

# Science, Technology and Innovation Policy Priorities for Sustainable Development

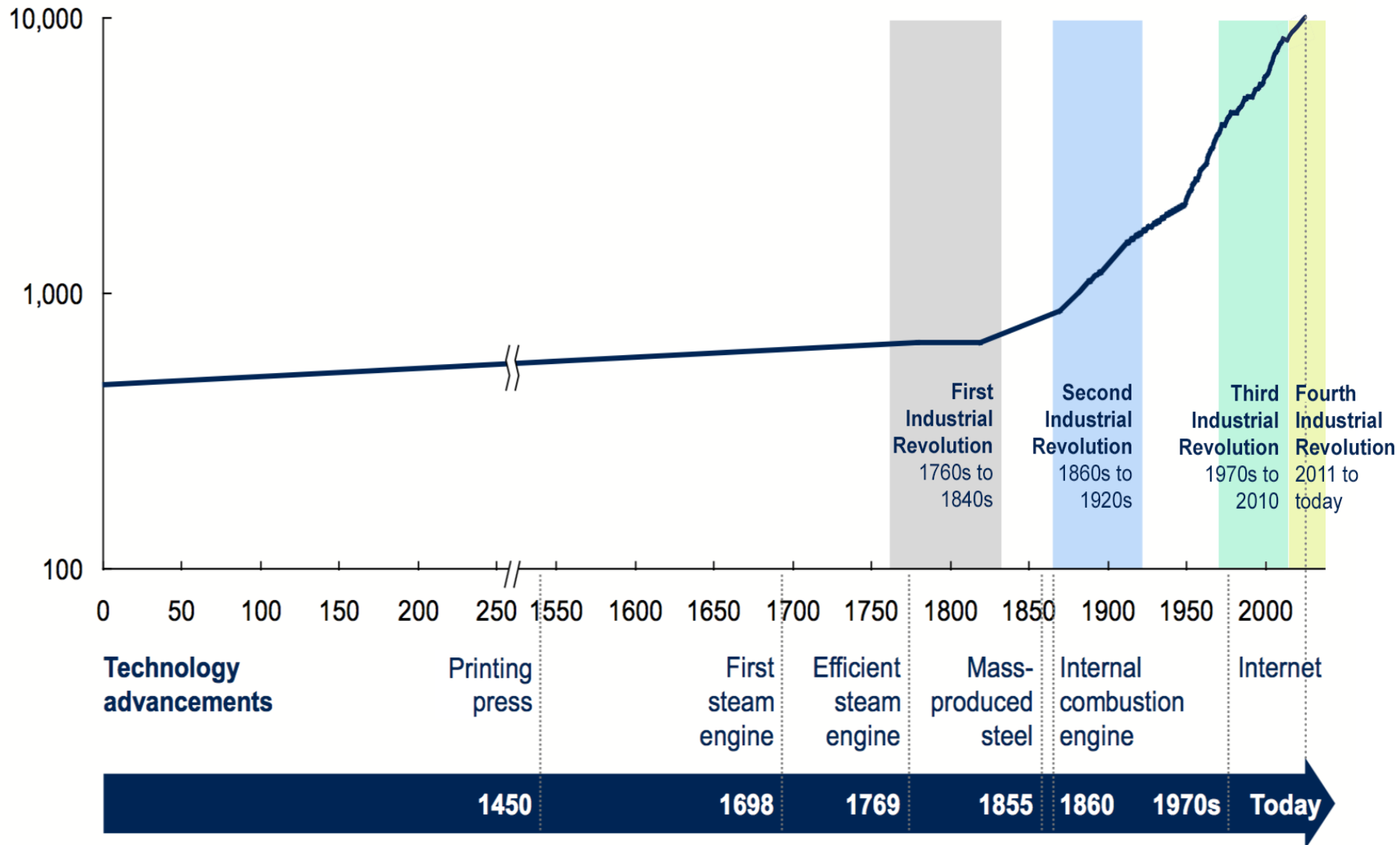
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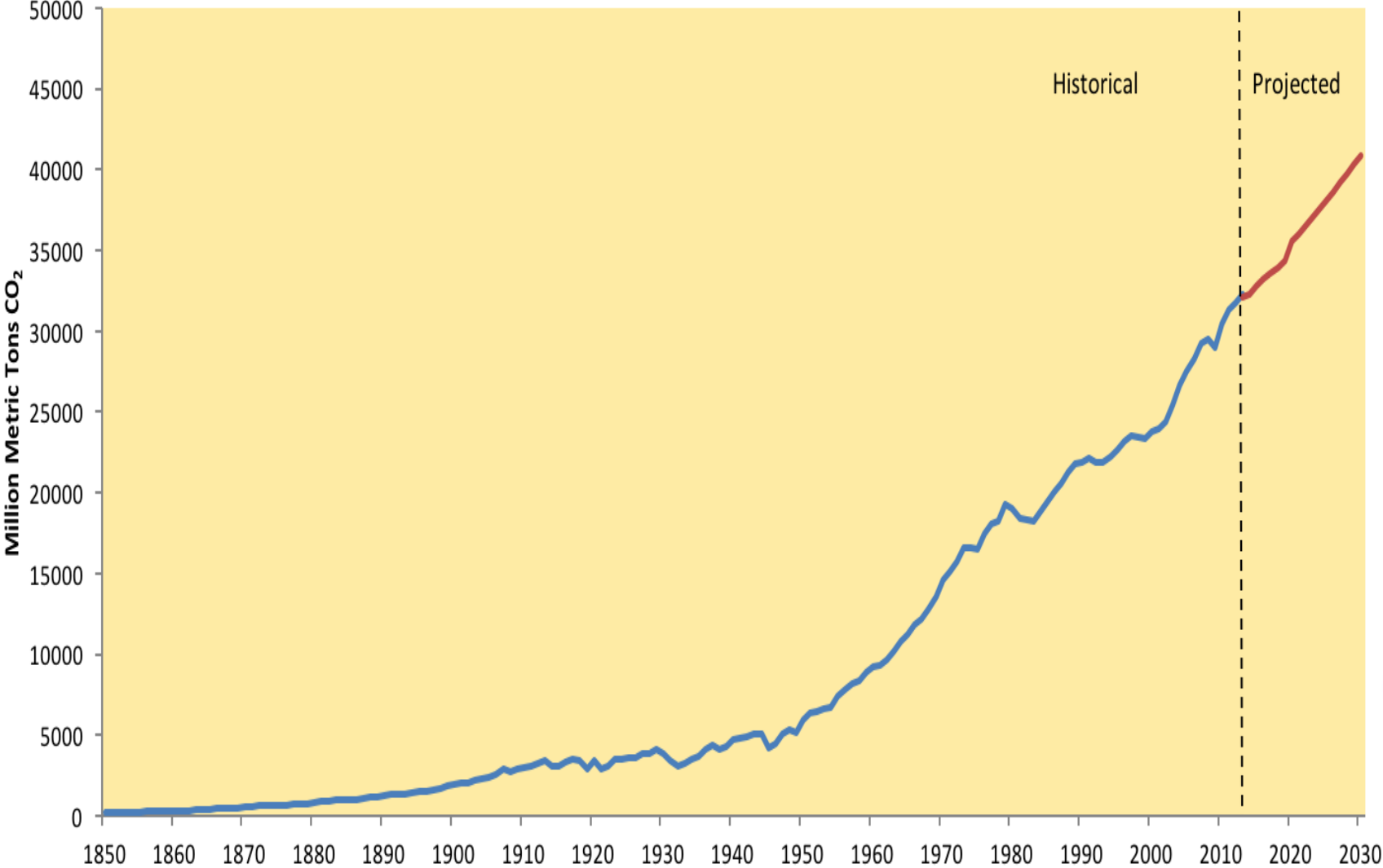
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# *Why is science and technology important for economic growth?*

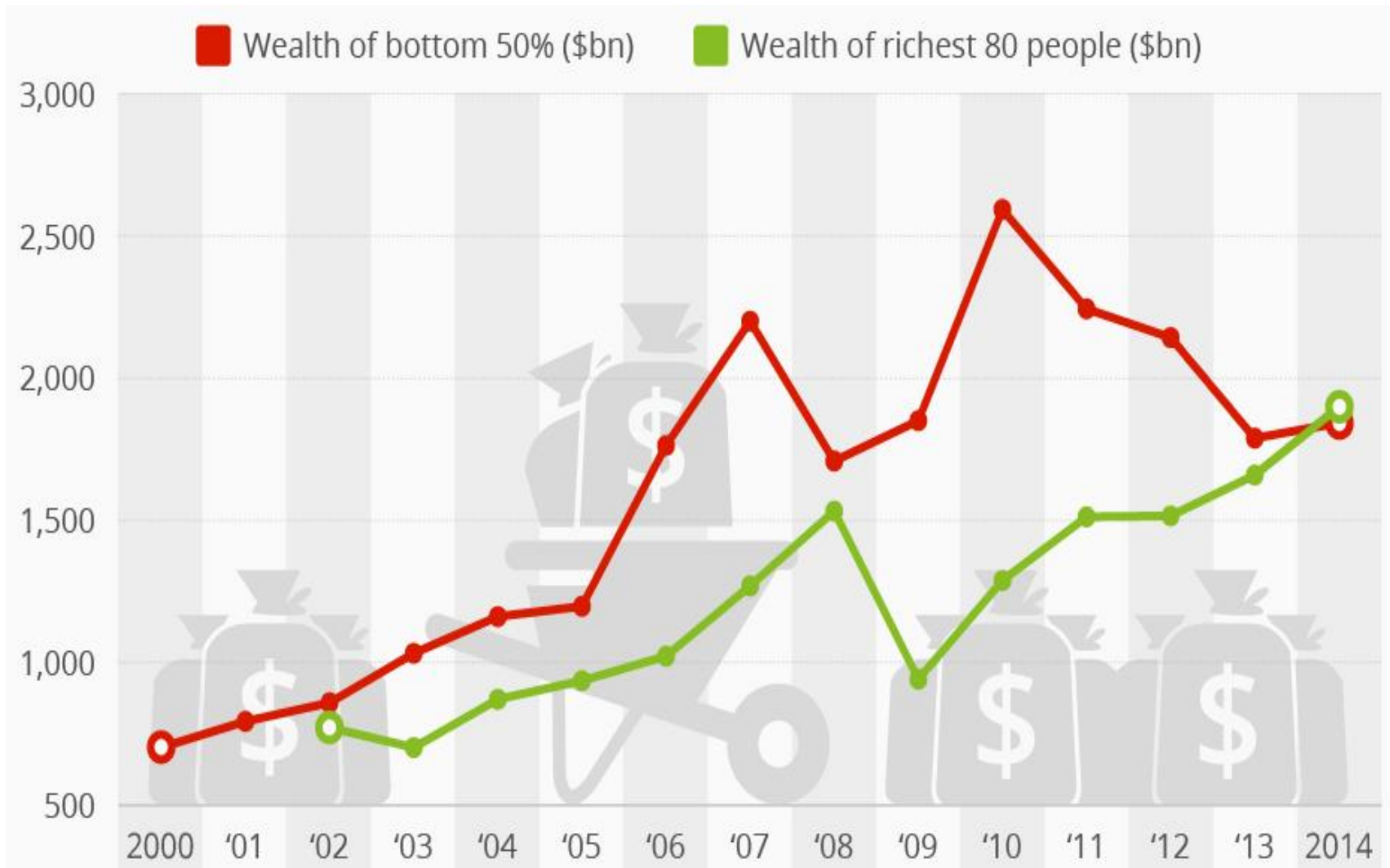


# Global Carbon Dioxide Emissions 1850 to 2030



Source: Centre for Climate and Energy Solutions

## World's 80 richest people have same wealth as poorest 50%



Sources: Oxfam, WEF, Forbes

# *Science Technology and Innovation for the Sustainable Development Goals*



# 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 GOALS



Society

Economy

Sustainable  
Development

Environment



*Inclusive Innovation is the inclusion of marginalized people in the innovation process, and the development of products and services for marginalized people*





*Laying the foundations for an science,  
technology and innovation system*



# HARNESSING SCIENCE, TECHNOLOGY AND INNOVATION FOR INCLUSIVE AND SUSTAINABLE DEVELOPMENT IN ASIA AND THE PACIFIC



# Policy Priorities

## The Foundations

- Visionary leadership
- Nurturing talent
- Investment
- Institutions and infrastructure

**Committed and visionary leadership is a  
pre-requisite for successful science,  
technology and innovation development**





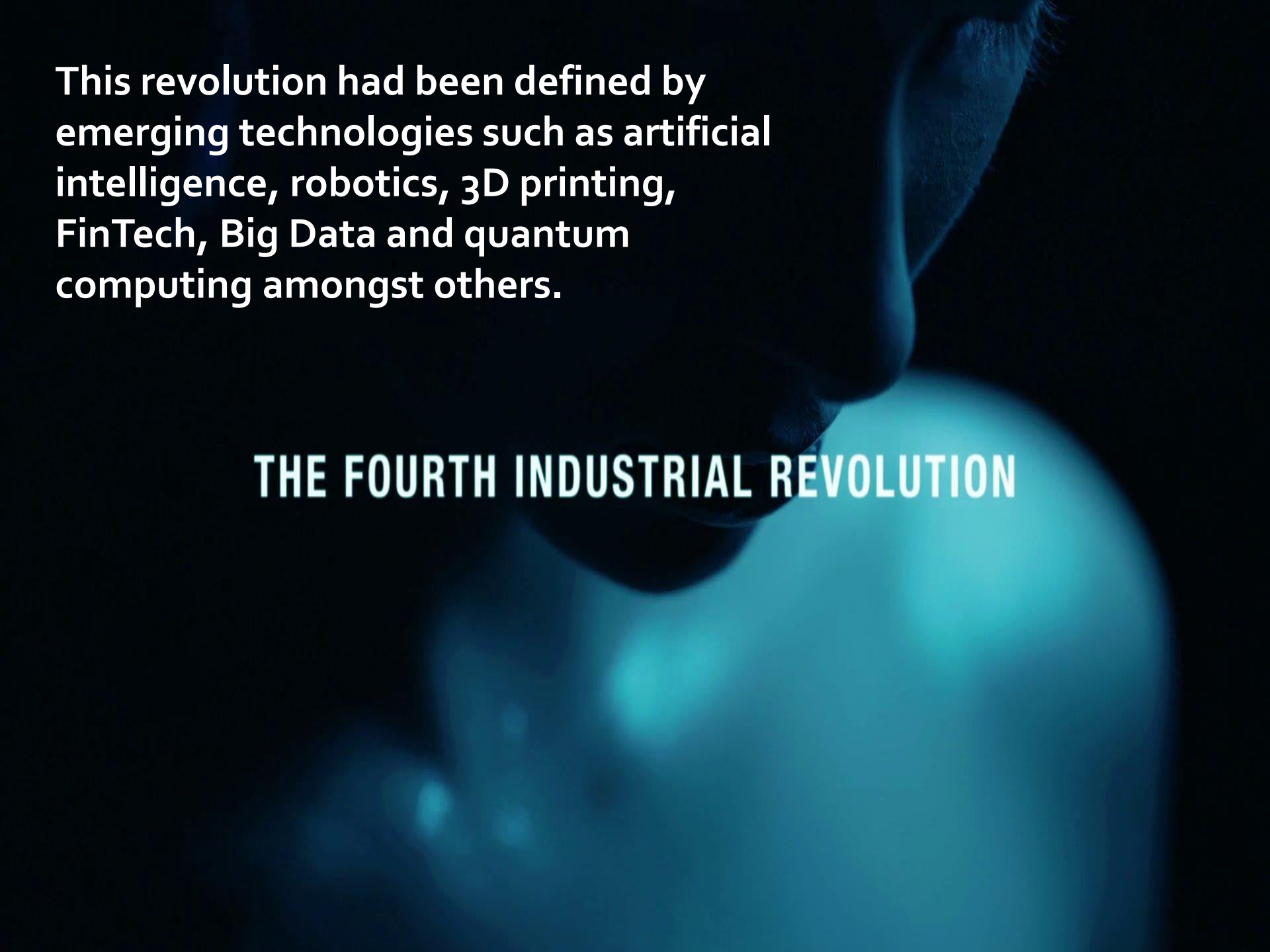
- Scientific education for all
- Digital skills
- Nurture scientists and entrepreneurs
- Challenge-driven universities





- Institutions that support ideas from lab to use
- Internet connectivity
- Corporate law and intellectual property





**This revolution had been defined by emerging technologies such as artificial intelligence, robotics, 3D printing, FinTech, Big Data and quantum computing amongst others.**

## **THE FOURTH INDUSTRIAL REVOLUTION**

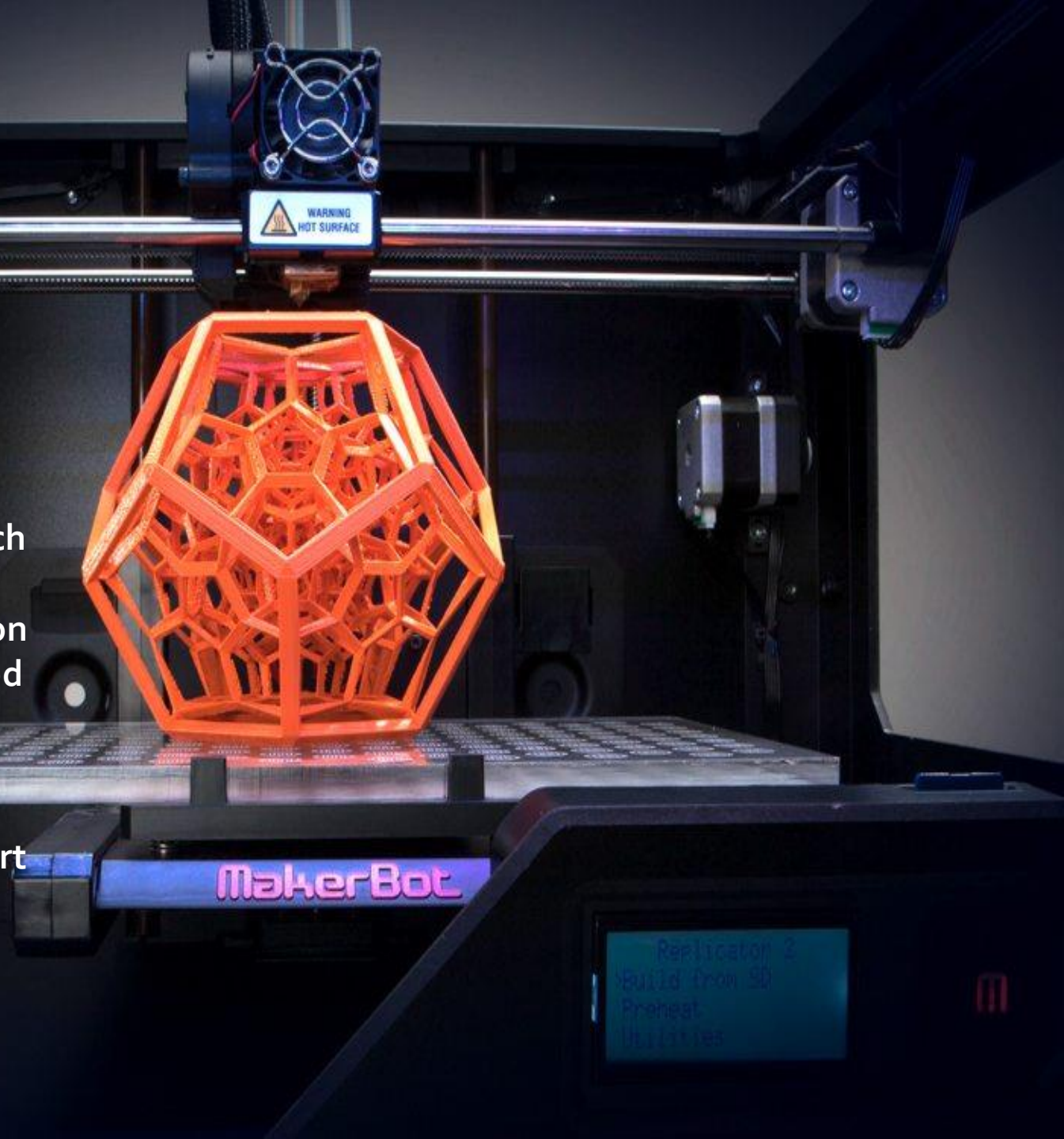




In considering only 15 major developed and emerging economies, the World Economic Forum predicts that emerging technological trends will lead to a net loss of over 5 million jobs by 2020. Worldwide, this number will almost certainly be much higher.

Emerging technologies could have significant positive impact on the environment. Data suggest that improved application of frontier tech to transportation and logistics will reduce carbon emissions by an estimated 4.5 billion tons by 2020.

Technologies such as 3D printing could also support more inclusive trade.





# M-PESA

10:35A

1 Send money

2 Withdrawal c...

3 Buy airtime

4 Pay Bill

5 Buy Goods

Select

SAMSUNG

Back

Personal business

☐ Shop / kiosk

☐ Salon

☐ Cafe

☐ Fish

☐ Water

☒ Food stall

☐ Fruit/veg

☐ Hawk

☐ Other

Business

hit

## **Extreme**

- Bitcoin banned in Indonesia and Bangladesh while legalized in Japan.

## **Innovative**

- Republic of Korea developed world's first robot tax.
- Japan developed world's first AI principles.
- Universal basic income pilots in India.

## **Practical**

- Singapore offers adults personal accounts which they can use to buy training, and another uses tax incentives to encourage firms to invest more in their lower paid workers.

# Role of UN ESCAP

- Policy advice
- Sharing regional and global expertise
- Bespoke support for governments

## Concluding Points

- Ensure science and technology policies benefit society and environment as well as economy.
- Ensure science and technology are open and accessible to all.
- Lay firm foundations through visionary leadership, education, targeted investment and enabling institutions and infrastructure.
- Prepare for the Fourth Industrial Revolution and opportunities to leapfrog.
- There is rich expertise in the region and UNESCAP stands ready to facilitate regional collaboration and support Cambodia in your science and technology efforts.



# Thank You

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