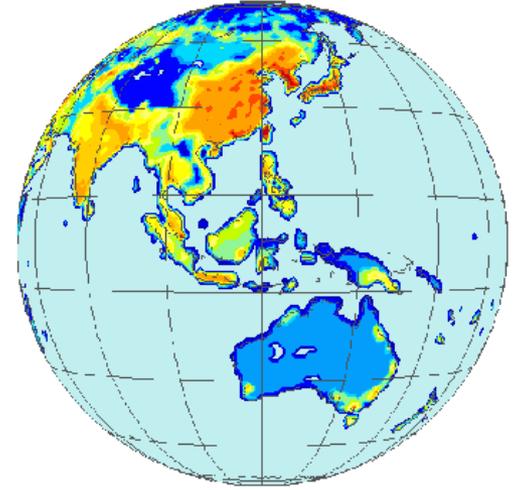


Mid-term target in Japan and contribution of AIM



Toshihiko Masui

National Institute for Environmental Studies

The 15th AIM International Workshop

February 20-22, 2010

NIES, Tsukuba, Japan

Mr.G.Hibino, Dr.J.Fujino, Dr.T.Hanaoka, Dr.O.Akashi and other AIM members are in charge of this work.

Middle Target

Annex I Parties	Emission reduction in 2020	Base year
Australia	-5% ~ -15%/-25%	2000
Belarus	-5-10%	1990
Canada	-17%	2005
Croatia	-5%	1990
EU	-20%/-30%	1990
Iceland	-30%	1990
Japan	-25%	1990
Kazakhstan	-15%	1992
Liechtenstein	-20%/-30%	1990
Monaco	-30%	1990
New Zealand	-10-20%	1990
Norway	-30-40%	1990
Russian Federation	-15-25%	1990
USA	-17%	2005

* Many countries add notes.

<http://unfccc.int/home/items/5264.php>

JB 15/2010

Note Verbale

The Embassy of Japan in Germany presents its compliments to the secretariat of the United Nations Framework Convention on Climate Change and has the honour to inform the latter of the willingness of the Government of Japan to be associated with the Copenhagen Accord of 18 December 2009.

The Embassy of Japan has further the honour to submit to the secretariat information on its quantified economy-wide emissions target for 2020 in the format given in Appendix I of the Accord as below.

Annex I Parties	Quantified economy-wide emissions targets for 2020	
	Emissions reduction in 2020	Base year
Japan	25% reduction, which is premised on the establishment of a fair and effective international framework in which all major economies participate and on agreement by those economies on ambitious targets	1990

The Embassy of Japan in Germany avails itself of this opportunity to renew to the secretariat of the United Nations Framework Convention on Climate Change the assurances of its highest consideration.

Berlin, January 26, 2010

To the
Secretariat of the United Nations Framework Convention on Climate
Change
Bonn

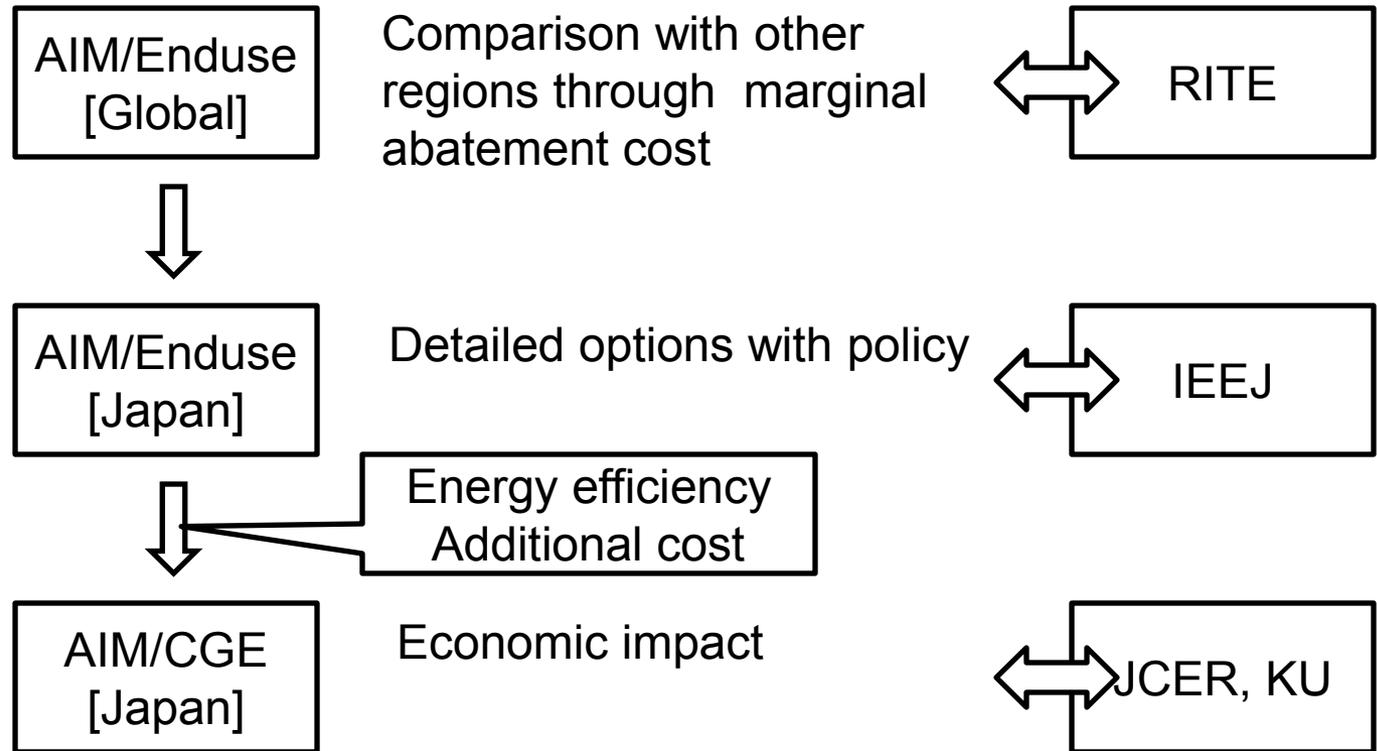


Process of Japan's middle-term target on GHG reduction

- Since October 2008, based on three types of models (global technology models, Japan technology models and Japan economy models), options of Japan's middle-term target on GHG reduction had been calculated.
 - Responding to criticism against the closed process at COP3 (Kyoto Protocol), open and academic process was introduced.
- On 14 April 2009, 6 options were finalized.
- On 10 June 2009, former prime minister, Mr. Aso, announced 15% reduction from 2005 level (=8% reduction from 1990 level) as domestic reduction target.
- On 22 September 2009, present prime minister, Mr. Hatoyama, announced 25% reduction (including international carbon credit and forest sink) from 1990 level.



Process and contribution of AIM

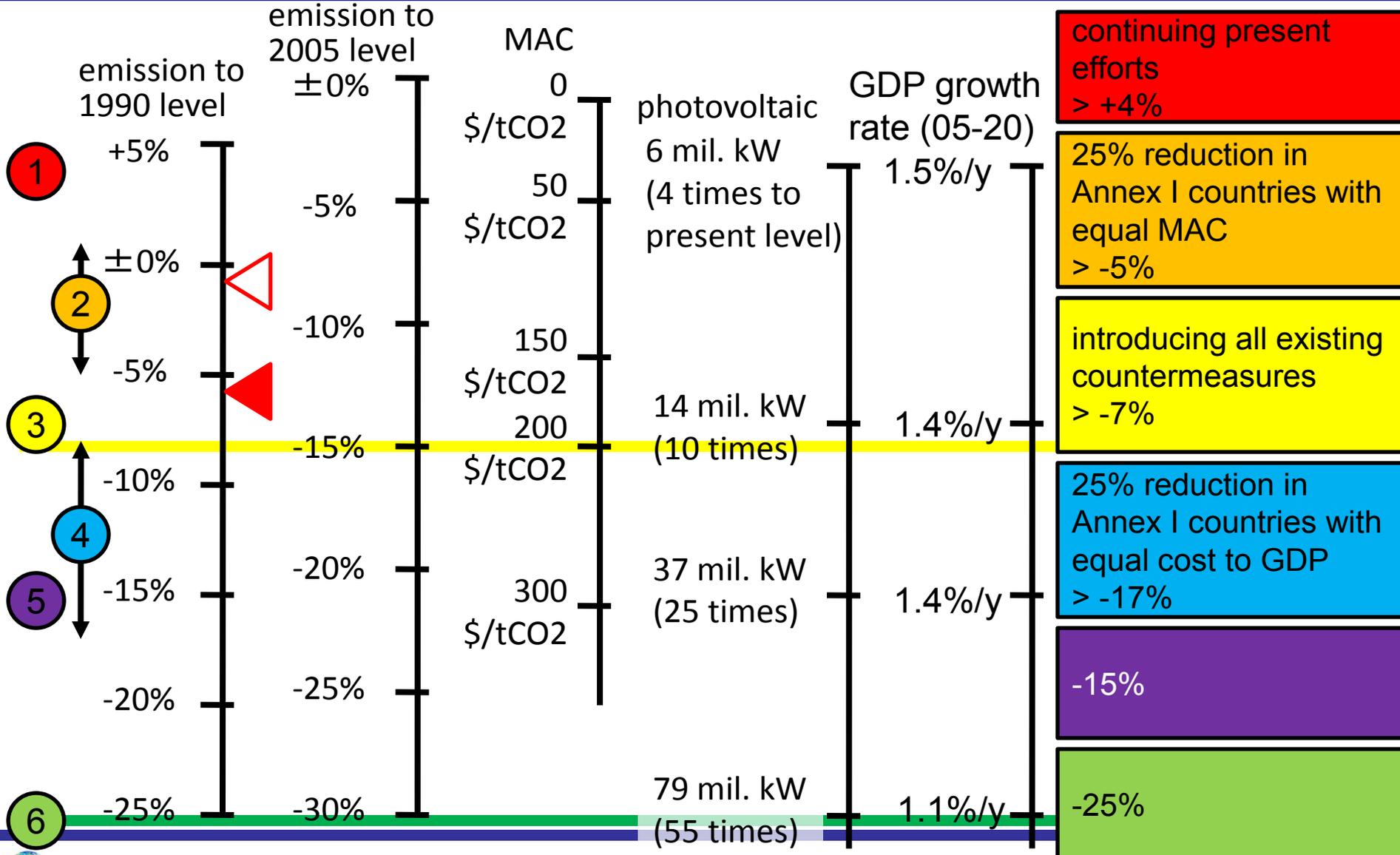


Assumption of activity level in 2020

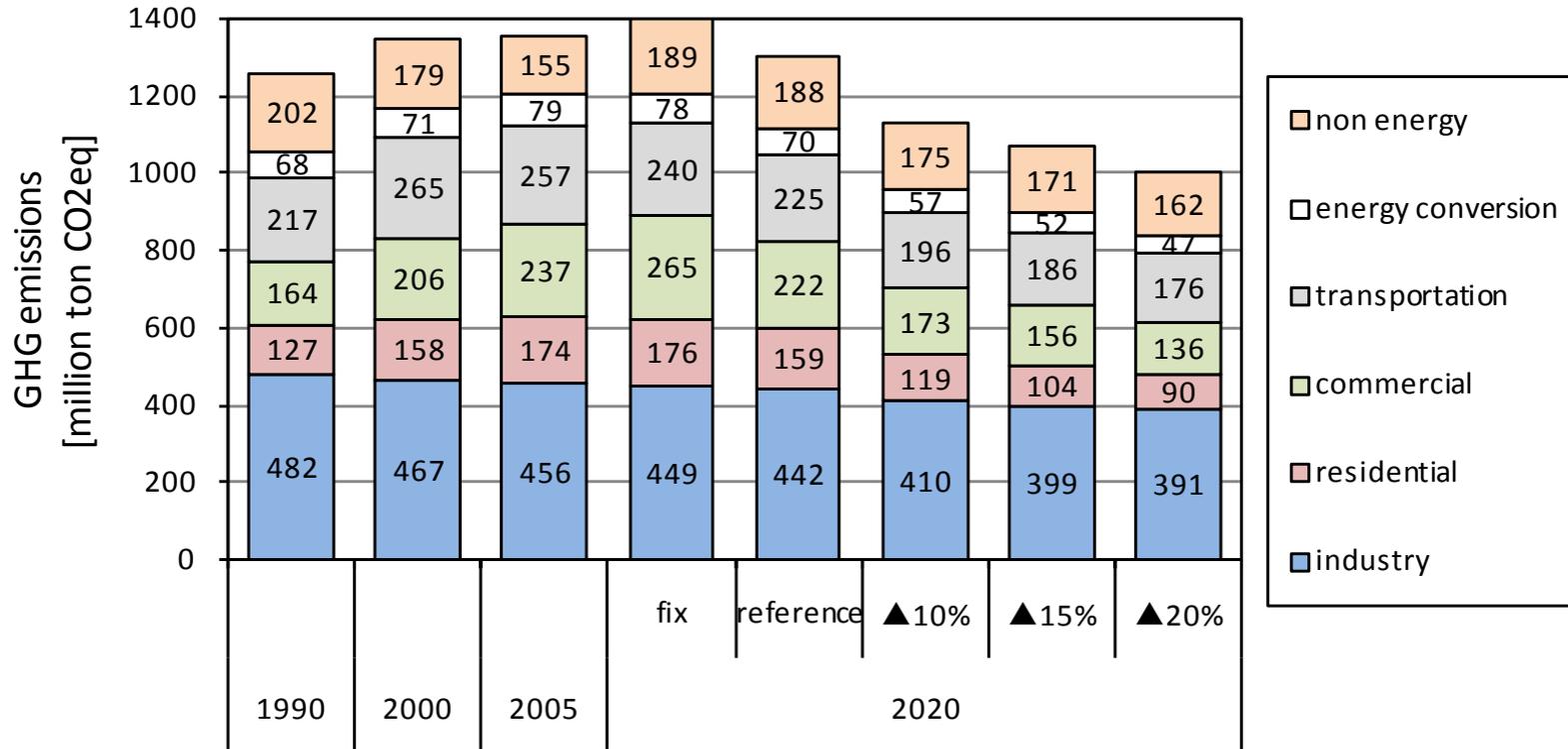
				1990	2000	2005	2020
industry	raw material production	crude steel	10,000 ton	11,171	10,690	11,272	10,697
		ethylene	10,000 ton	597	757	755	706
		cement	10,000 ton	8,685	8,237	7,393	7,179
		paper and paper board	10,000 ton	2,854	3,174	3,107	3,244
	production index	food	100 in 2000	100	100	94	93
		textile	100 in 2000	185	100	64	54
		chemical	100 in 2000	87	100	100	127
		non-ferrous metal	100 in 2000	93	100	102	124
		machinery	100 in 2000		100	107	149
	household	number of households	10,000	4,116	4,742	5,038	5,131
commercial	floor space	million m ²	1,286	1,655	1,764	1,957	
transportation	passenger	100 mil. person km	11,313	12,969	13,042	12,927	
	freight	100 mil ton km	5,468	5,780	5,704	6,275	



6 options Japan's middle-term target (as of 14 April 2009)



GHG emissions in 2020 from AIM/Enduse [Japan] (as of 19 November 2009)

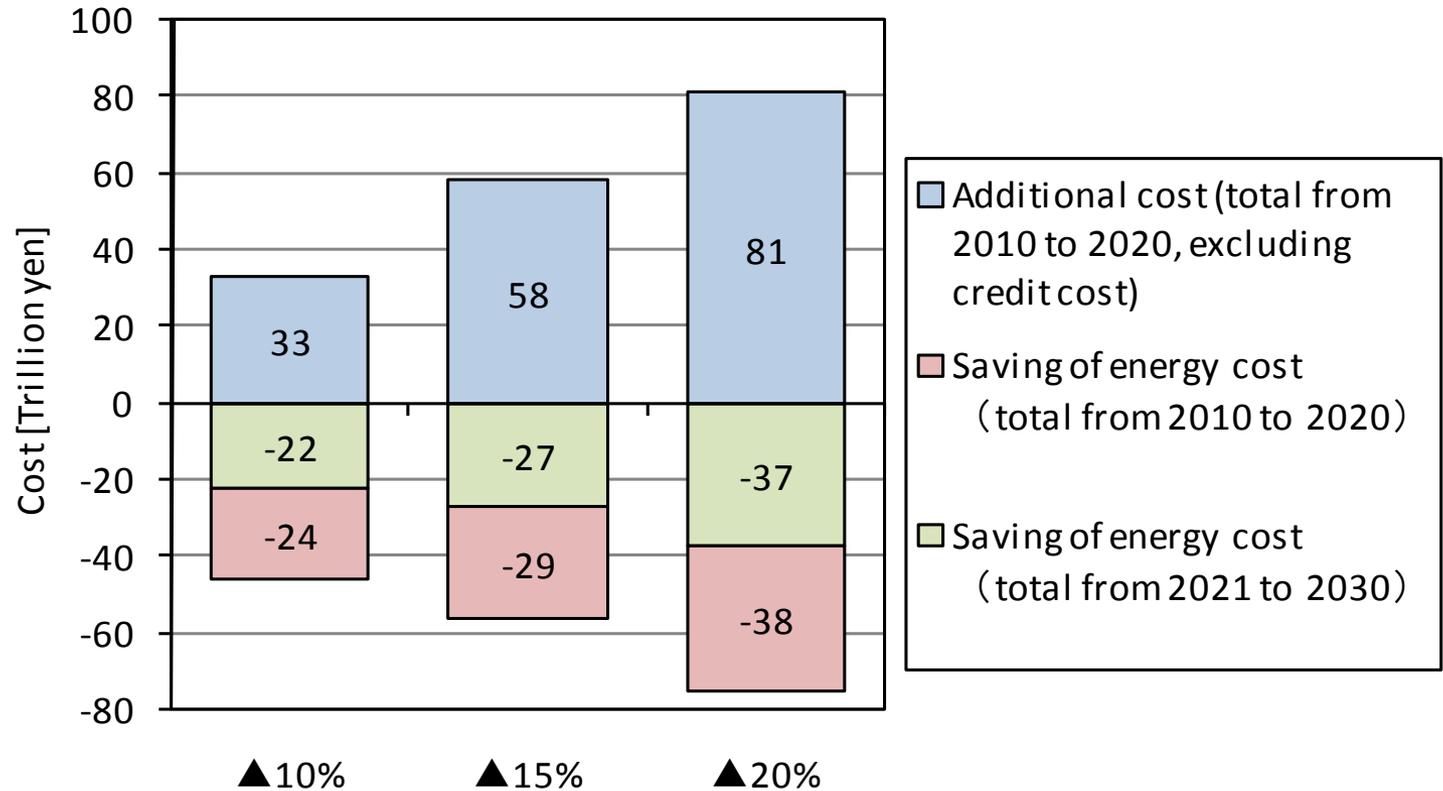


Socio-economic framework did not change at the new taskforce (2009.11-).

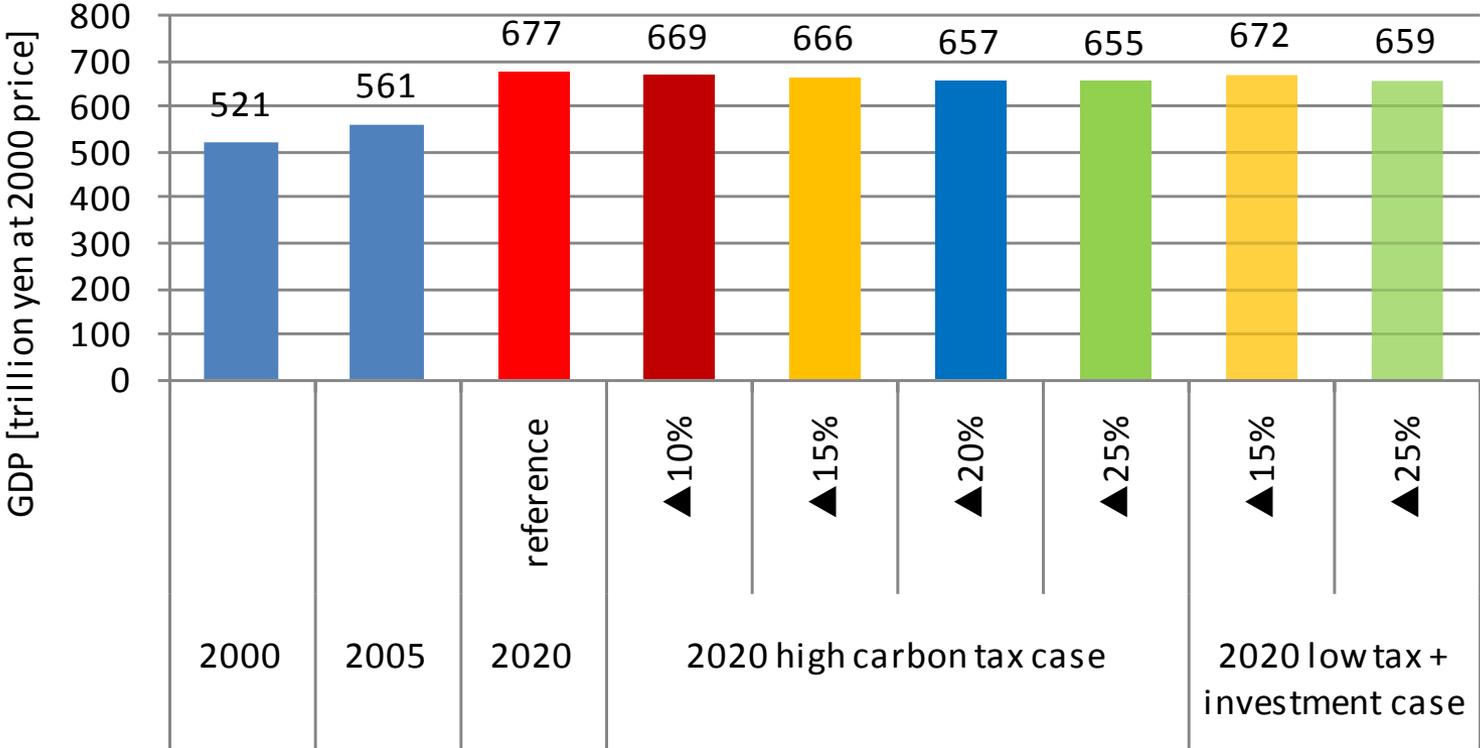
Maximum GHG reduction based on the present framework is 20%, even though countermeasures are reconsidered.



Additional cost to achieve reduction target from AIM/Enduse [Japan] (as of 19 November 2009)



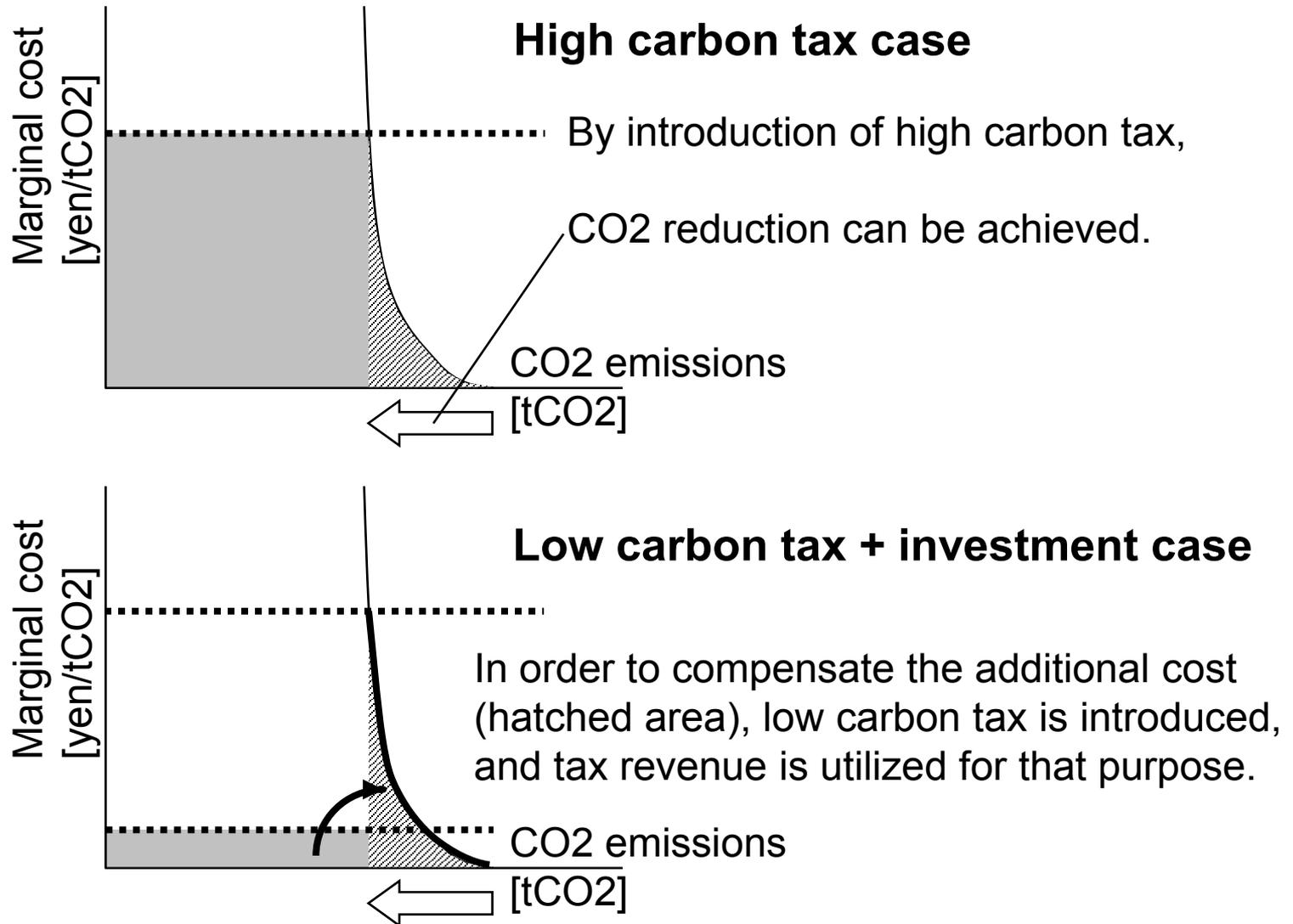
GDP and carbon tax ratio from AIM/CGE [Japan] (as of 19 November 2009)



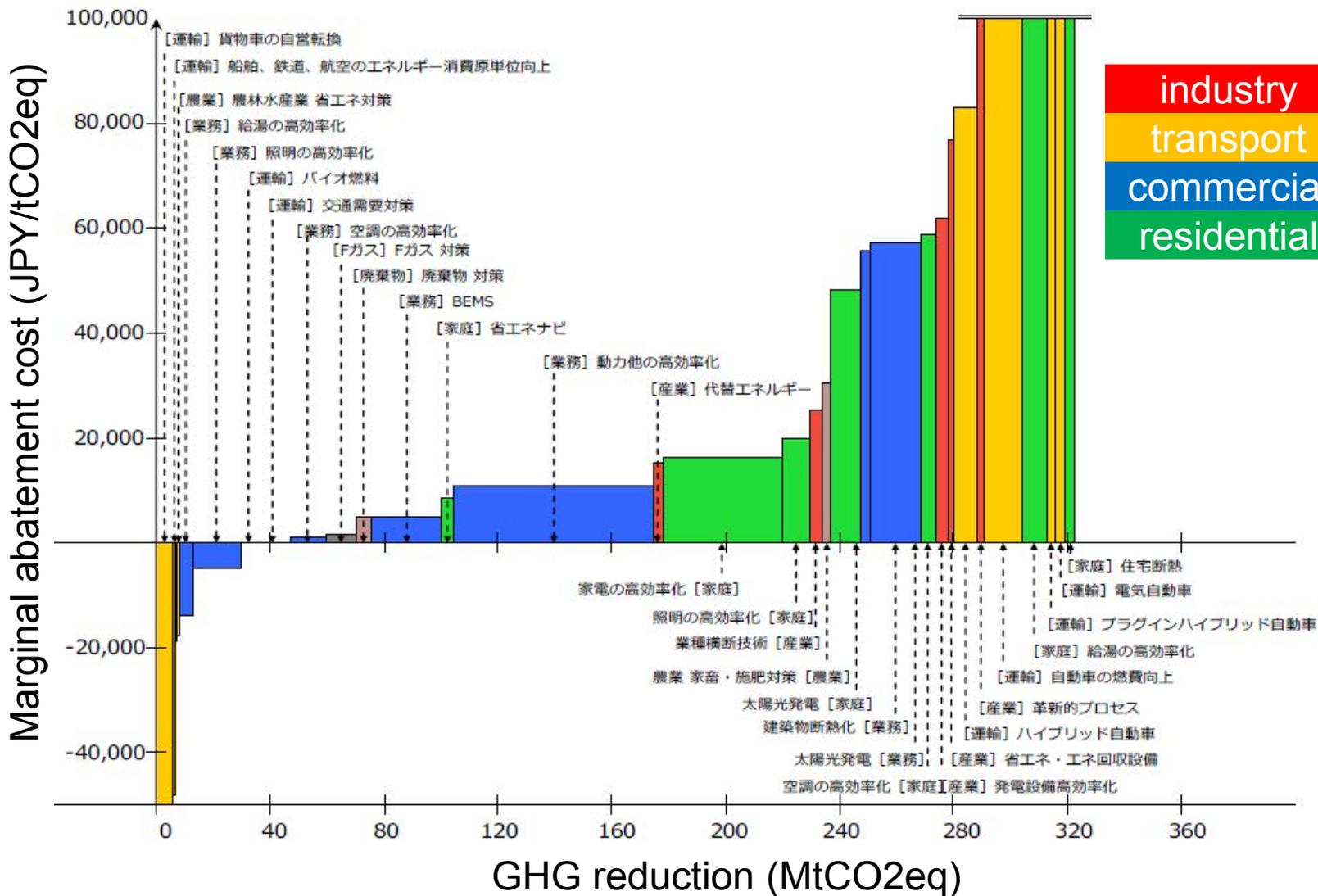
	2020 high carbon tax case				2020 low carbon tax + investment case	
	▲10%	▲15%	▲20%	▲25%	▲15%	▲25%
carbon tax ratio [yen at 2000 price /tCO ₂]	8,678	10,252	23,869	52,438	5,961	8,558



Proposal of carbon reduction policy



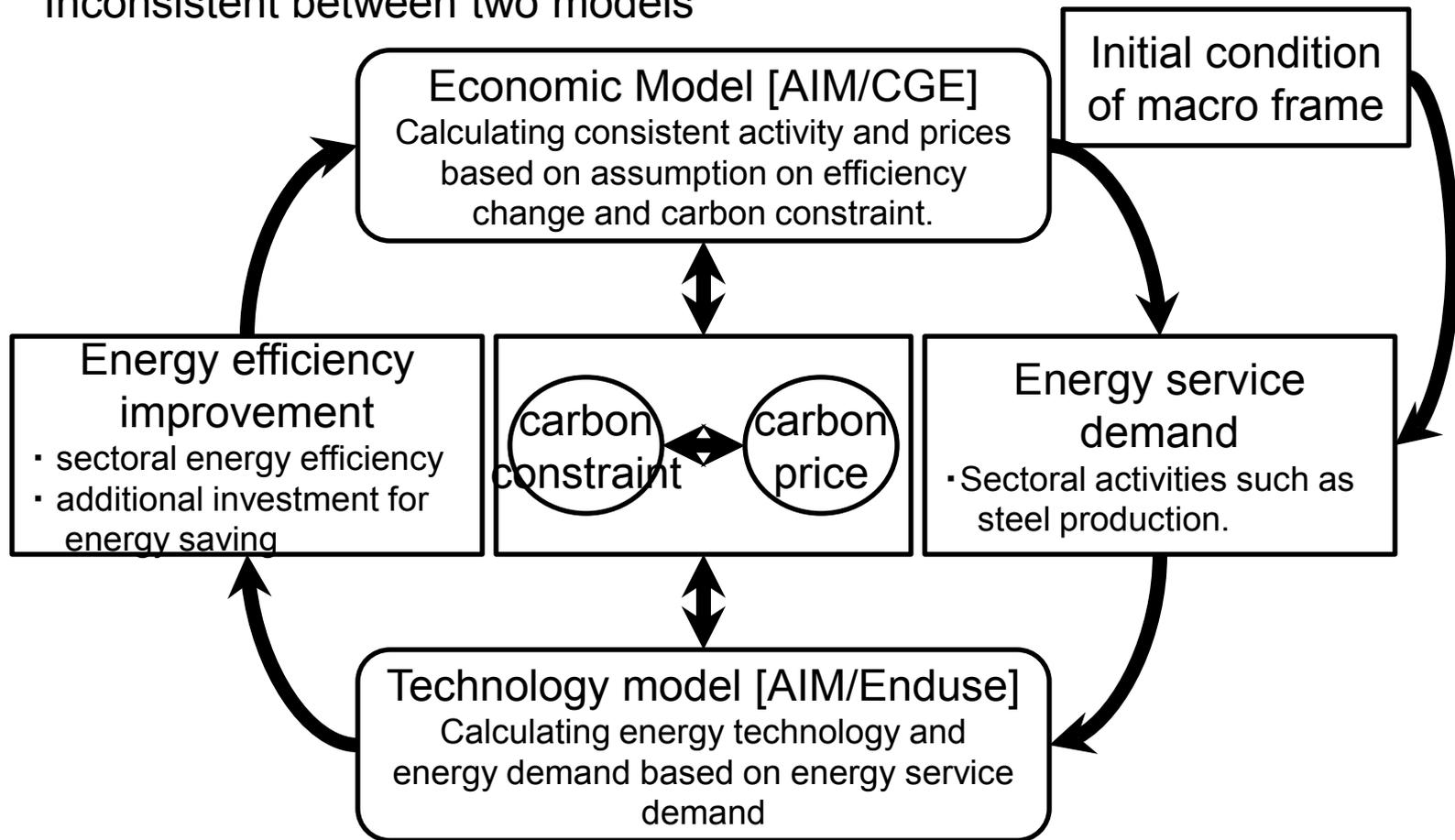
Marginal abatement cost curve for 15% reduction (as of 19 November 2009)



Future works

Roadmap to 2020/2050

Inconsistent between two models



Feedback economic impact to Enduse model

