# **Environmental Management**of Panasonic Group

October 7, 2022

Panasonic Holdings Corporation Executive Officer, Group CTO Tatsuo Ogawa

## 1. Introduction of Panasonic Group

2. How to Evaluate Companies
Contributing to Decarbonization

## **Outline of Panasonic Group**



**Group CEO** Yuki Kusumi



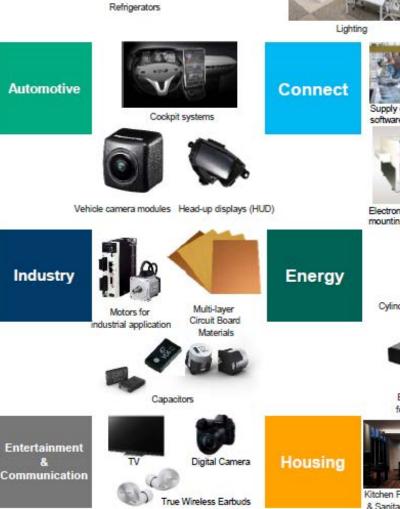
Common Stock 259.2 billion yen **7,388.8** billion yen **Net Sales** 240,198 people **Employees** 

**Consolidated Companies 532** 

(included parent company)

**XAs March 31, 2022** 





Air purifiers





Battery modules for power storage

Dry batteries

Kitchen Furniture, Bathroom & Sanitary Fittings products



Interior products

## Konosuke Matsushita, the Founder

## **Management Philosophy**

Panasonic has been committed to the progress and development of society and the well-being of people through its business activities

Established by the founder in 1929.



#### **Tap Water Philosophy**

Eliminating poverty and bring wealth will be accomplished by producing an inexhaustible supply of goods.

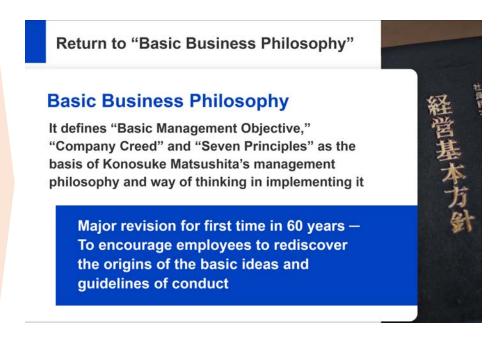
#### **Both material and spiritual affluence**

Only when spiritual peace of mind is combined with a limitless supply of material goods can true happiness be achieved.

## Return to "Management Philosophy"

"People's pursuit of affluence has taken them off the path toward an Ideal Society"





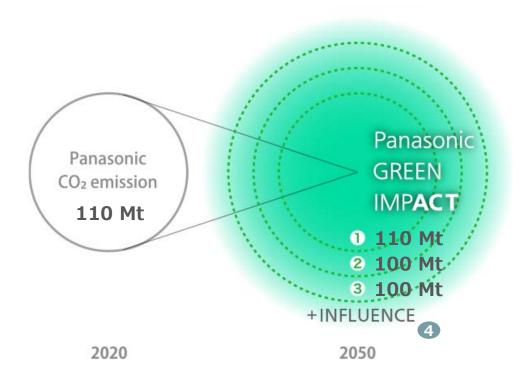
"The mission of Panasonic now is to address social issues and contribute to elimination of anxieties, toward realization of an Ideal Society with affluence both in matter and mind"

"Environment is unavoidable social issues that must be addressed with the highest priority, through business."

## Panasonic GREEN IMPACT (Announced on April 1, 2022)

## By 2050

Create an impact that reduces CO<sub>2</sub> emissions by more than 300 Mt, equivalent to approximately 1% of the current total global emissions\*



- Impact 1: Emissions reduction in our own value chain, including the effect of decarbonization occurring in society (achieve net zero in own value chain)
- Impact 2: "Avoided Emissions (contribution in reducing CO2 emissions for society)" through existing businesses
- Impact 3: "Avoided Emissions" through new technologies and business
- Impact 4: Impact of repercussions in energy transformation for society

<sup>\*</sup> Data from IEA: Global energy related CO<sub>2</sub> emissions in 2019 were 33.6 Bt. Figure for 300 Mt: calculated by emission factor as of 2020

## **GHG Protocol**

#### Categories in CO<sub>2</sub> emissions (GHG Protocol\* scope1,2,3)

- Scope1: Direct emissions of greenhouse gases by business entities (Fuel combustion and industrial processes)
- Scope 2: Indirect emissions associated with the use of electricity, heat, and steam supplied by other companies
- Scope3: Indirect emissions other than scope 1 and 2 (Emissions by other companies related to their business activities)

#### **Upstream Activities**



Scope3



(7)Employee commuting

(4)Upstream transportation &distribution

\*Other: (2)Capital goods, (3)Fuel and energy-related activities not included in Scope 1 and 2, (5) Waste generated in operations, (6) Business trip,(8)Leased assets

#### Own Company





Combustion of fuel

#### Scope2



Use of electricity

#### Downstream Activities

#### Scope3



Use of sold products



End of life treatment of sold products

- \*Other: (9) Transportation & distribution,
  - (10) Processing of sold products,
  - (13) Downstream leased assets,
  - (14) Franchises (15) Investments

narrow scope of manufacturer's responsibility **≒ CO2 Zero Factory** 

Broad scope of responsibility of manufacturers /future competitive domain Panasonic Environment Vision 2050 covers Scope 1 through 3 from the beginning

\*GHG Protocol: Global recommended standard for accounting and reporting of greenhouse gas emissions. Scope 1 through 3. World Resources Institute (WRI) and World Business Council for Sustainable Development (WEBCSD)

: Development led by the World Business Council for Sustainable Development and involving governments. Develop standards through an open process to promote international use.

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## 2. How to Evaluate Companies Contributing to Decarbonization

## **Current Issues**



## <u>Disclosure of risks and opportunities</u> for climate change is required

- 1 The GHG protocol allows companies to measure the CO2 emissions associated with their business activities, but it does not include how to measure the contributions to society through business
- ② Avoided Emission contributes to customers' CO2 reduction and it does not offset or double-count with own emissions The unified standard has not been established and its social recognition is low.

## **Avoided Emissions = Opportunity**

- Fair rules that enhance desirable business activities
- Social awareness for mitigation contribution

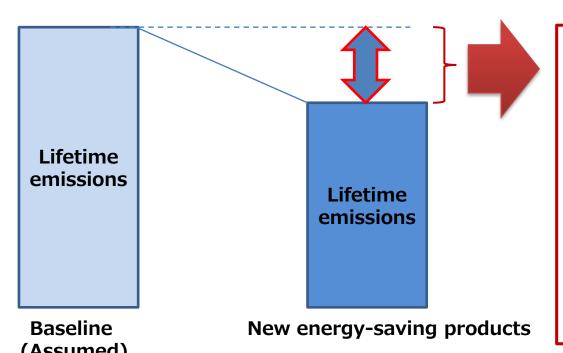
"Avoided Emission": Example of International Standardization Initiatives

Aiming to raise awareness of contribution to GHG reduction (contribution to society) through business, the definition and calculation method of Avoided Emissions will be standardized by IEC.

#### ■ IEC 63372

"Carbon Footprint of Product, GHG emission reductions/avoided emission from EE product and system"

Aiming for publication of international standards in 2024, circulating Committee Draft (CD) as of Aug. 2022.



## "Avoided Emission"

GHG emission reduction that occurs outside of the organization by direct use of EE product, service or system.

Or Emissions avoided by services using new digital technologies which are AI, IoT, digital twin, etc.

## **Initiative for Mitigation Contribution**

## **Key Initiative:**

By creating a cross-industry coalition to preparing an environment in which companies' contributions to decarbonization are properly evaluated, promote corporate efforts (technological development and innovation) and create mechanisms to accelerate the carbon-neutral society

- Cross-industry consensus on 'the indicator' for contribution to decarbonization
- Global Dissemination and Rule Making
- Promoting the spread of products, systems and services that contribute to the Avoided Emissions

Panasonic GREEN IMPACT

Thank you for your attention.