



Cooperative Activities of ZEB Dissemination in ASEAN Members of States

Japanese Business Alliance for Smart Energy Worldwide

ZEB Solution Group Leader

JUN DONOMAE



Japanese Business Alliance for Smart Energy Worldwide

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JASE-W (Japanese Business Alliance for Smart Energy Worldwide)

- ◆ JASE-W was established in October 2008 with strong support from the Japanese business community and the government.
- ◆ To promote international cooperation through various excellent energy-saving, renewable energy and decarbonization technologies and products possessed by Japanese companies,
- ◆ The public and private sectors have been working together to actively implement various activities such as dispatching missions overseas, disseminating information, holding business forums, participating in international energy and environment-related exhibitions, and conducting surveys and analyses.

 **IEE JAPAN**
The Institute of
Energy Economics, Japan

 **JICA**
Japan International
Cooperation Agency

 **NEDO**
New Energy and Industrial Technology
Development Organization

 **JETRO**
Japan External Trade Organization

 **ECCJ** The Energy Conservation Center, Japan
 **AEEC** Asia Energy Efficiency and Conservation
Collaboration Center



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Member Companies

➤ Currently 41 of Japanese companies are the members of JASE-W.

AGC

azbil

DMW CORPORATION
Powering Passion

株式会社アースクリーン東北
Earth Clean

EX EX Research Institute Ltd.
Environmental and Regional Planning, Research and Consulting

FE Fuji Electric
e-Front runners

FB FURUKAWA
BATTERY

Green Power
GreenPower Investment Corporation

Kanadevia
Technology for people and planet

HITACHI
Inspire the Next

INPEX

JFE JFE Steel Corporation

JFE JFE Engineering Corporation

Kansai Electric Power
power with heart

Kawasaki

KURITA

Make Next.
KYUDENKO

MITSUBISHI ELECTRIC
Changes for the Better

Mitsubishi Corporation

MITSUBISHI
HEAVY INDUSTRIES, LTD.

MIURA

NEW JEC

NIKKEN
EXPERIENCE, INTEGRATED

NIPPON KOEI

NIPPON STEEL

NIPPON STEEL ENGINEERING

OSAKA GAS

Osaka Gas Group is now Daigas Group
Daigas

Pacific Consultants
Producing The Future

RES

SANKEN
ENVIRONMENTAL ENGINEERING

SEKISUI HOUSE

SHIMIZU CORPORATION
SHMZ

Sumitomo Corporation

Takasago Thermal Engineering Co., Ltd.

TLV

TEPCO

TORISHIMA

TOSHIBA
Leading Innovation >>>

TOYO

Toyo Engineering Corporation

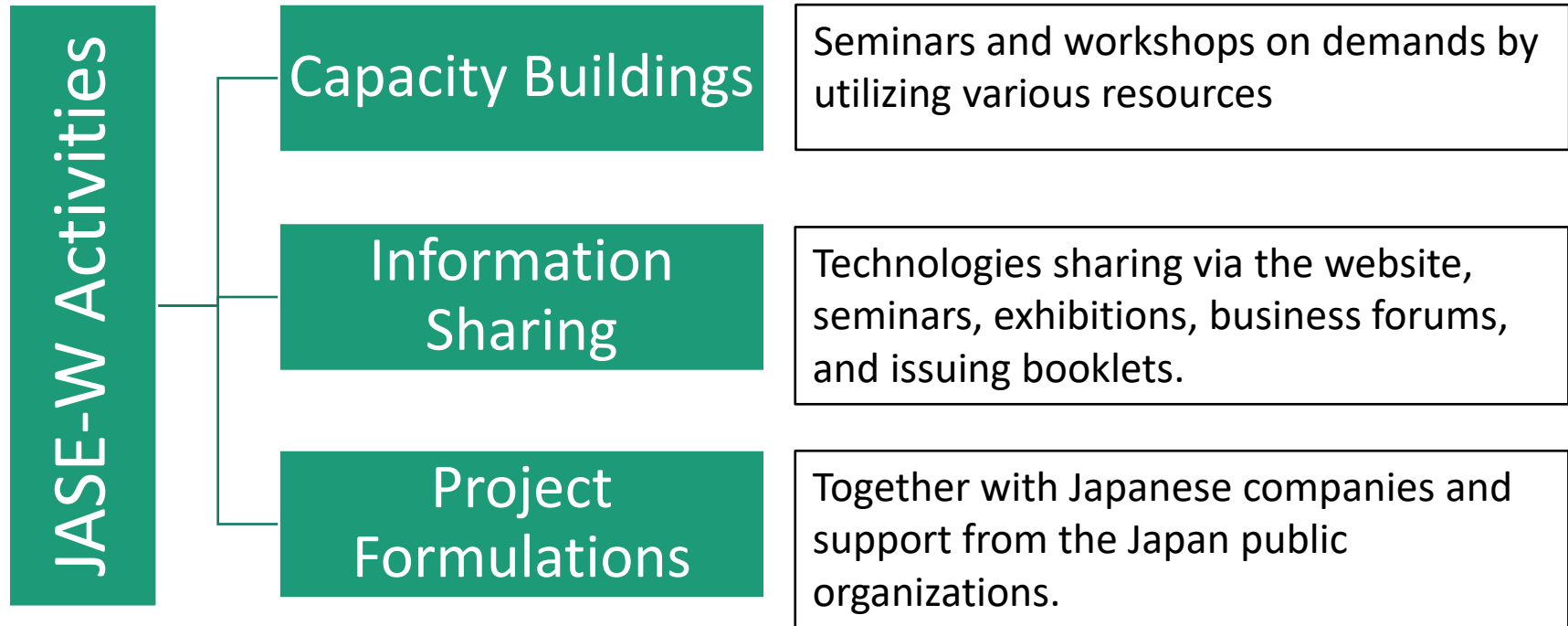
YOKOGAWA



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What is JASE-W doing?





Explore Smart Energy Projects

ZEB Solutions Working Group

- ◆ JASE-W ZEB WG has been convening workshops and seminars in ASEAN to familiarize themselves with it and announce that a step-by-step approach for promoting ZEB is important.
- ◆ The WG has also been working in the ISO (International Organization for Standardization) committee concerned (TC205), and the ISO issued TS (Technical Specification) 23764 on the ZEB concept in September 2021.
- ◆ The WG has a system that provides support from design to energy management. The WG is working to promote ZEB demonstrations in each country.
In Malaysia, the WG is collaborating with the Sustainable Energy Development Authority (SEDA) to showcase ZEBs in existing buildings.

Other Projects

Renewables and Distributed Power Working Group

Grid Improvement Working Group

Geothermal Power Working Group

Turkey and the Black Sea Region Working Group

Waste to Energy Working Group

Water Technology Working Group

Electric Power & Thermal Management Working Group



ISO TS23764 update



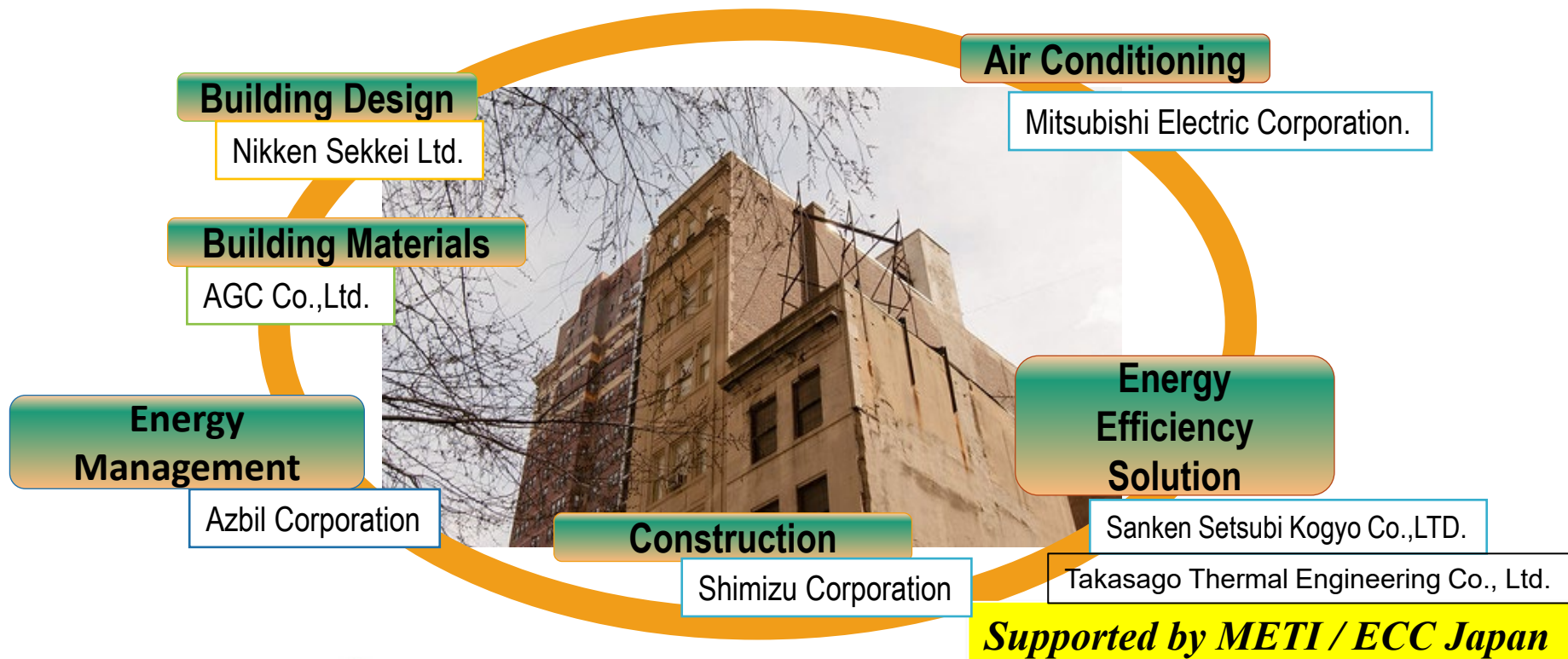
ISO TS23764 Methodology for achieving non-residential zero-energy buildings (ZEBs)

Issued on Sept. 2021
Now updating is ongoing

- ◆ The purpose of the standardization is to improve practicability for ZEB by promoting the “ZEB family concept” which allows a “Step-by-Step Approach” to net zero energy buildings and to increase dissemination rate by realizing ZEB family buildings to satisfy part of all the requirements necessary to achieve (net) ZEB



ZEB SOLUTION WG

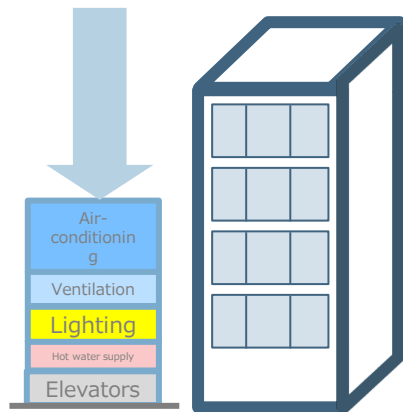


Step-by-Step Approach toward ZEB

The concept of ZEB has been expanded to “ZEB series” according to actual conditions. First step is to aim for super energy efficient buildings which are defined as “ZEB ready”, and then aim for “Nearly ZEB” and “(net) ZEB” which is a step-by-step approach. → **ZEB family Concept**

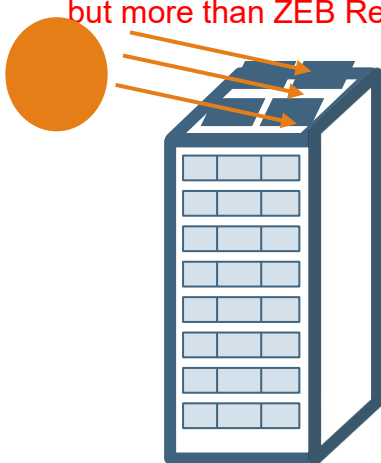
ZEB Ready

(Significant energy saving **more than 50%** from **reference point**)



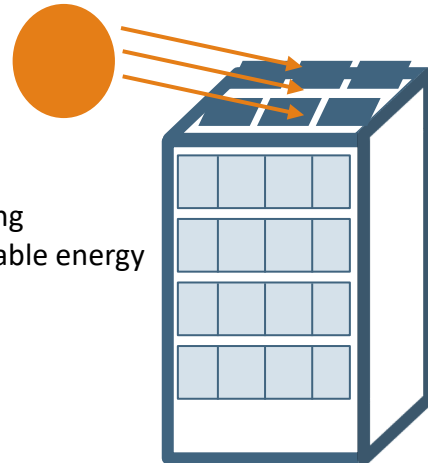
Nearly ZEB

(Net energy saving (RE) **not reach 100%** including % but **more than ZEB Ready**)



(net)ZEB

(Net energy saving (including RE) **of 100% or more**)



Including
Renewable energy



Successful ZEB Workshop/Seminar Held in Jakarta, Indonesia 2025

- ◆ On July 23 2025, the ZEB Solutions Working Group successfully co-hosted a ZEB workshop/seminar in Jakarta, with 46 participants attending in person and approximately 80 participants online, totaling over 120 attendees.
- ◆ This seminar featured presentations from the following key institutions promoting Indonesia's energy conservation policies,
 - Ministry of Energy and Mineral Resources (MEMR)
 - Green Building Office under the Ministry of Public Works and Housing (MPWH)
 - Jakarta City Urban Planning Department

- ◆ From the Japanese side, provided an overview of the latest ZEB policy trends, an explanation of the advanced energy consumption simulation program “WEBPRO,” and introductions of outstanding products and technologies by member companies



ZEB Workshop co-hosted by DEDE in Bangkok, Thailand 2024

- ◆ On July 25 2024, a Workshop on "Zero Energy Building (ZEB) Development Program" in Bangkok collaborating with the Department of Alternative Energy Development and Efficiency (DEDE)Thailand was held.
- ◆ From the Japanese side, Mr. Yoshino, Director of the Ministry of Economy, Trade and Industry (METI), gave a welcome speech and introduction from Japanese speakers on the measures and legal system for ZEB initiatives, an overview of TS23764 and its updates, and Japanese technical products were made.
- ◆ From the Thais side, Mr. Wongwanasana, Head of the Energy Regulations and Energy Saving Department of DEDE, gave a speech and the director of DEDE introduced energy-saving initiatives for buildings in Thailand, the DEDE's ZEB building, which was newly built last year, and the Siam Cement Group's zero-emission initiatives are introduced.

- ◆ The number of applicants exceeded 100, showing that the interest in ZEB in Thailand is growing.
- ◆ The day before the event, the participants visited DEDE's ZEB building and Shell's headquarters building in Thailand, which won the ZEB award at the ASEAN Energy Awards 2022, to see examples of ZEB implementation in Thailand.



The Building Green 2024 Conference in Davao City, Philippines 2024

- ◆ JASE-W participated as a partner sponsor in the "Building Green 2024" conference hosted by the Philippine Green Building Council (PhilGBC) from September 26 to 27, 2024.
- ◆ ZEB Solutions Working Group leader presented an overview and the latest information on the ZEB technical specification (TS23764). In addition, Azbil Philippines introduced its energy management technology.
- ◆ On the afternoon of the 27th, we visited the DEMOSA headquarters building, a real estate company that is also a member of the Philippine Green Building Council, to experience a real green building.

- ◆ PhilGBC is actively working on greening buildings and achieving ZEBs. JASE-W will continue strengthening its cooperative relationship with PhilGBC and promoting the spread of ZEBs in the Philippines.



ZEB Workshop Held in Hanoi, Vietnam, in Collaboration with Hanoi University of Civil Engineering 2024

- ◆ On Thursday, September 18, 2024, a ZEB workshop entitled "Workshop on Zero Energy Building (ZEB) Development Program" was held in a conference on the campus of Hanoi University of Civil Engineering under the auspices of the Vietnamese Ministry of Construction.
- ◆ The event was attended by about 70 participants in person and about 80 online.
- ◆ The theme of the workshop was to consider benchmarks for Vietnam, referencing benchmark systems for building energy consumption in Japan and Europe.

- ◆ On the Vietnamese side, the Director General of the Science, Technology, and Environment Department of the Ministry of Construction gave a greeting and a presentation on the current state of energy-saving measures in Vietnamese buildings, as well as on reducing emissions from buildings.



Demonstrate Project : Collaboration with Sustainable Energy Development Authority ,Malaysia (SEDA)

Cyberjaya, Malaysia



Under discussion

Target: Nearly ZEB/net ZEB

Retrofit ZEB project

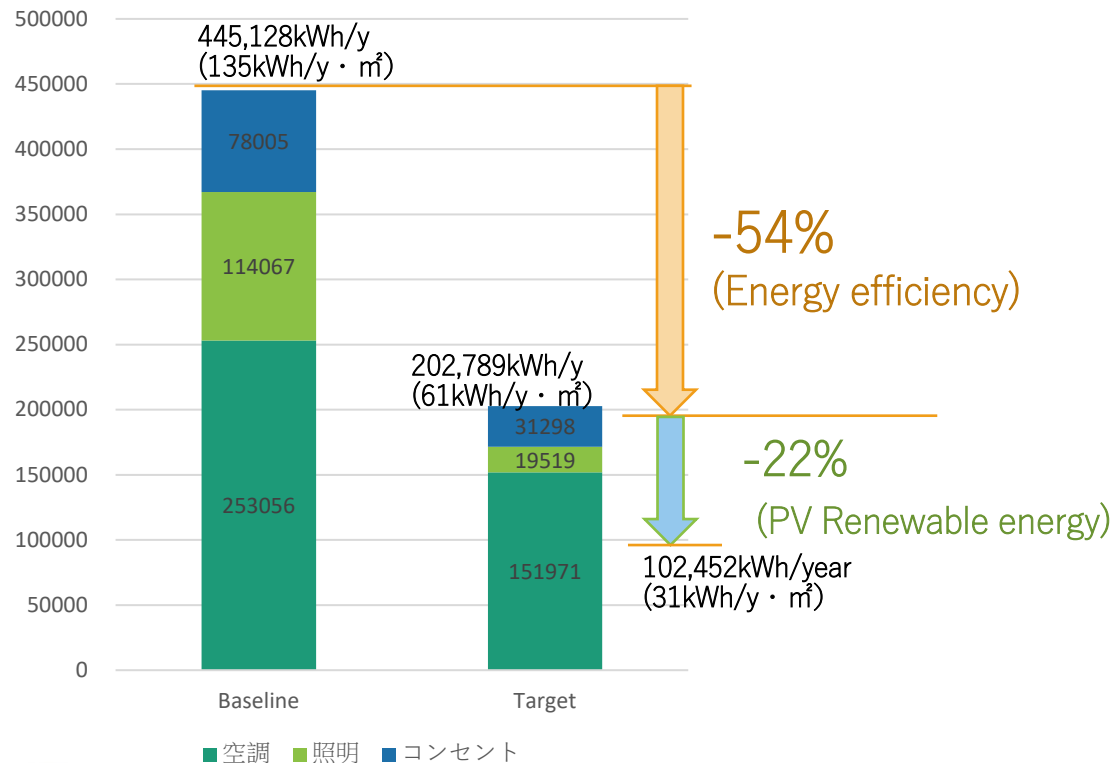
Partner: SEDA Malaysia

4-story building, Office

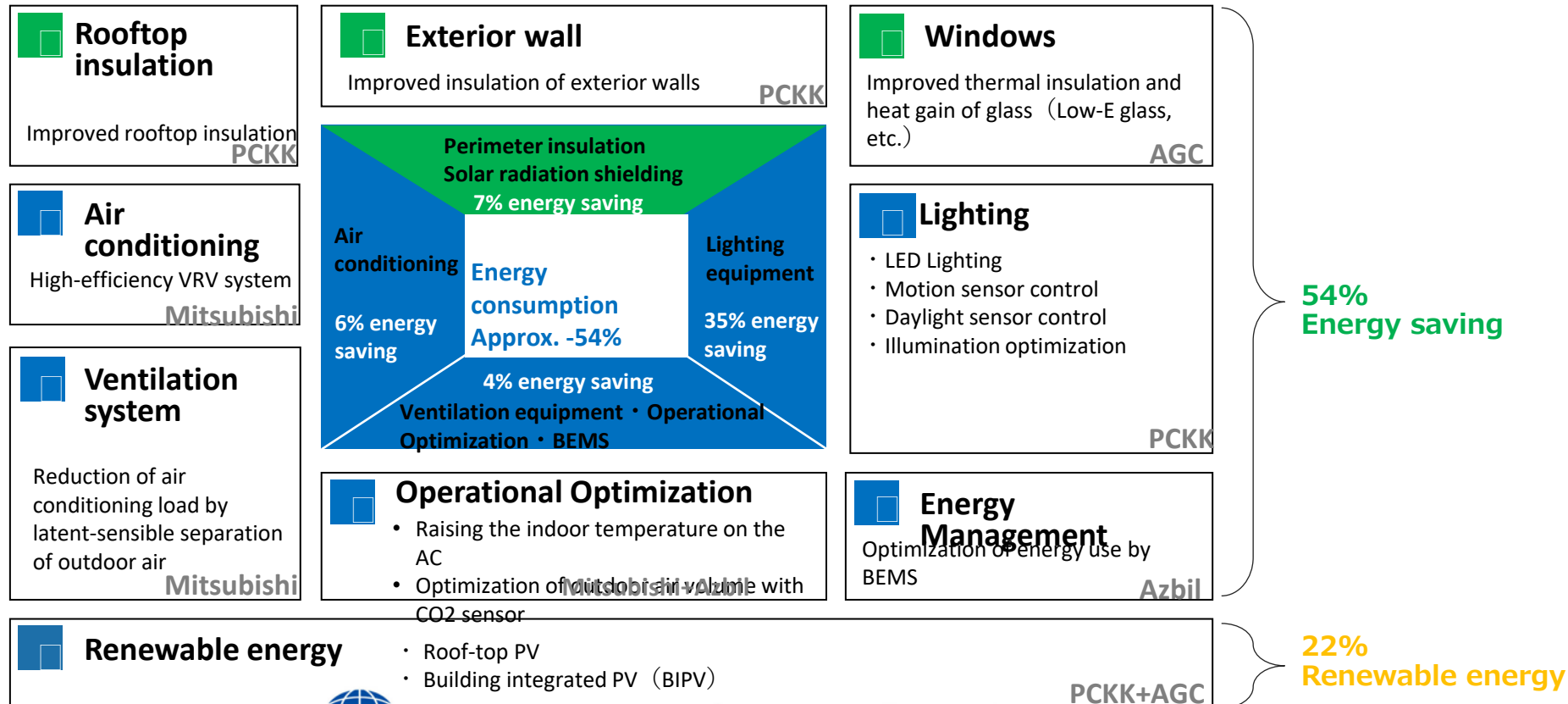


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Total 76% of energy consumption can be reduced.



Total energy consumption : Approx. 76% reduction (Target) Aiming for 「Nearly ZEB」



THANK YOU !



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<https://www.jase-we.org/>



The Energy Conservation Center, Japan



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