

Hurricane Wilma, courtesy of NOAA

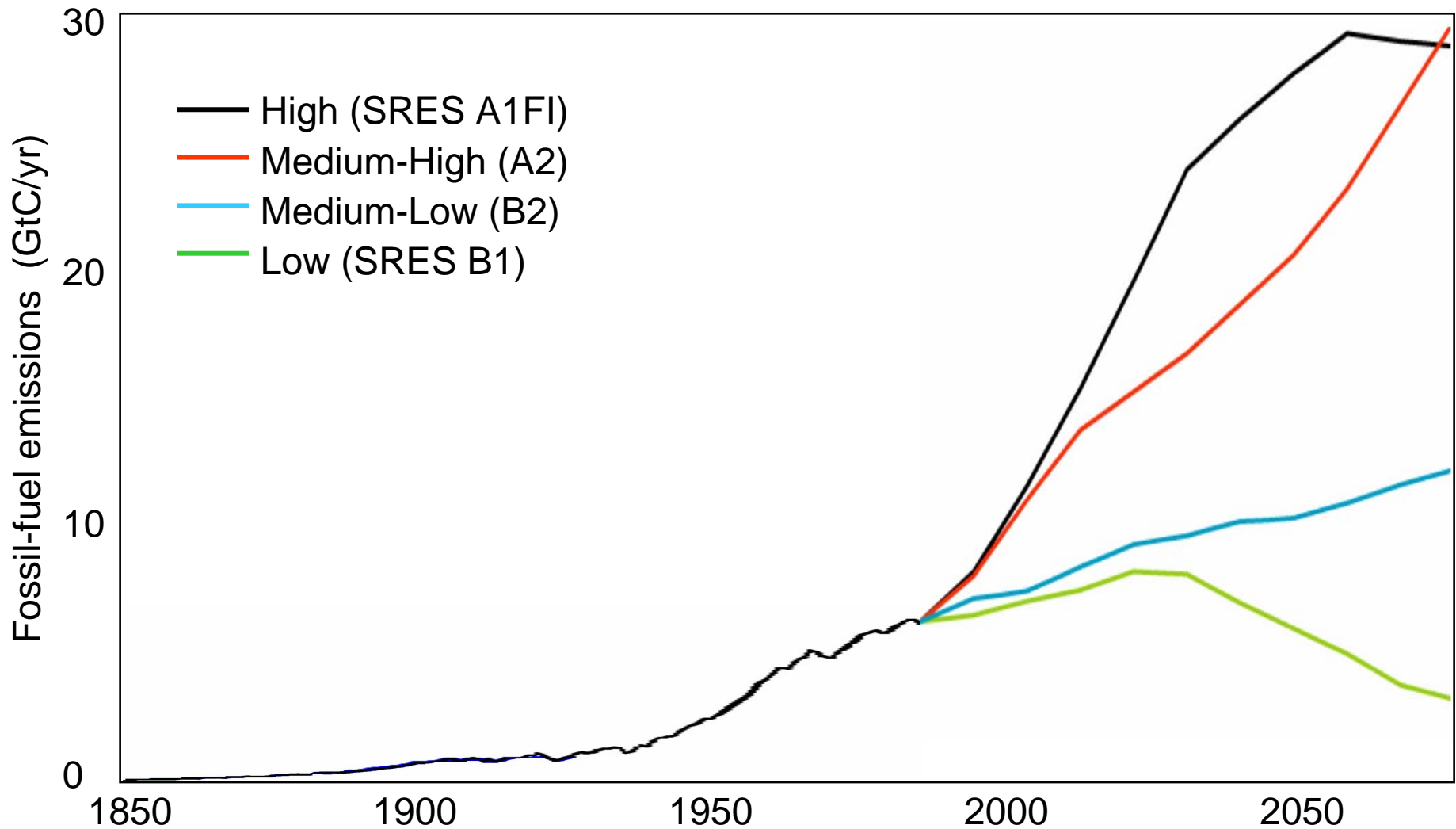
National and Global Cooperation to achieve Low Carbon Societies through Sustainable Development

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Rural Affairs**

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Emissions to 1850-2000, and IPCC projections to 2100



How much climate change is too much?

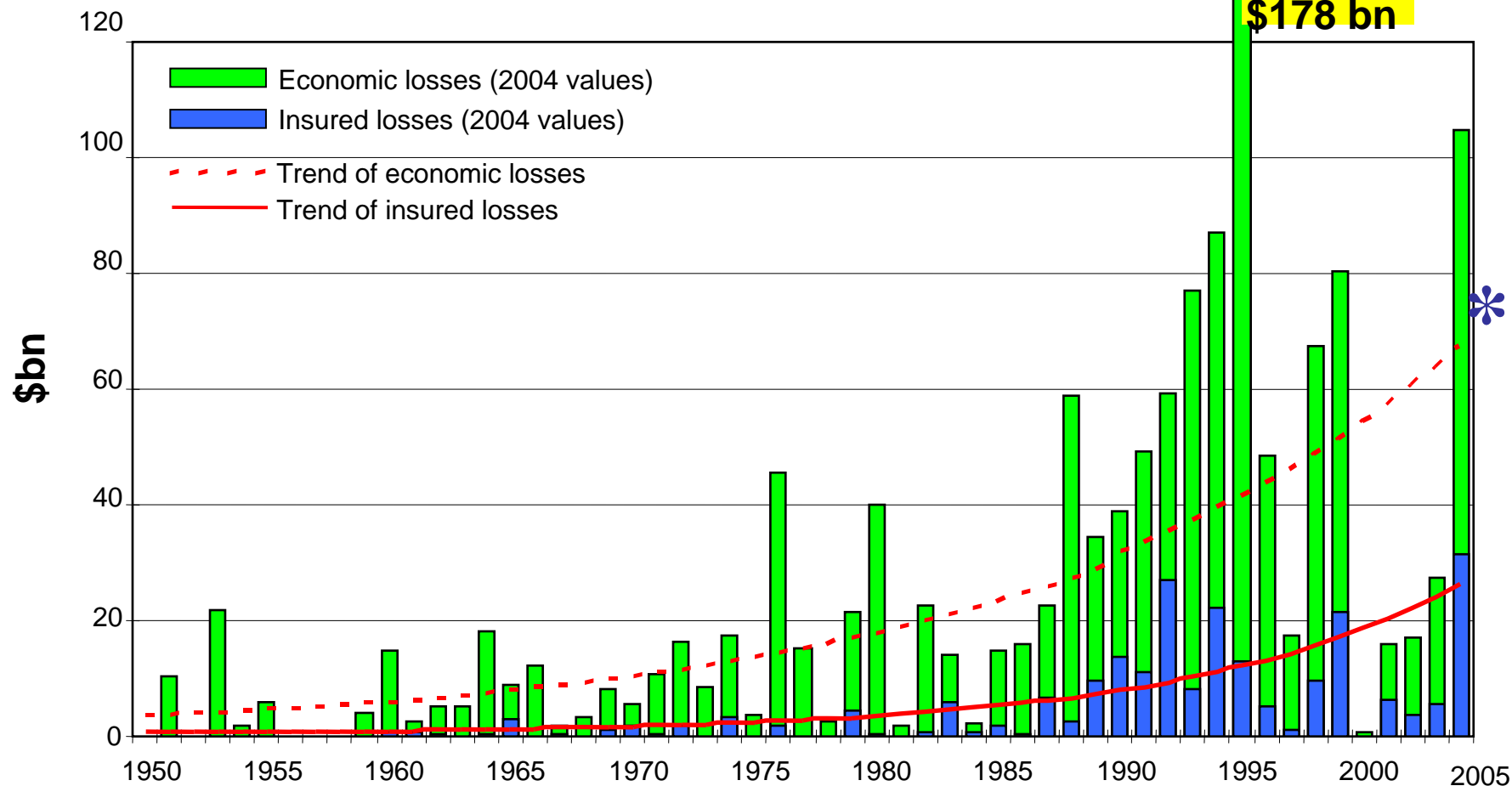
| | |
|------------------------------------|---|
| 1-2 C Above pre- industrial | Major impacts on ecosystems and species; wide ranging impacts on society, including developing country agriculture. |
| 1.5 – 3 C | Greenland ice-cap starts to melt irreversibly (7 m) |
| 2 - 3 C | Major loss of coral reef ecosystem; considerable species loss; large impacts on agriculture; water resources; health; economies. |
| | General increase in droughts and extreme rainfalls as temperature increases. Up to 88cm sea level rise in next 100 years. |
| 2 - 3 C | Terrestrial carbon sink becomes a source. |
| 1 - 4 C | North Atlantic circulation collapses |
| 2 - 4.5 C | West Antarctic ice sheet collapses (5 m) |

Extreme events and economic costs – threat to sustainable development



\$298bn

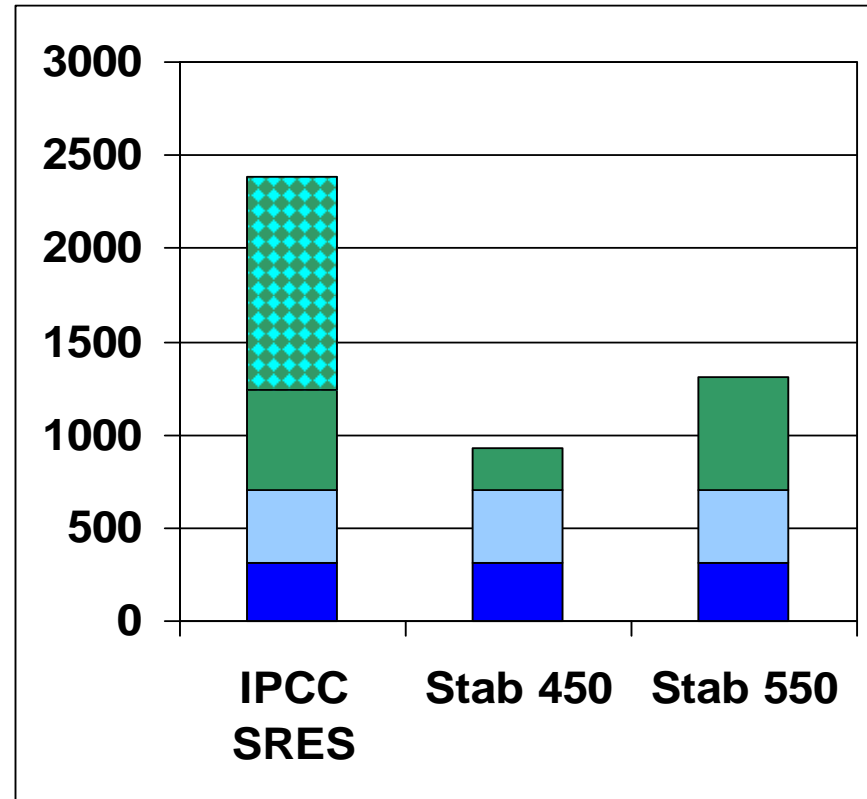
Economic and insured losses of major natural disasters



Sustainable development issues related to CO₂ emissions over the next 100 years

Cumulative CO₂ emissions (GtC)

- IPCC High Scenario 2030 to 2100
- IPCC Low Scenario and stabilisation scenarios 2030 to 2100
- IEA projection 2000 to 2030
- Historic 1750 - 2000



Some implications for achieving deep cuts in global emissions

- Long-term policy framework – with sustainable development and integral part.
- Wide range of issues and large number of actors
- Comprehensive range of technologies and policies
- Political leadership