



KGID
2026
SEJONG

Occupational Safety and Health in the Green Transition

: Ensuring Green Growth is also Safe Growth

May 7, 2026

Youngkyun Kim

Manager, International Cooperation Center
Korea Occupational Safety and Health Agency(KOSHA)

Why OSH?

: Matters in Green Transition

World Bank's GRID approach



Green

Environmental sustainability & clean energy



Resilient

Workers at the center of the transition



Inclusive Development

Safe working conditions = foundation for growth



OSH as a Foundation for Sustainable Growth

Without ensuring safe working conditions for the workers who drive the green transition, it is impossible to achieve truly inclusive and resilient development outcomes.

The Missing Link

: A Critical Gap in Green Transition



Rapid expansion of green industries



Safety management systems lag behind



OSH not fully embedded in policy design

"Green does not automatically mean Safe."

Emerging Occupational Risks

: New hazards in green industries



Renewable Energy

Work at heights · Electrical hazards · UV exposure



Battery & EV Industry

Chemical exposure · Fire & explosion · Thermal runaway



Waste & Recycling

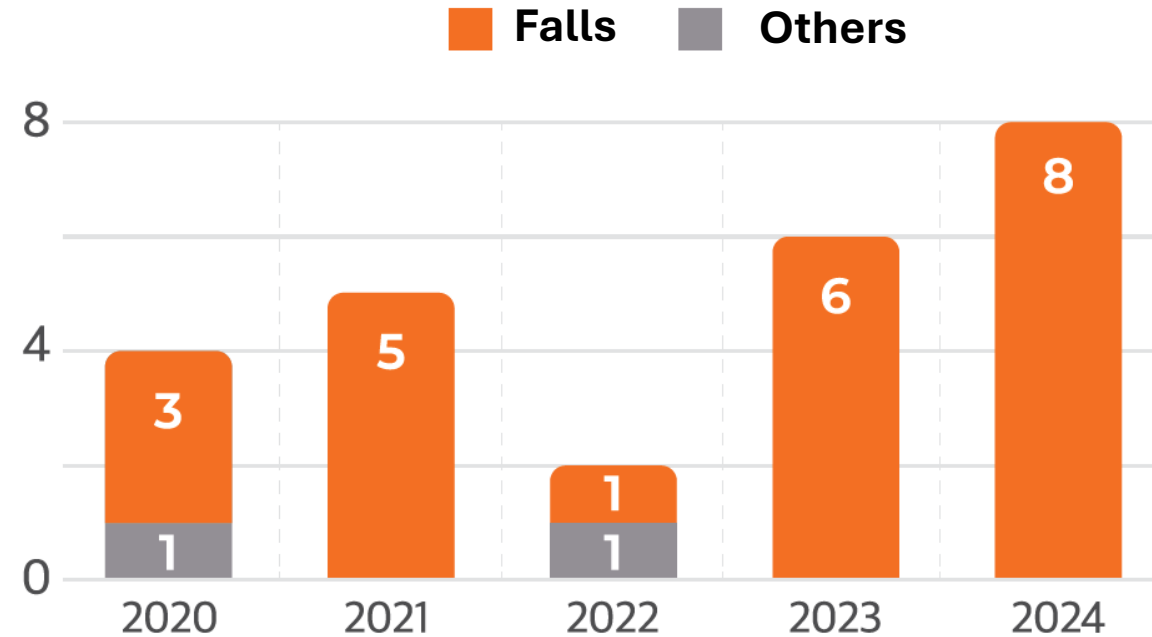
Biological hazards · Hazardous materials · Unknown substances

***These risks are increasingly complex
“new combinations make them harder to manage”***

Fall Risks in Solar Installation

: Solar Fall Data

In Korea, 25 fatalities occurred in solar installation over the past 5 years

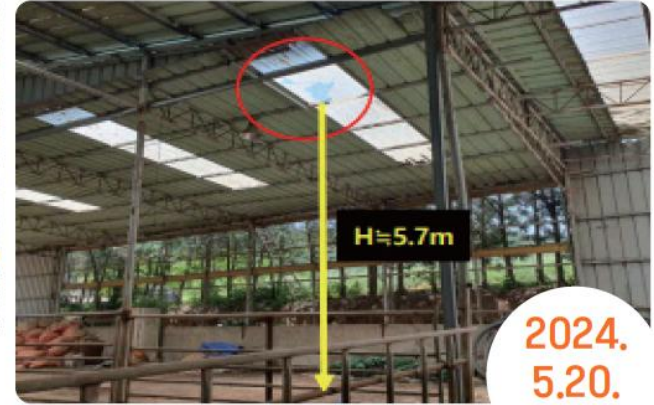


Reasons for the recent increase in fatalities

- Expansion of solar installation driven by government subsidy programs
- Increased demand for solar energy as part of greenhouse gas reduction efforts

Fall Risks in Solar Installation : Accident Scenarios

Roof surface failure (e.g., skylights)



Falls from roof edges



Impact of Integrating OSH



Fewer Accidents

Prevents workplace injuries and reduces economic losses from incidents



Higher Productivity

Enhances operational stability and worker efficiency in green industries



Industry Trust

Builds public confidence and investor trust in emerging green sectors



Inclusive Growth

Supports sustainable development outcomes for workers and communities

About KOSHA

Safety is the **Fastest Path** Forward.
It will become even **Faster** When **We Work Together**.



About KOSHA

: Organizational Capacity

Budget

USD 1.2B(for Year)

Staff size

2,091 (as of 2026)

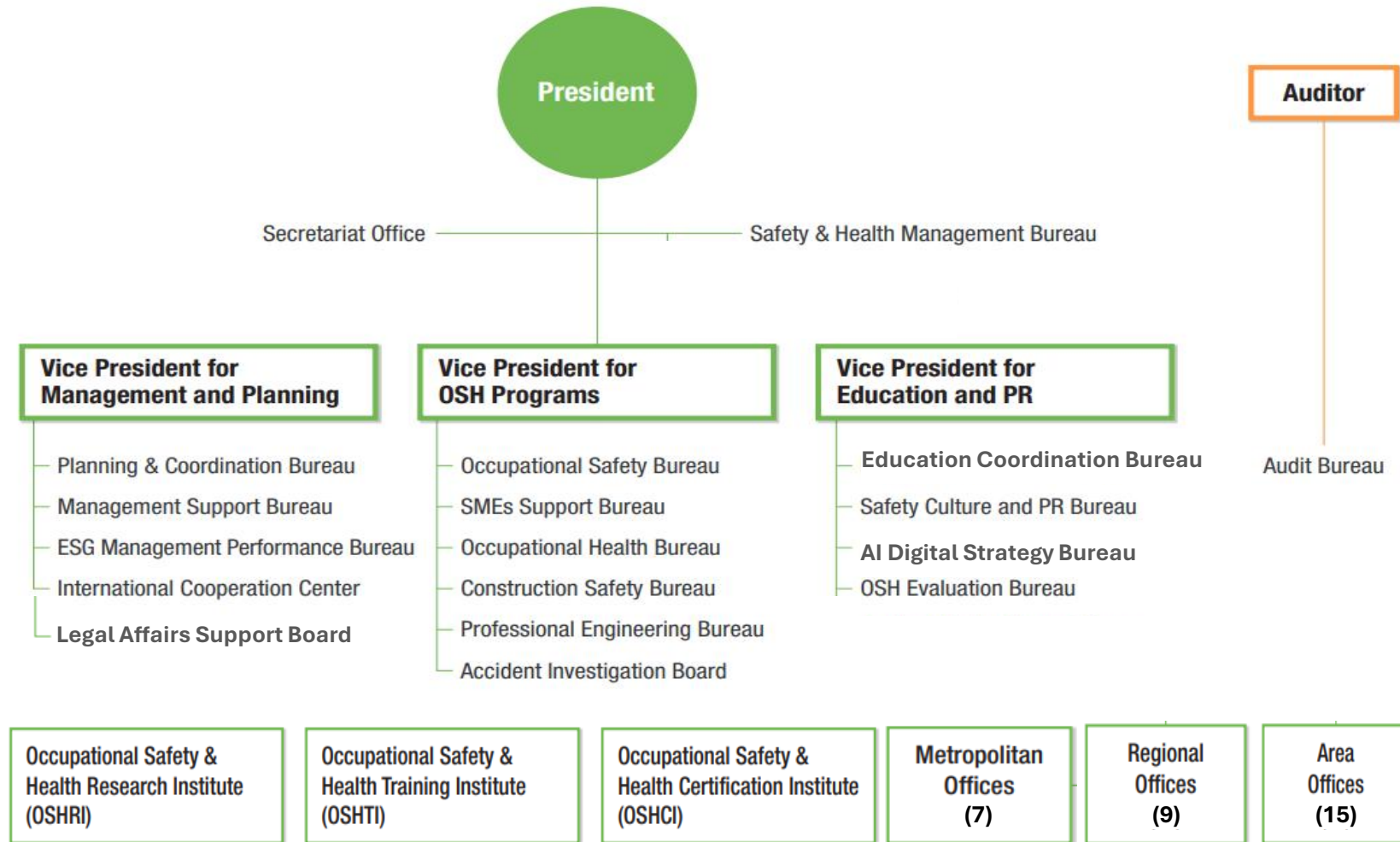
HR Composition

PhDs : 113

Professional Engineers : 280

Headquarters

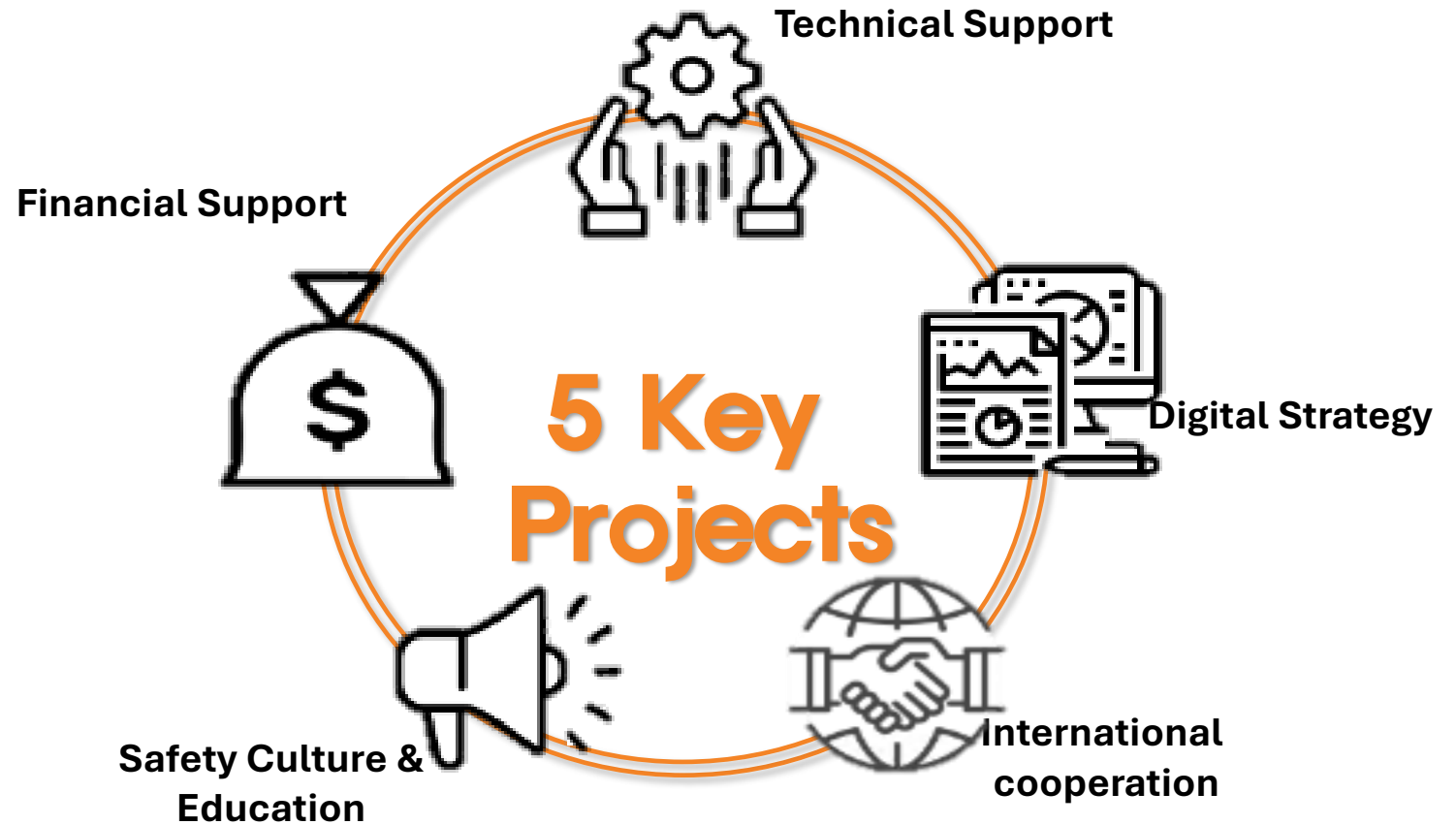
3 Vice Presidents, 14 Bureaus, 3 Board
400 Jongga-ro, Jung-gu, Ulsan



About KOSHA : Approach

5 Key Projects

On-Site Responsiveness for
Safety and Health is
Enhanced



Green Transition & Waste

: Applying OSH
to green sector



Renewable Energy

Safety frameworks
for energy industries



Chemical & Battery

Risk mgmt for new
materials & batteries



Waste & Recycling

Strengthening safety
in recycling operations

Why the Waste Sector Matters

Direct exposure to hazardous and unknown materials

High uncertainty in risk identification and classification

Critical in post-conflict and reconstruction environments

Policy Implications



Safety by Design

Prevention is far more effective than response. Safety must be integrated from the beginning — not added after the fact



A Design Principle

This is not a choice but a fundamental design principle for building sustainable and resilient systems



Critical in Transition

This becomes even more essential in contexts of rapid transition or reconstruction, where risks emerge quickly

Key Messages



Green transition creates new and complex occupational risks



OSH is a key enabler of sustainable green growth



Early integration of safety is essential



International cooperation strengthens impact and builds capacity

Global Experience & Partnerships (ODA)

KOSHA's recent ODA and cooperation programs

**Ukraine
(2025~)**

Hazardous waste
(asbestos)
management

**Indonesia & Cambodia
(2021~)**

Policy Advisory
on OSH System
Improvement

**Vietnam & Cambodia
(2020~2024)**

Capacity Building for an
Occupational Safety and Health
Training Center

And Others

Ongoing bilateral
cooperation

Global Experience & Partnerships (ODA)



Safety and Health Training Center Opens in Cambodia with Support from the Ministry of Labor and KOSHA

New Draft of Occupational Safety and Health Law

Chapter I- General Provisions

Article 1. Purpose

The purpose of this law aims to ensure the occupational safety and health of persons who provide labor through the establishment of occupational safety and health management system by aimed to creating a good working environment, improving labor productivity and contributing to the national economic growth.

Article 2. Scope of Application

This law covers to enterprises or establishments and persons subject under the provisions of the Labor Law.

Article 3. Terminology

The terminology used in this act are defined in the appendix

Chapter II- Competent Institution

Article 4. The Authority of the Ministry in charge of Labour

The Ministry in charge of Labour has an authority to lead, manage and monitor the Occupational Safety and Health in enterprises and establishments under the provisions of Labour Law.

Article 5. General Department of Occupational Safety and Health

Established the General Department of Occupational Safety and Health, which is headquarter of the Ministry in Charge of Labor in fulfilling the competencies as stated in the above paragraph.

Organization and Functioning of the General Department of the Occupational Safety and Health is formulated by Sub-Degree.

Important roles and responsibilities of the General Department as following:

1. Formulate and execute occupational safety and health national policies;
2. Support and advice to improve Occupational Safety and Health conditions to establish a better Occupational Safety and Health management system by a business owner;
3. Raise awareness of occupational safety and health through public education to ensure compliance with Occupational Safety and Health to become a culture ;
4. Research and develop technology related to Occupational Safety and Health;
5. Formulate a basic plan for preventing and controlling industrial accidents;
6. Investigate, manage and maintain statistical reports on industrial accidents;



Cambodia. Credit = the Korea

safety and Health Agency (KOSHA) announced on the
Penh, Cambodia, on the 29th.

th education institution equipped with state-of-the-art

Thank You

Younkyun Kim

Manager

International Cooperation Center of KOSHA

ykk@kosha.or.kr

