

# Economics of Climate Change in Mongolia

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# Economics of Climate Change

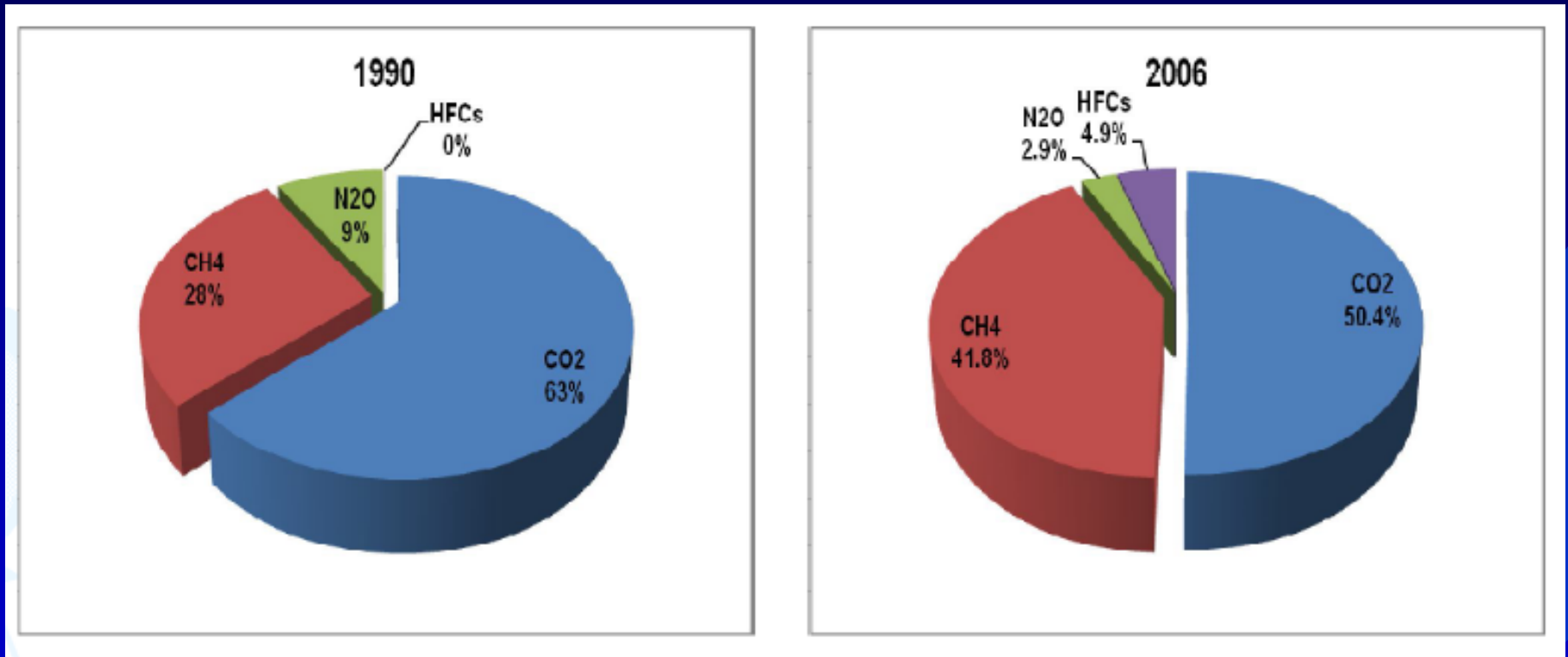
- Climate change is a global, long-term, uncertain externality.
- The climate change impact is potentially large and irreversible.
- Hence key roles are to do economics of risk and take international action

*From the Stern Review*

# Regional and National Economics of Climate Change

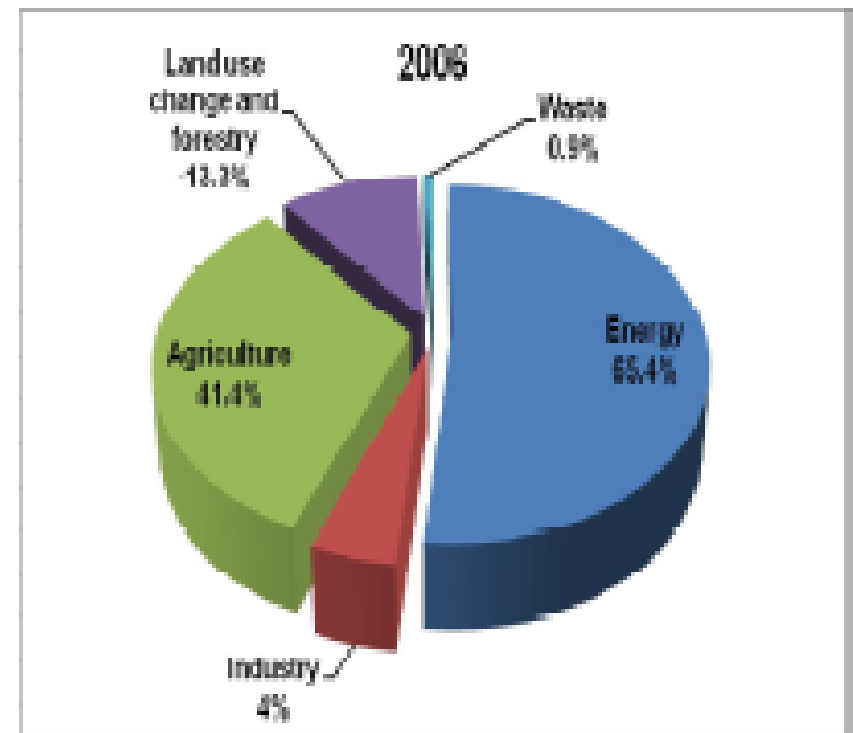
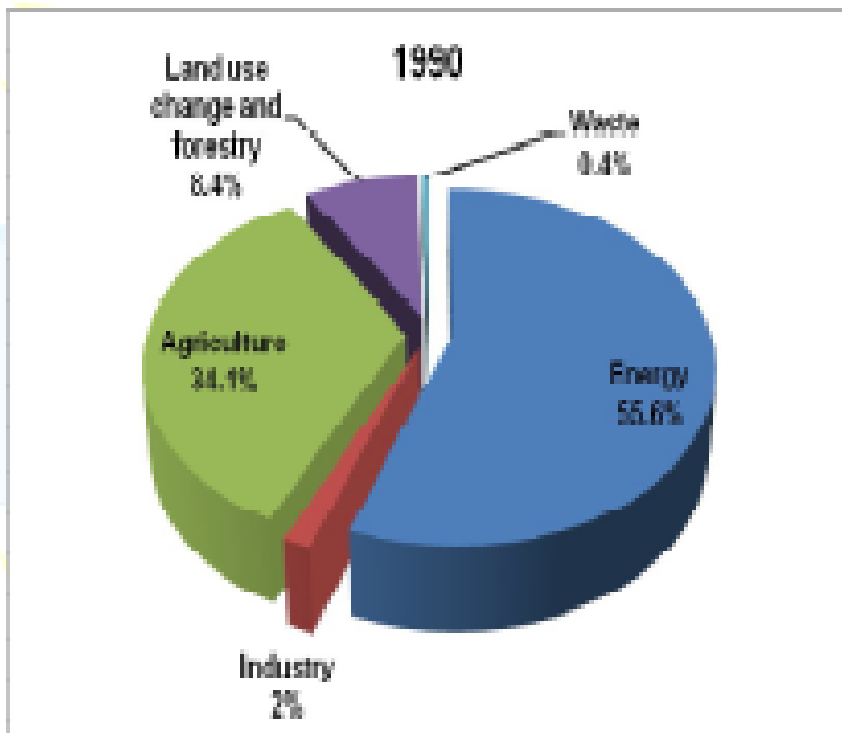
- Climate change is global issue but regional and national perspectives should be included to tackle this issue.
- Need for achieving a balance between economic development and environmental concerns
- Necessity for climate change adaptation to minimize climate change impacts. According to German Watch (2009), Mongolia places at the 16th most vulnerable country to the climate change among 174 countries.
- Need for developing cleaner and low carbon economic growth strategies at both regional and national levels

# Mongolia's GHG Inventory



Source: Dorjpurev Jargal, GHG Inventory and mitigation analysis in Mongolia, 1<sup>st</sup> National Workshop, Economics of Climate Change and the Low Carbon Growth Strategies in Northeast Asia, April 14, 2010

# Mongolia's GHG Inventory - By Sector -



Source: Dorjpurev Jargal, GHG Inventory and mitigation analysis in Mongolia, 1<sup>st</sup> National Workshop, Economics of Climate Change and the Low Carbon Growth Strategies in Northeast Asia, April 14, 2010

# GHG Mitigation Options in Mongolia

## - Energy Sector -

- Promotion of Renewable Energy Sources such as hydro/wind/solar
- Energy Efficiency Improvement: Heating boilers, household stoves, furnaces, etc.
- Efficient use of coal

# ADB's Projects - Energy Sector -

Project Name	Amount (Mil. US\$)	Project Description	Climate change
Loan 1548: Ulaanbaatar Heat Efficiency Project	40.00	The project is comprised of (a) conversion of the disbrict heating sytem to variable flow operation; (b) consumer-end heat control and metering and billing improvement; (c ) steam system rehabilitation; and (d) project management and training, to improve energy efficiency of heating supply system in Ulaanbaatar. <b>Completed.</b>	Mitigation
Grant 9109: Community-Based Heating Supply in Rural Remote Areas	2.00	The project is comprised of (a) retrofit heat-only bilers for improving combustion efficiency; (b) training for community and local government for system O&M; (c ) upgrading building features for demand side energy conservation; and (d) information dessemination. <b>Ongoing.</b>	Mitigation
Grant 9127: Energy Conservation and Emissions Reduction from Poor Households	2.00	The project introduces insulated ger blankeds for 4,000 households to improve quality of life in fet housing areas, thereby reducing coal and firewood consumption by 50%. <b>Ongoing.</b>	Mitigation
Grant 9139: Demonstration Project for Improved Electricity Services to the Low-Income Communities in Rural Areas	2.40	The project introduces Single Wire Earth Return system (SWER) for supplying on-grid electricity to remote rural areas, to improve quality of pilot 9 bag centers. <b>Ongoing.</b>	Mitigation
TA 3965: Renewable Energy Development in small towns and Rural Areas	0.40	the TA assists the Government to undertake a comprehensive assessment of the technical feasibility and economic viability of new renewable energy technology under Mongolian circumstances. <b>Completed.</b>	Mitigation
TA 7502: Ulaanbaatar Low Carbon Energy Supply Project Using a Public-Private Partnership Model	1.50	The TA assists the government in (i) preparing a technical study on the proposed CHP 5; (ii) assessing secgor issues; (iii) identifying various options for project financing and operation; and (iv) organizaing workshops and preparing policy note for information dissemination. <b>Ongoing.</b>	Mitigation
<b>Total</b>	<b>48.30</b>		

**Thank you**

**ADB**