Keidanren
Policy & Action

The Role of Business in Developing and Disseminating Low-Carbon Technology

November 16th, 2016

Hiroyuki Tezuka
Chairman of Global Environment Strategy WG,
Committee on Environment and Safety,
Keidanren

Keidanren
Policy & Action

(1) Our Basic Concept

Viewpoint on Climate Protection Measures

➢ **Technology is a key to reconcile economic growth and emission reduction.**

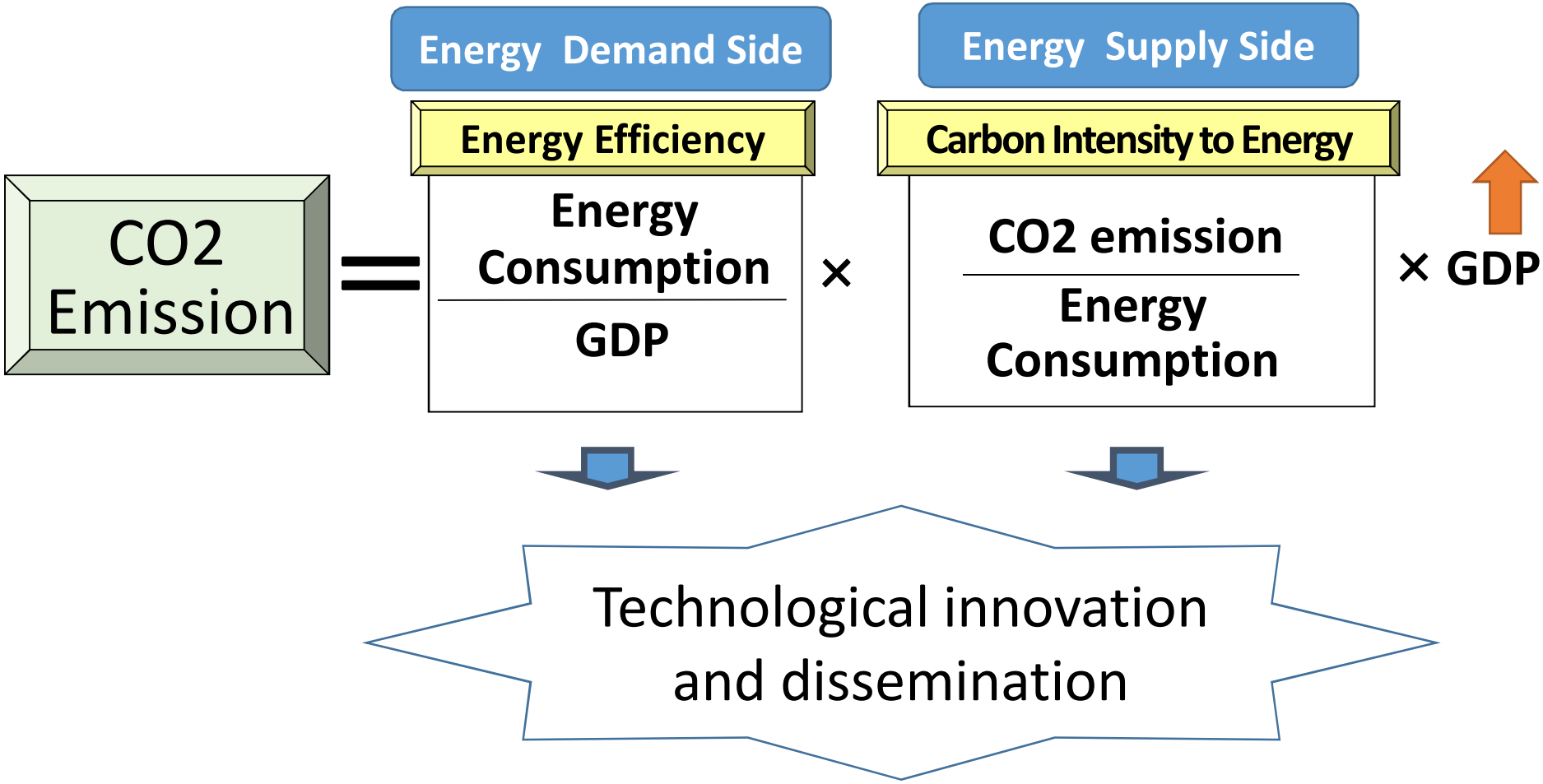
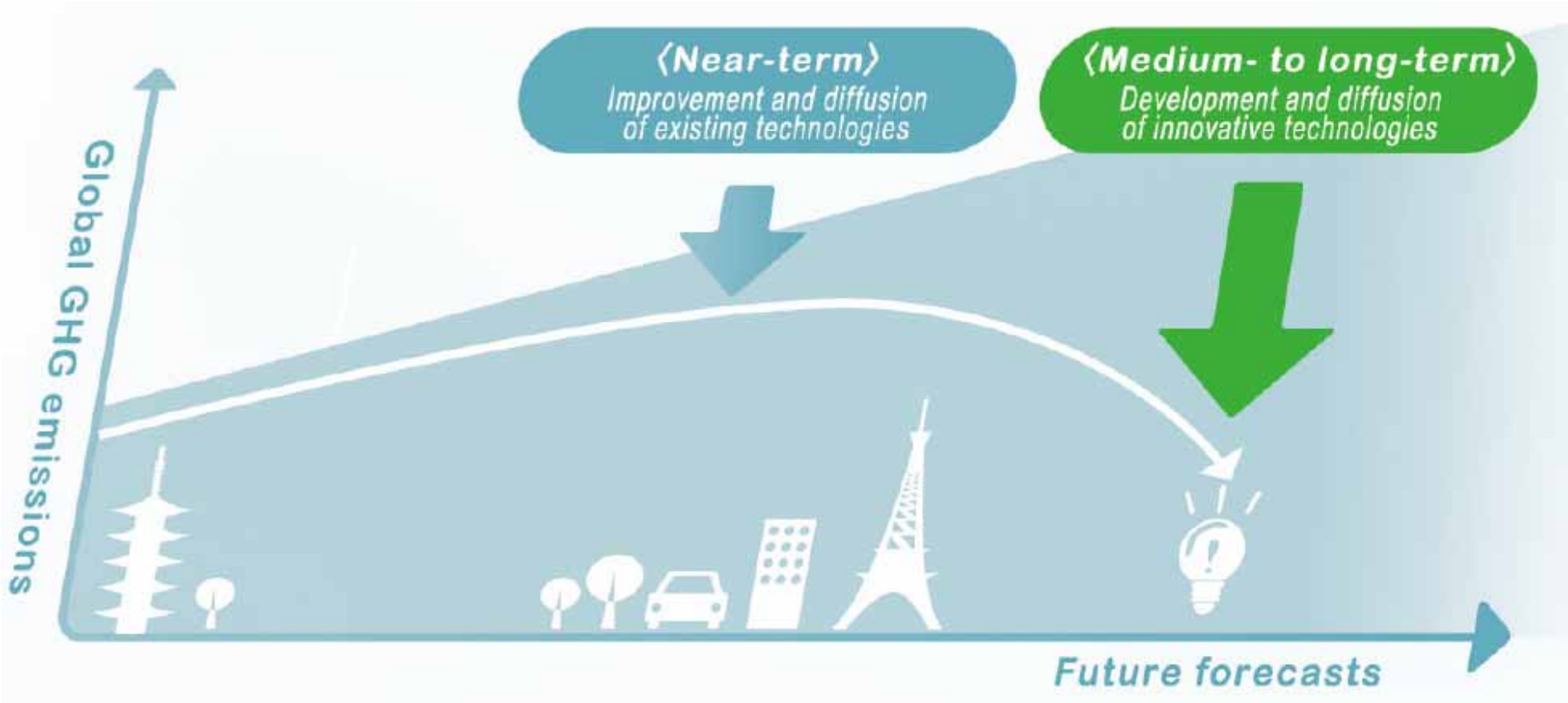


Image of achieving dramatic reductions by technologies

- By developing and disseminating low-carbon technologies, we can reduce global GHG emissions dramatically in the long-run.



(2) Recent Developments

Efforts by Japanese Government to Promote Innovation

ICEF (Innovation for Cool Earth Forum)

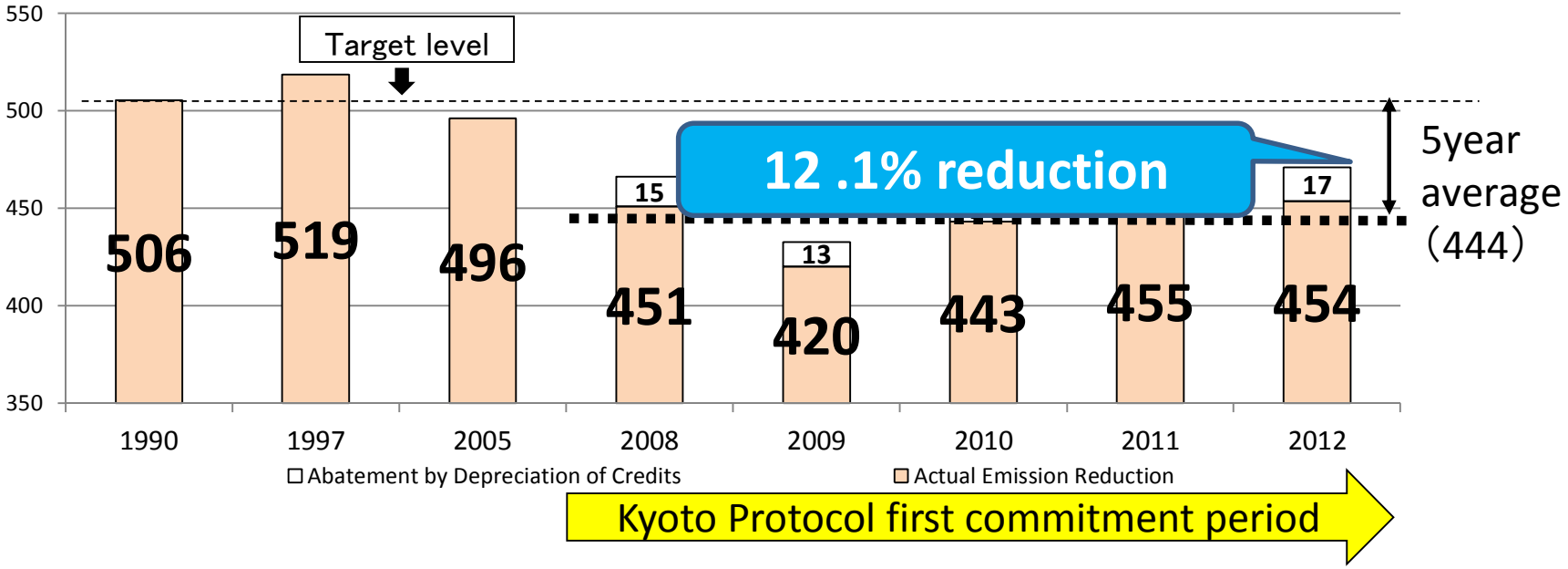
- ICEF is aimed at addressing climate change through innovation, and held in Tokyo every year by METI.
- ICEF investigates via discussion in the forum what innovative measures should be developed, how the innovation should be promoted, and how cooperation should be enhanced among the stakeholders.

ACE 2.0 (Actions for Cool Earth 2.0)

- Japan has released the ACE 2.0 on November 26th, 2015. This is a reinforcement of Japan's contribution to climate change actions which was presented as "ACE" in 2013.
- One of the major components of ACE 2.0 is innovation. Japan will formulate the "Energy and Environment Innovation Strategy" by next spring. Prospective focused areas will be identified and research and development on them will be strengthened.

(3) Keidanren's Efforts

Results of Keidanren's Action Plan

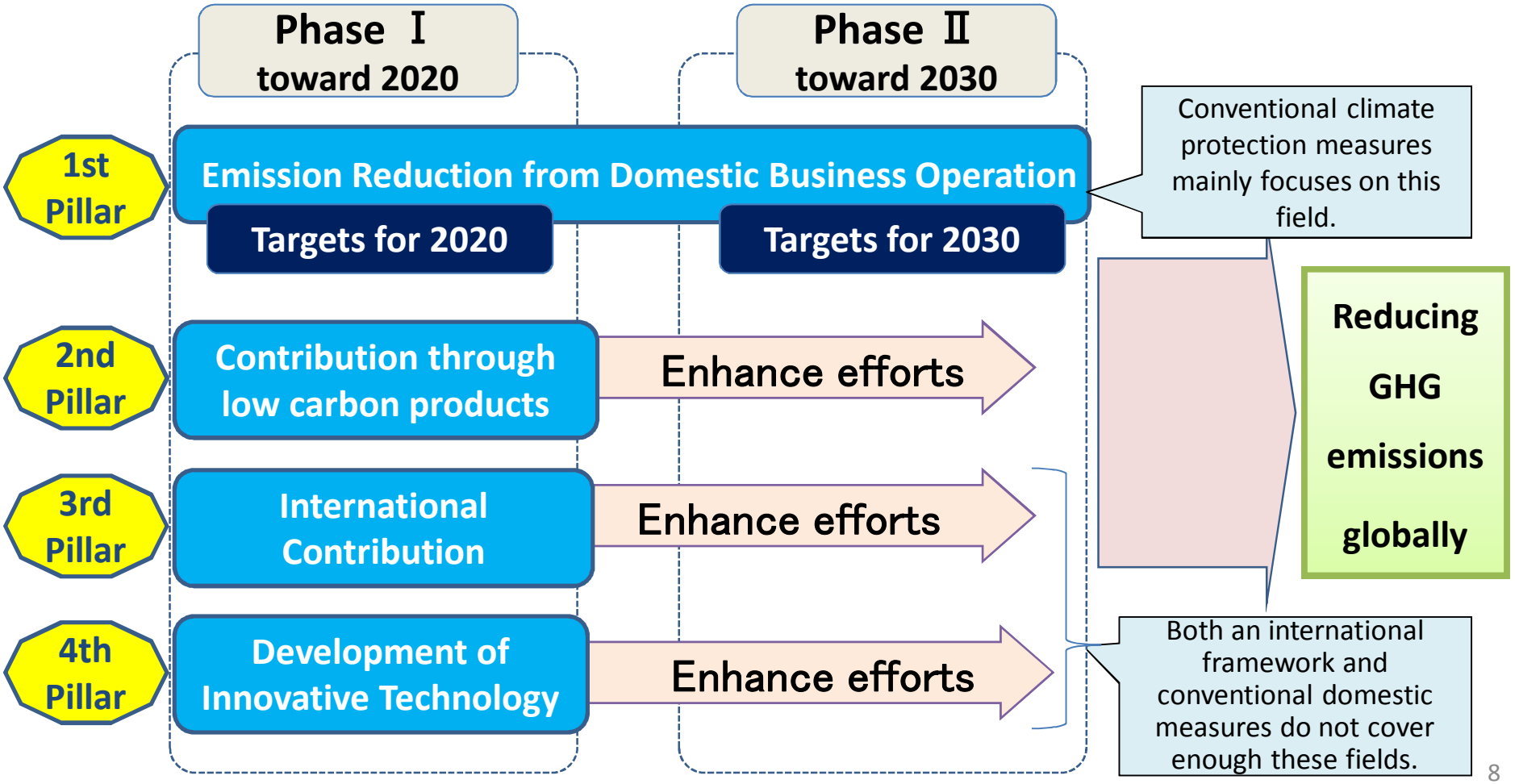


Factors Contributing to Reduction (Average of 2008-2012)	Comparison to FY 1990
Change in production activity	+2.0%
Change in CO2 emission factor	+0.0%
Change in CO2 emissions per unit of output (efficiency improvement)	-14.0%
Total	-12.1%

Efficiency improvement was the driving force to reduce CO2 emissions in KEIDANREN's plan.

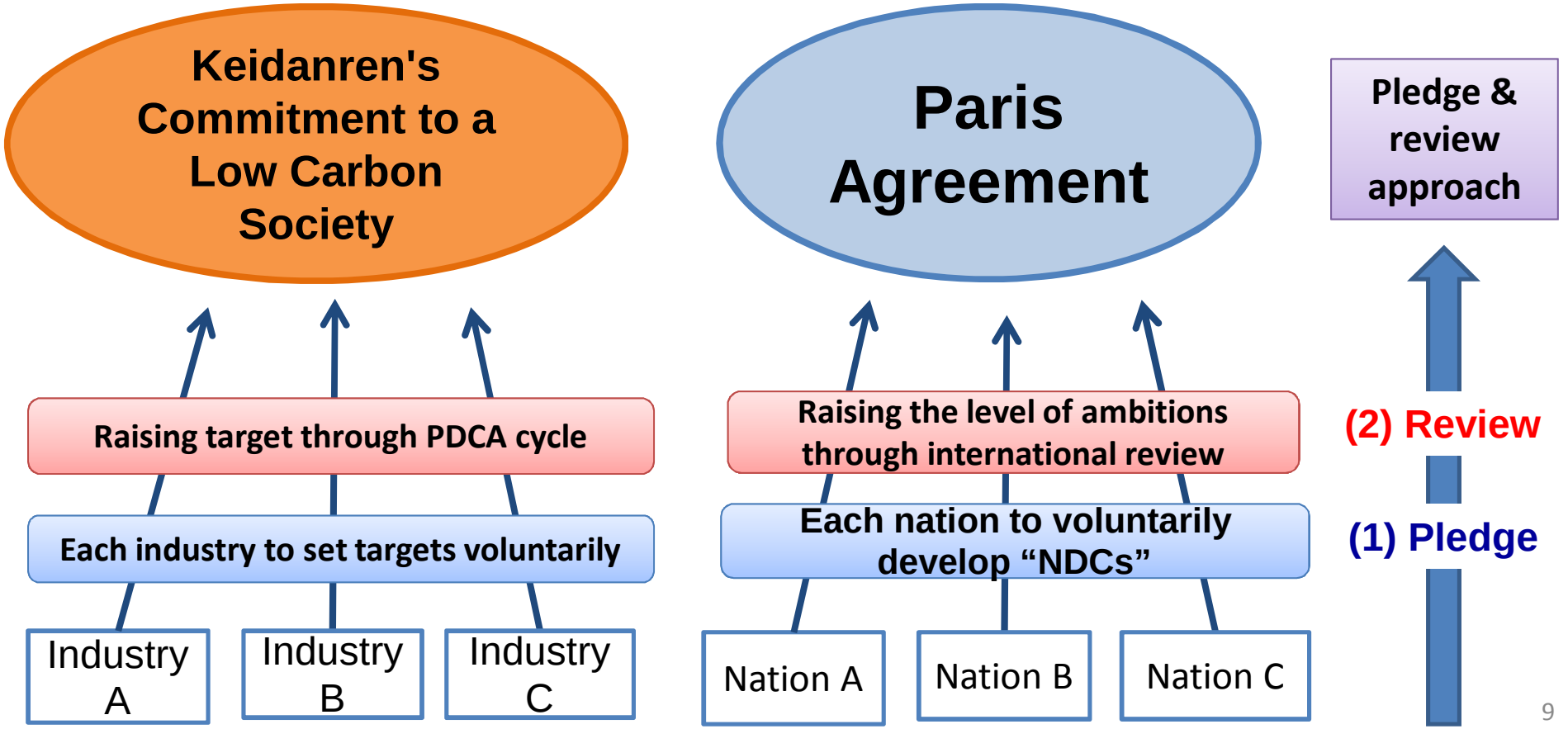
KEIDANREN's Commitment to a Low Carbon Society

1. Participating industries and companies set their own targets.
2. The plan consists of 4 pillars (shown bellow).
3. 55 industries made their plans as for the Phase Ⅰ toward 2020.
4. Endeavor to expand our efforts for the Phase Ⅱ toward 2030.



Implication to the Paris Agreement

1. The Paris Agreement incorporates a “pledge and review” approach, where each participating country commits to their NDCs (pledge), and improve the effectiveness of national measures through periodical international review (review).
2. This is the very same approach Japanese business has implemented for many years through the PDCA cycle in the Keidanren's action plan.



(4) Technology Transfer

(Examples of Iron & Steel Industry)

The public and private collaborative meeting between Indian and Japanese iron and steel industry (1/2)

Purpose

To encourage technology transfer from Japanese to Indian steel industry and thereby contribute to the energy saving in India and in the world.

Members – Public and Private sectors of India and Japan

Public and Private Partnership

India

Public members and observers

Ministry of Steel

Bureau of Energy Efficiency etc.

Private members and observers

Indian steel companies (SAIL, RINL, Tata, JSW, Bhushan, BPSL, Essar, Jindal etc.)

Japan

Public members and observers

Ministry of Economy, Trade and Industry/ NEDO / JBIC / JETRO

Private members and observers

The Japan Iron and Steel Federation (Nippon Steel & Sumitomo Metal, JFE steel, Kobe steel, Nisshin Steel etc.)

The public and private collaborative meeting between Indian and Japanese iron and steel industry (2/2)

Meetings – since 2011

2011	2012	2013	2014	2015	2016
1st meeting (Nov. 2011, New Delhi)	2nd meeting (Nov. 2012, New Delhi)	3rd meeting (Feb. 2013, Tokyo)	4th meeting (Feb. 2014, Tokyo)	5th meeting (Mar. 2015, New Delhi)	6th meeting (Feb. 2016, Tokyo)

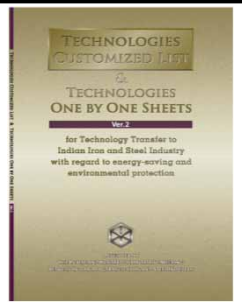


Three pillars of the energy management in the steel plant

ISO14404

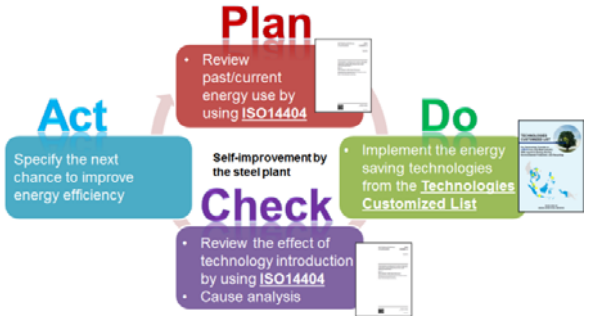
Steel Plant Diagnosis using ISO14404 (2013-2016)

Technologies Customized List



Technology reference of energy saving technologies suitable for each country/region

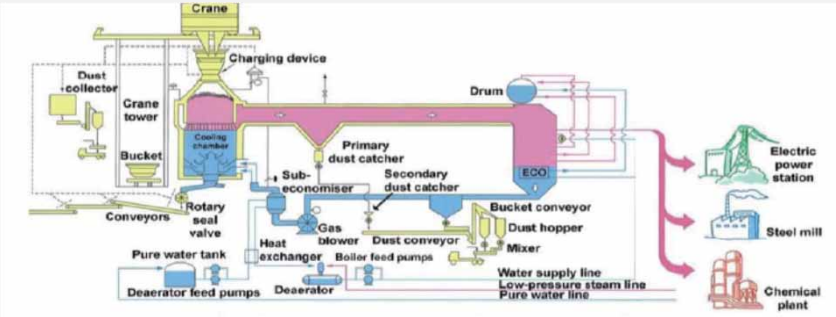
Energy Management System



Help steel plants to establish a framework to plan, do, check and act for the energy saving activities

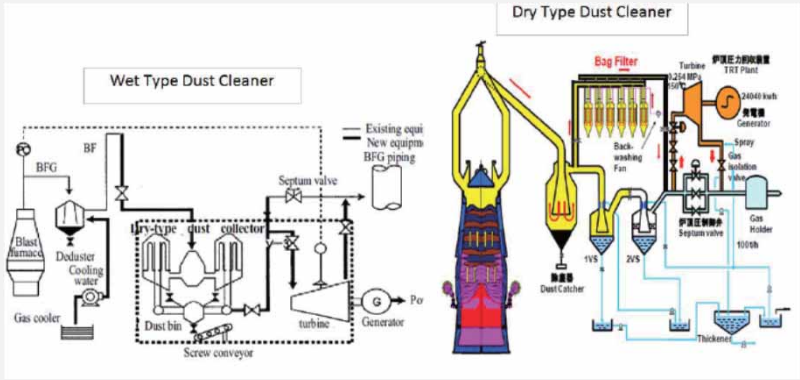
Emission Reduction by Technology Transfer to Indian Steel Industry

CDQ (Coke Dry Quenching)



10 CDQs have been installed by Japanese engineering companies to India triggered by NEDO model project

TRT (Top Pressure Recovery Turbine)



5 TRTs have been installed by Japanese engineering companies to India

With Japanese energy saving technologies,
Indian steel industry will be able to reduce CO2 emission by 13 Mt per year.

(5) Policy Proposals

To promote technology transfer

1. Promote diffusion of advanced low carbon technologies particularly through “visualizing” its contribution to global emission reduction, so as to develop a favorable environment to encourage international contribution.
2. Involve the Climate Technology Centre and Network (CTCN) and the Green Climate Fund (GCF), and enable them to collaborate effectively.

To promote technology development

1. Build an international framework where contribution and efforts to develop innovative technologies would receive higher evaluation.
2. Every government should clearly indicate a numerical target of raising its investment in R&D programs, and make steady efforts to realize it.
3. Provide tax incentives for promoting private R&D investment.