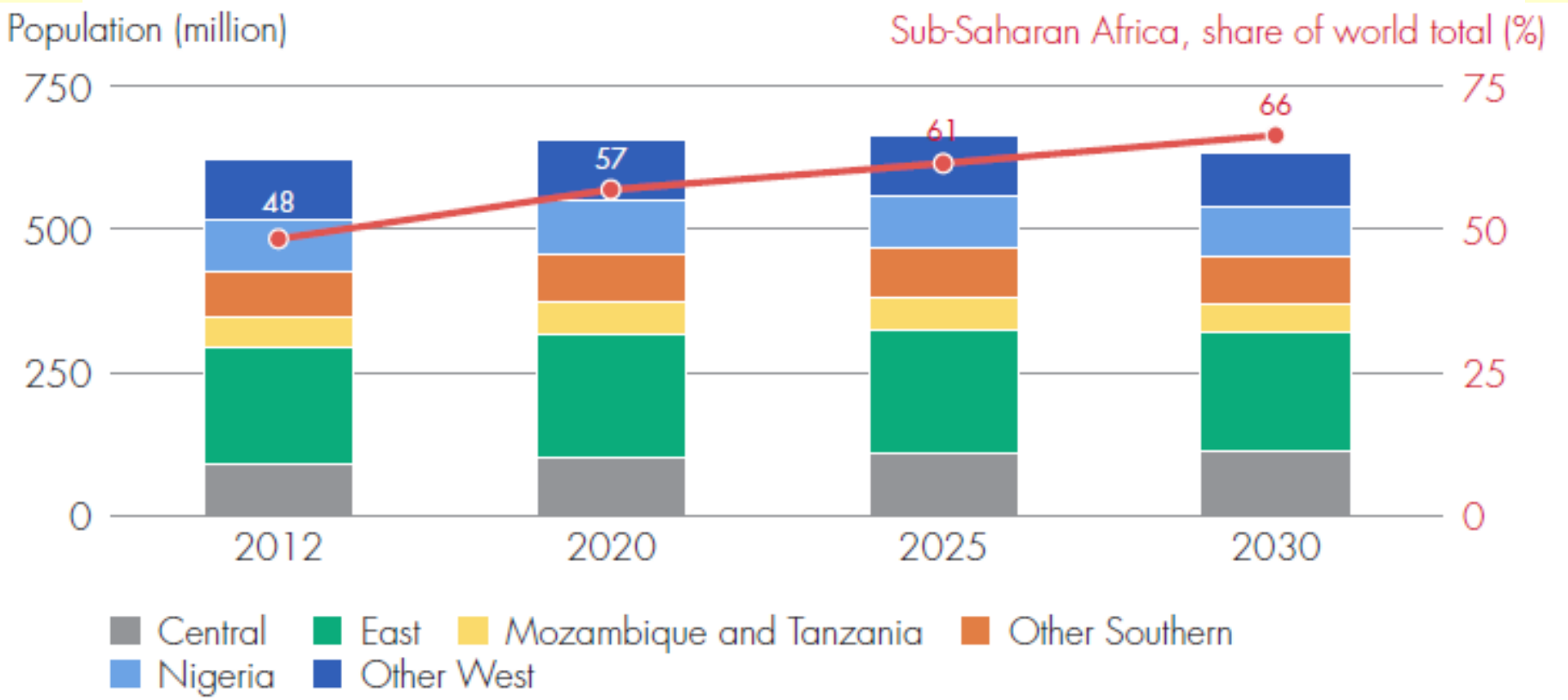
Proposed Measurement

51. Share of the population using reliable electricity, by urban/rural

52. Implicit incentives for low-carbon energy in the electricity sector (measured as US\$/MWh or US\$ per ton avoided CO₂)

Target 7.b

Population without access to electricity by subregion in Sub-Saharan Africa



Sources: IEA and World Bank, 2015



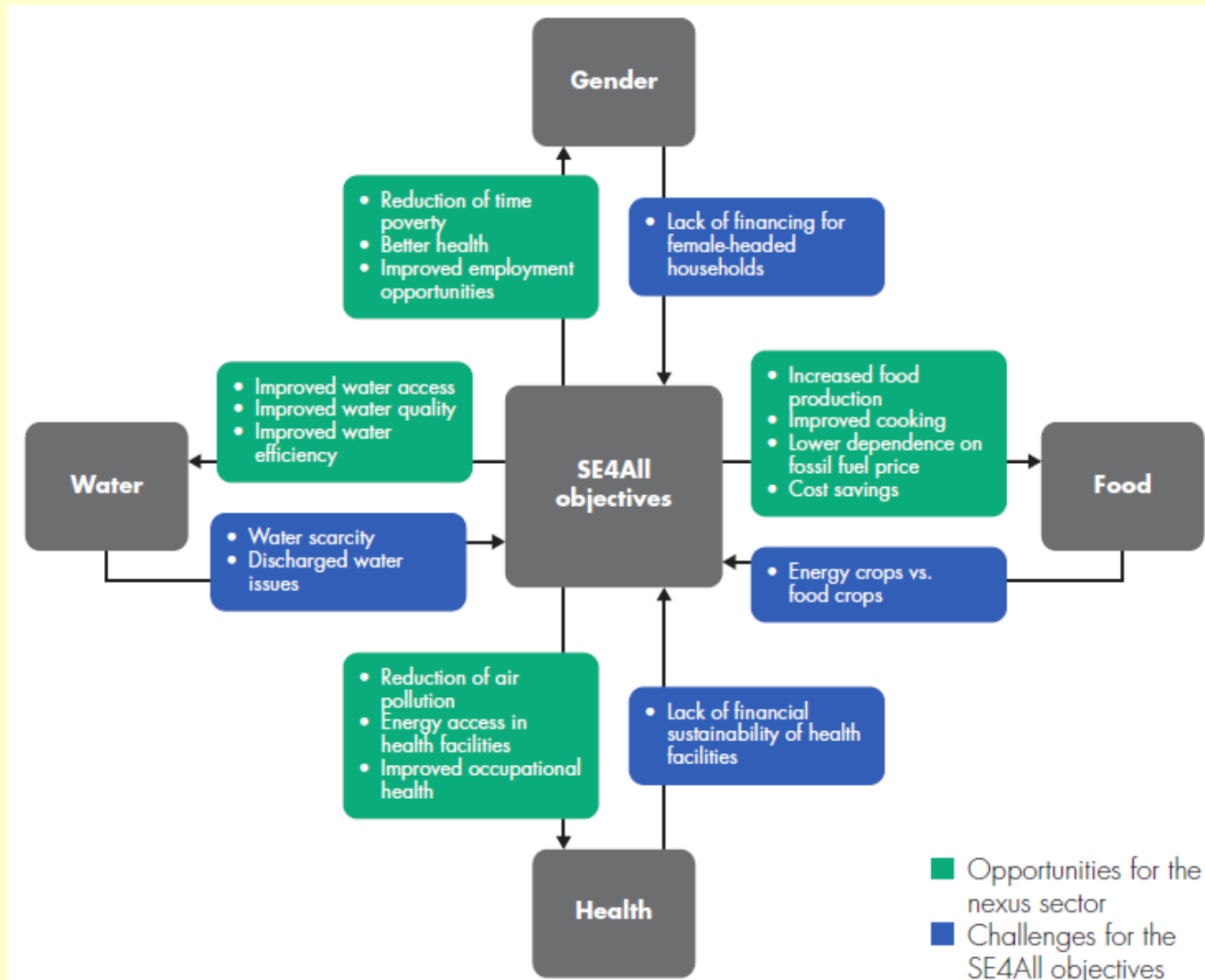
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Target 12.c

Rationalize inefficient **fossil-fuel subsidies** that encourage wasteful consumption by removing market distortions, in accordance with national circumstances, including by restructuring taxation and phasing out those harmful subsidies, where they exist, to reflect their environmental impacts, taking fully into account the specific needs and conditions of developing countries and minimizing the possible adverse impacts on their development in a manner that protects the poor and the affected communities

The nexus of water, food, health, and gender



From Thermodynamics To Theology

“An equally important role for religion is its confrontation with the big lie:

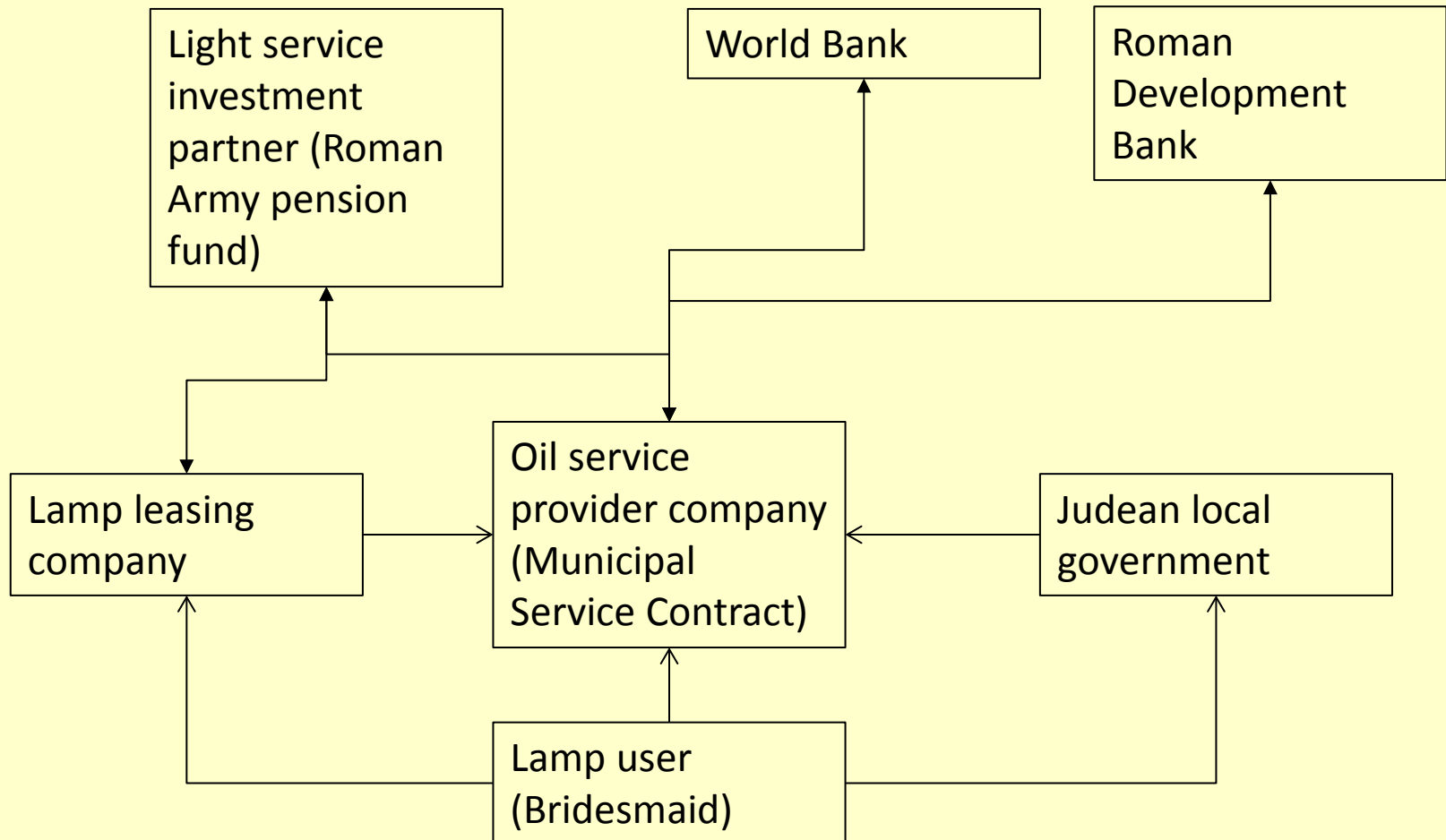
science and technology can fix energy problems
with no lifestyle changes

”

Biblical Illumination

- Darkness and Light
 - “The people living in darkness have seen a great light” Mt 4:16
- Wise and Foolish Bridesmaids
 - “The wise ones, however, took oil in jars along with their lamps.” Mt 25:4

Delivering Light? PPP Funding Flows.



Note: this is a humorous illustration

Mission

- Christian Aid. Lessons on Supporting Energy Access Enterprises.
- Tearfund. Church and Community Mobilisation.
- CAFOD. Measuring what matters in the Energy SDG.
- Eco Church. Buildings section.

SDG 7 Personal Response

How will you deliver SDG 7?

- Own energy generation / use
- Campaigning
- Giving
- Going

Objectives

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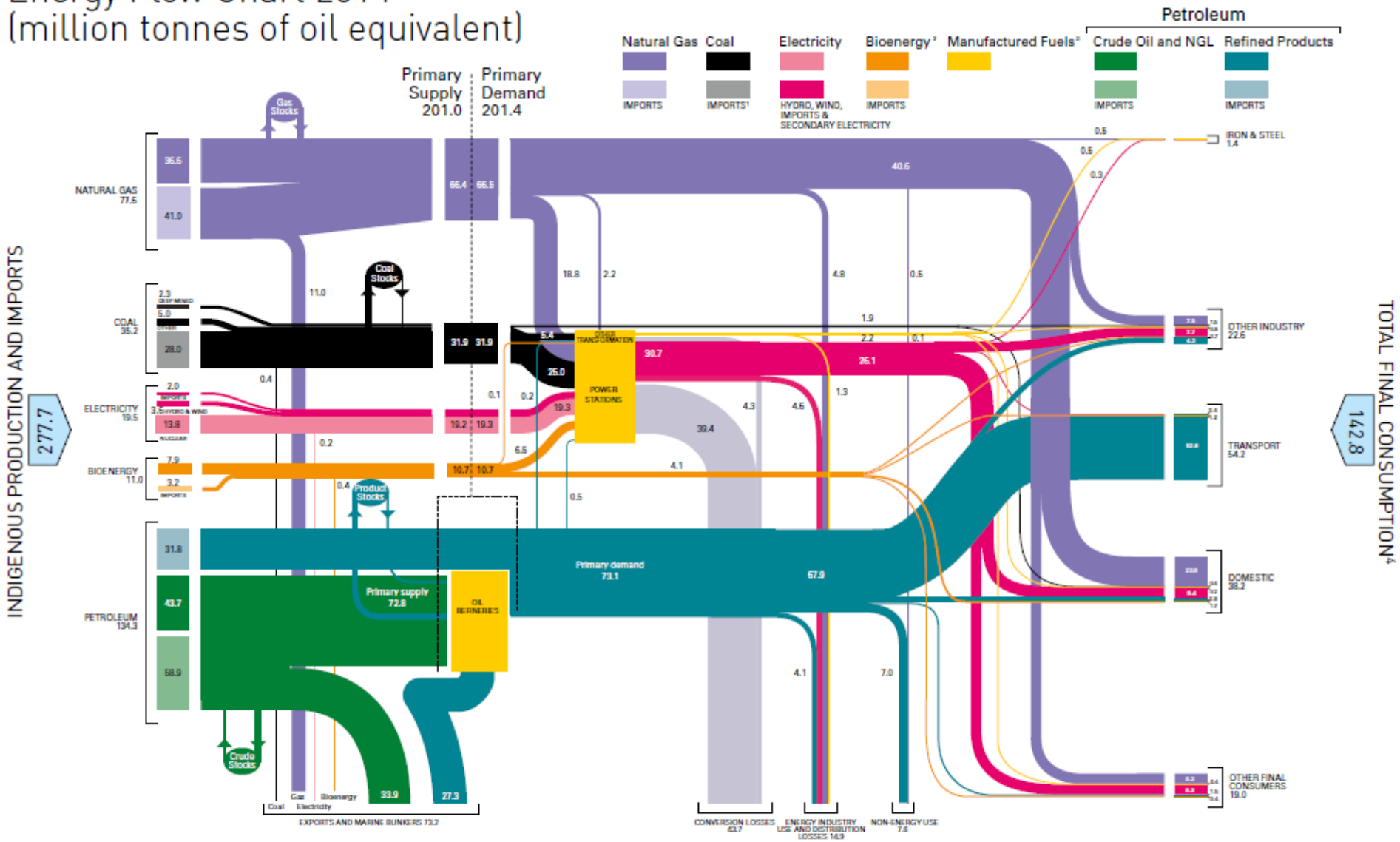
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References

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Backup slides

Energy Flow Chart 2014 (million tonnes of oil equivalent)



Sources: Department for Energy and Climate Change, 2015