

## Low Carbon Monitor Report Fact Sheet

The **Low Carbon Monitor Report** focuses on the benefits that holding warming to 1.5°C brings in terms of economic growth, employment, avoided climate impacts, energy security, access and imports and health. The report is being released by UNDP in Marrakech on Wednesday 16 November. Below are key facts and figures from the report.

### Economic

- If we keep warming to 1.5°C rather than continue with current policies, climate change damages would be substantially lower and world GDP would be USD \$12 trillion, or 10%, higher by 2050, while world GDP growth would be four times stronger by the 2040s – with similar advantages at national level, including for China.
- 1.5°C is the only warming scenario that prevents major economies, such as Germany, Japan and the US, from entering into permanent recession in the 2040s as climate-change damages outpace “baseline” economic growth. This scenario applies, however, only if these countries take no adaptation measures.

### Employment

- The rapid transition to renewables required for 1.5°C would create 68% more energy-related jobs in 2030 compared with current policies.
- Under current policies, we would see up to 7% losses of total economy-wide working hours by outdoor heat stress for developing countries, such as Pakistan by mid-century. 1.5°C policies would reduce such losses by as much as half.

### Environmental Impacts

- 2°C of warming entails the virtual disappearance (99% loss) of all coral reefs. Keeping warming to 1.5°C saves at least 10% of all reefs, with chances for survival gradually improving after mid-century.
- Keeping warming to 1.5°C reduces by one full month the length of extreme heatwaves each year for most tropical regions by mid-century, compared with 2°C of warming.
- The Greenland ice sheet risks entering irreversible decline at 1.6°C warming, leading to up to 7 meters of long-term sea-level rise.
- 1.5°C reduces losses to key crops, such as wheat, by 10-15% by 2050 compared with 2°C of warming for regions of Africa and for Central America.

### Energy Self-Sufficiency

- Virtually every country has domestic renewable energy potential 20-80+ greater than current energy consumption levels require

### Energy Imports

- Costs of fuel imports constitute up to a third of the value of all imports in many developing countries and OECD economies such as Japan, Turkey, Italy and Spain. 1.5°C policies would reduce inflationary risks from fluctuation in fossil fuel prices. They would also improve the trade balance of fossil fuel importing countries.

### Energy Access

- 1.5°C policies require high proportions of renewable energy capacity, 60% of which needs to be provided off-grid. Such policies bring the greatest possible contribution towards achieving universal energy access by 2030.

### Health and Air Pollution

- 1.5°C policies maximise contributions to reducing air pollution that already kills 7 million people each year worldwide - as many as alcohol or tobacco.
- By 2050, 1.5°C policies avoid a 5% reduction to productivity of key crops, such as rice and wheat, due to the pollution added by the emissions expected under current policies (on top of the benefits of lower climate change impacts on food crops)

### Globalising Action

- 1.5°C requires global zero CO<sub>2</sub> emissions by 2050, with large benefits if 100% renewables in the power sector were achieved
- 1.5°C-compatible policies accelerate access to cheap renewable energy, reducing current costs (2009-10) by as much as five times before mid-century due to increased renewable energy installation capacity worldwide.