Korea's Implementation of the Sustainable Development Goals (SDGs)

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I. Overview

- In Sep. 2015, the UN General Assembly adopted the 2030 Sustainable Development Agenda to spur UN member states including the Republic of Korea to stride towards the Sustainable Development Goals (SDGs)

  - ✓ SDGs comprise 17 Goals and 169 Targets in the economy, society and environment fields, and their progress is measured through 231 Global Indicators

- In line with the need for UN member states to share their progress towards the SDGs, the Korean government has been monitoring the country's implementation of the SDGs with KOSTAT playing a central role

  - ✓ **Providing country-level, quality data** is key to the successful implementation of the SDGs
  - ✓ Korean government is fully committed to providing high-quality data with a focus on official statistics
    - ➤ Has published comprehensive analysis reports since 2019 to review the nation's progress towards the SDGs
    - ➤ Leverages domestic statistics corresponding to global SDG indicators through progress reports to assess country-level progress and ensure comparability to other OECD countries

< Publications >

https://unstats.un.org/sdgs/indicators/database/

HLPF

APFSD

Provision of SDG data and Korea's governance system

- **(Provision of data to international organizations)** Korea provides data and metadata **prepared in accordance with the Fundamental Principles of Official Statistics** to international organizations at their request
  - International organizations **submit such data to the UN database following comparability review**
  - In case differences occur as international organizations do not use the data and methodologies provided by respective countries, these organizations account for such inconsistencies to NSOs and data providers

- **(Domestic governance) KOSTAT** was designated as a **data focal point**
  - Provides data based on Korea's official statistics and data in collaboration with 28 government ministries and nearly 40 statistical producers

Country

International Organization

UN
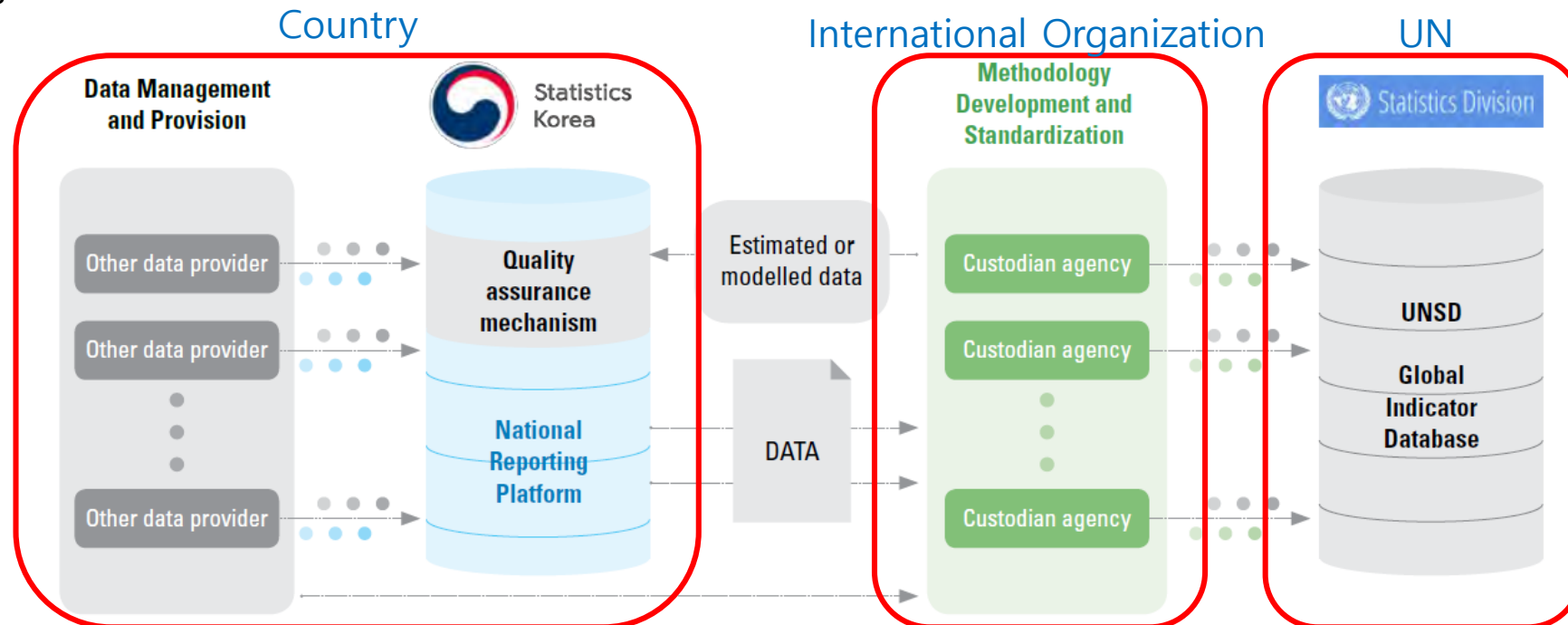
Framework Act on Sustainable Development and KOSTAT's role

- Recent enforcement of the Framework Act on Sustainable Development (Jul. 5, 2022) laid the legal groundwork for KOSTAT's mandate in relation to the SDGs
    - Efforts have been made since 2017 to amend relevant laws, and new provisions were established recently in collaboration with the Office for Government Policy Coordination and the Ministry of Environment

Act		Framework Act on Sustainable Development (took effect in Jul. 2022)	Act on Sustainable Development (abolished)
Line Ministry		✓ Office for Government Policy Coordination	✓ Ministry of Environment
Key Details	**Implementation Strategy**	✓ Establish and implement action plans every five years to formulate and execute 20-year **national/local basic strategies** for sustainable development	✓ Based on higher laws (Establish and implement 20-year **National Basic Plans for Sustainable Development** every five years based on the Carbon Neutrality Green Growth Framework Act)
	Indicator Development & Evaluation	✓ **Develop and distribute national/local-level sustainable development indicators**, and conduct **biennial** sustainability assessments	✓ **Government** prepares and distributes **sustainable development indicators** and conducts biennial national sustainability assessments
Provisions Concerning KOSTAT		✓ Heads of central administrative bodies shall **consult Commissioner of KOSTAT in advance** in developing and distributing indicators (Article 10 of the Enforcement Ordinance) ✓ **Commissioner of KOSTAT** shall join the Presidential Commission on Sustainable Development as an **ex-officio member** (Article 13 of the Enforcement Ordinance)	✓ Not available (Heads of central administrative bodies prepare indicators through deliberations made through the Presidential Commission on Sustainable development)

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KOSTAT's monitoring of progress towards the SDGs

- **Review Korea's progress towards the SDGs** based on global indicator data
- **Publicly available database** based on an open source **platform**
- **R&D on the standardization and improvement of indicators** to ensure the availability of SDG data

https://kostat.go.kr/sdg
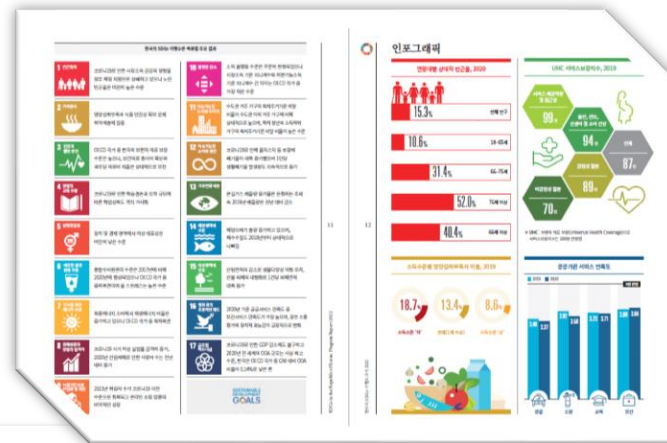
II. SDGs in the Republic of Korea: Progress Report 2022

- Progress Report 2021 focused on 'vulnerability' issues that could occur in the economy, society and environment fields amid COVID-19

- **Progress Report 2022** not only captures vulnerable areas and groups but also **delves into how Korean society fared in the post COVID-19 era to shed light on the responses made by Korea to the global pandemic**
  - ✓ **Reviewed official statistics and data availability** to collect and manage data for each indicator
    - ➢ Identified and organized data sources, responsible organizations and disaggregation levels
    - ➢ Secured fit-for-purpose statistics that best reflect Korea's progress status when data was found to have limitations or its sources were not clear in the process of analyzing selected indicators
  - ✓ Organized the report around selected global SDG indicators **in each of the 17 Goals**

- 17 Goals were further categorized into **5Ps – People, Planet, Prosperity, Peace and Partnership** – to review Korea's progress through a total of 231 indicators
  - ✓ Analysis data : Data from the UN DB + domestic official statistics and policy data

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Korea's goal-by-goal status in achieving the SDGs

1 NO POVERTY
Significant market income loss caused by COVID-19 was offset by government financial support, but the poverty rate of the elderly is still very high.

2 ZERO HUNGER
Vulnerable groups are disproportionately affected by poor nourishment and food insecurity.

3 GOOD HEALTH AND WELL-BEING
Korea has a high UHC level among OECD countries, but it needs to reduce catastrophic health expenditure and increase the number of healthcare workers.

4 QUALITY EDUCATION
Korea is witnessing a significant learning deficit caused by COVID-19 and widening gaps in academic achievement between urban and rural.

5 GENDER EQUALITY
Women remain underrepresented in the economical and political fields.

6 CLEAN WATER AND SANITATION
Korea achieved a higher IWRM score in 2020 than it did in 2017, but it is still among the middle-to-low score groups in OECD, and water stress level is high.

7 AFFORDABLE AND CLEAN ENERGY
The share of renewables in final energy consumption is increasing, but it is among the lowest levels in OECD.

8 DECENT WORK AND ECONOMIC GROWTH
A lot of women lost their jobs amid COVID-19, and deaths from industrial accidents increased from 2019 to 2020.

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
The number of jobs almost returned to pre-pandemic levels in 2021, and online shopping transactions have grown dramatically.

10 REDUCED INEQUALITIES
Income inequality is on a steady decline, but the gaps between Gini coefficients based on market income and on disposable income are the smallest among OECD countries.

11 SUSTAINABLE CITIES AND COMMUNITIES
Those living in the capital area are more likely to live under the minimum residential standards than their counterparts living in other regions, especially the youth and low-income groups.

12 RESPONSIBLE CONSUMPTION AND PRODUCTION
Packaging waste, including plastic, has increased significantly due to COVID-19, and domestic waste generation per capita is also on the rise.

13 CLIMATE ACTION
Emissions decreased in 2019 from the previous year with the overall trend of GHG emission growth slowing down.

14 LIFE BELOW WATER
Total amount of marine debris has increased and the quality of seawater has relatively deteriorated since 2018.

15 LIFE ON LAND
Forest loss is putting biodiversity at risk, and the size of affected areas by wildfires has significantly increased per case as they are becoming larger.

16 PEACE AND JUSTICE
Health service earned the highest score in a survey on satisfaction with public services, and both the state-public communication and political efficacy were improved.

17 PARTNERSHIPS FOR THE GOALS
Despite the GDP loss due to COVID-19, global ODA reached an all-time high in 2020, but ODA as a percentage of GNI is quite low at 0.14% in Korea compared to other OECD countries.

SUSTAINABLE DEVELOPMENT GOALS

7

Korea's overall status in reporting the SDGs

Overall reporting status (unit: %)
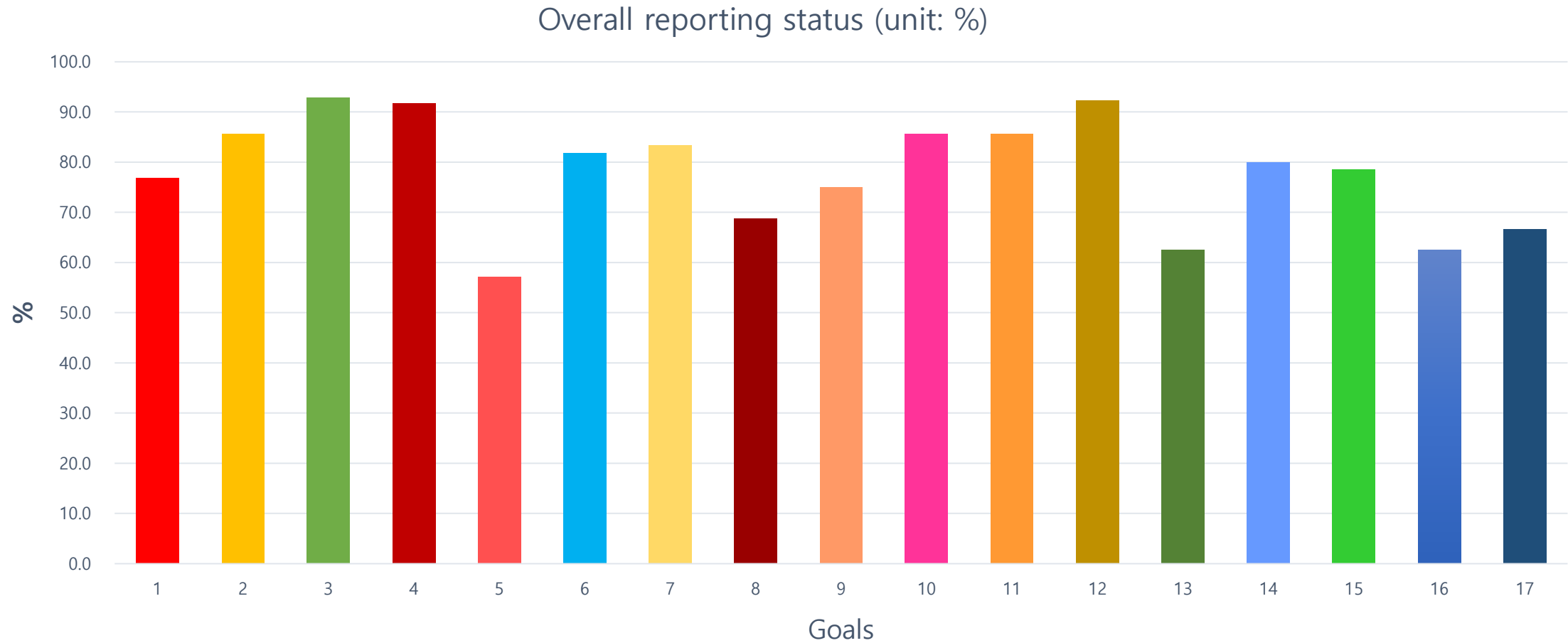
4 Quality education

◆ (Goal 4) Percentage of middle school seniors and high school sophomores **below basic academic skills rose** in 2020 from that of 2019, **confirming concerns about learning loss**

✓ Notably, **percentage of students below basic academic skills in English** increased by **3.8%p** among middle school seniors (3.3%(2019)→7.1%(2020)), and by **5.0%p** among high school sophomores (3.6%(2019)→ 8.6%(2020))

✓ By regional size, percentage of **middle school seniors** below basic academic skills in **math** was higher in **rural areas (18.5%)** than in **large cities (11.2%)**, and the **regional disparity** widened to **7.3%p**, up from the previous year (4.9%p)

The percentage of students below basic academic skills(Level 1); 2019, 2020 (Unit: %)
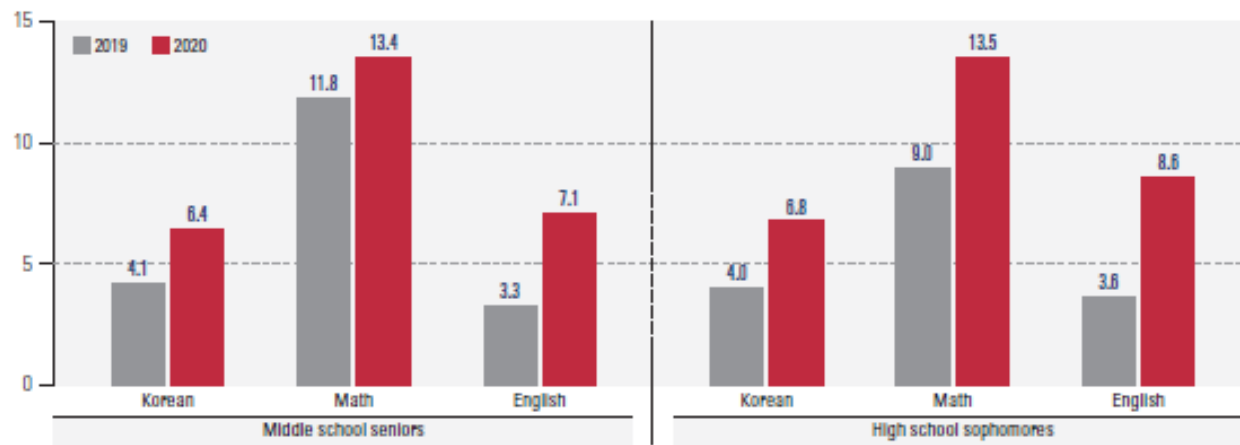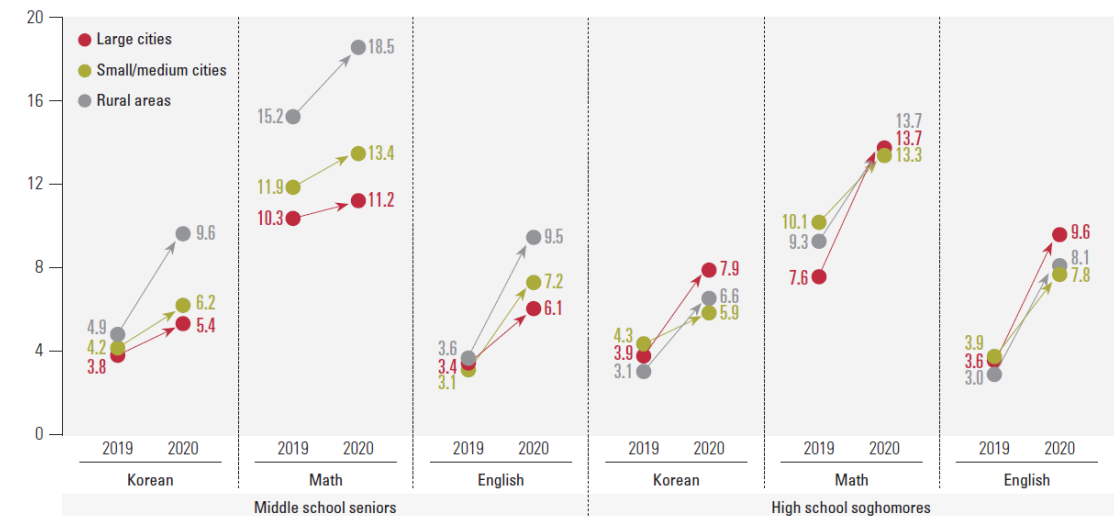
Source: Ministry of Education, Result of 2020 National Assessment of Educational Achievement and Response Strategies to Strengthen Learning Support, Press Release(June 1, 2021). p.2. <Table> was used to draw the graph.
Note 1 : Achievement by subject is divided into four levels (Level 4: Excellent, Level 3: Average, Level 2: Basic, Level 1: Below Basic Academic Skills).
Note 2 : There is no data that directly compares different countries in the impacts of COVID-19 on academic achievement. Some countries, such as the United States, Germany and Japan, did not conduct their national assessment of educational achievement in 2020 due to concerns about the spread of COVID-19.

The percentage of students below basic academic skills(Level 1) by regional size; 2019, 2020 (Unit: %)

Source : Korea Institute for Curriculum and Evaluation, Result Reports of 2019 and 2020 National Assessment of Educational Achievement were used to draw the graph. For details, please refer to Min-hee Seo, Wan-su Kim, Mi-rim Kim, Jeong-ah Han, Yun-hee Son(2020a: 32, 2020b: 33) and Nam-ok Koo, Mi-rim Kim, So-ra Lee, Min-ho Kwak(2021a: 32, 2021b: 33).
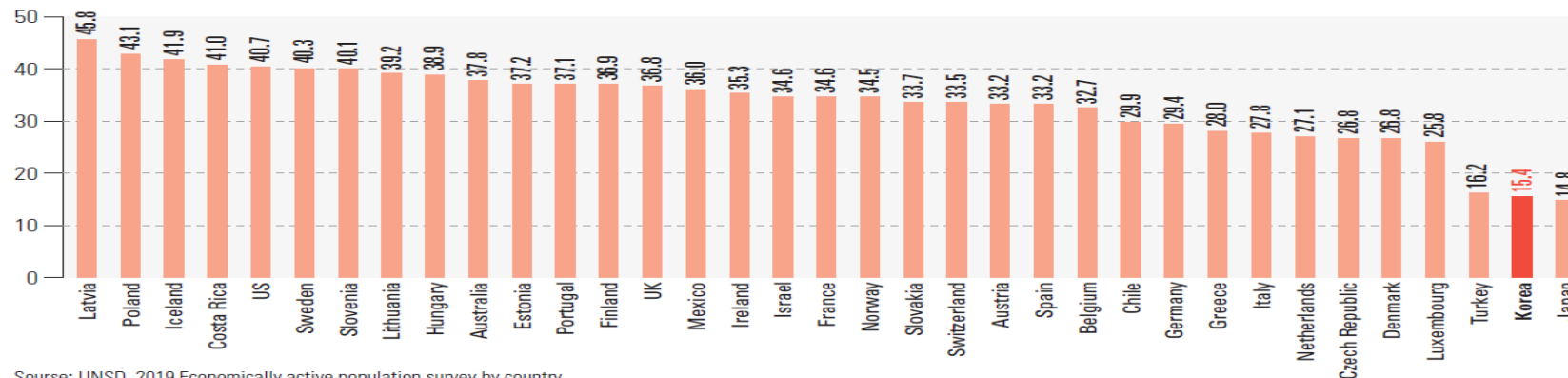
5 Gender equality

◆(Goal 5) **Female manager rate** was 15.4% in 2019 (15.7% in 2020), and **female share of seats in parliaments** was 19.0% in 2021 to account for roughly 1/5 of total, placing Korea in the lower ranks among **OECD countries**
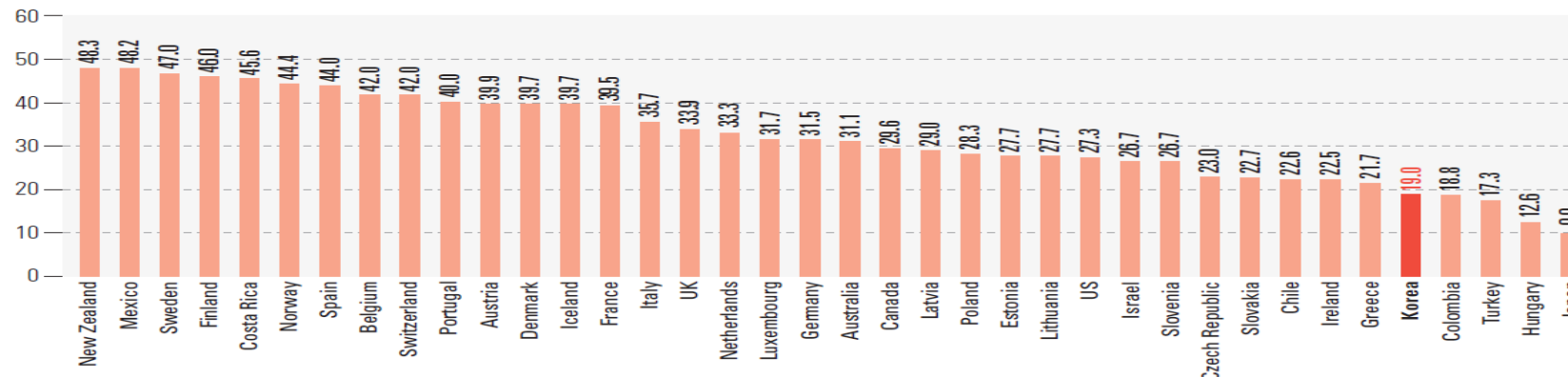
Female manager rate of OECD countries; 2019

(Units: %)

Latvia 45.8, Poland 43.1, Iceland 41.9, Costa Rica 41.0, US 40.7, Sweden 40.3, Slovenia 40.1, Lithuania 39.2, Hungary 38.9, Australia 37.8, Estonia 37.2, Portugal 37.1, Finland 36.9, UK 36.8, Mexico 36.0, Ireland 35.3, Israel 34.6, France 34.6, Norway 34.5, Slovakia 33.7, Switzerland 33.5, Austria 33.2, Spain 33.2, Belgium 32.7, Chile 29.9, Germany 29.4, Greece 28.0, Italy 27.8, Netherlands 27.1, Czech Republic 26.8, Denmark 26.8, Luxembourg 25.8, Turkey 16.2, Korea 15.4, Japan 14.8

Source: UNSD, 2019 Economically active population survey by country
Note : Israel is based on 2017 and Australia is based on 2018

Female share of seats in national parliaments of OECD countries; 2021

(Units: %)

New Zealand 48.3, Mexico 48.2, Sweden 47.0, Finland 46.0, Costa Rica 45.6, Norway 44.4, Spain 44.0, Belgium 42.0, Switzerland 42.0, Portugal 40.0, Austria 39.9, Denmark 39.7, Iceland 39.7, France 39.5, Italy 35.7, UK 33.9, Netherlands 33.3, Luxembourg 31.7, Germany 31.5, Australia 31.1, Canada 29.6, Latvia 29.0, Poland 28.3, Estonia 27.7, Lithuania 27.7, US 27.3, Israel 26.7, Slovenia 26.7, Czech Republic 23.0, Slovakia 22.7, Chile 22.6, Ireland 22.5, Greece 21.7, Korea 19.0, Colombia 18.8, Turkey 17.3, Hungary 12.6, Japan 9.9

Sourse: IPU(Inter-Parliamentary Union), Parline Database, retrieved on june, 2021)

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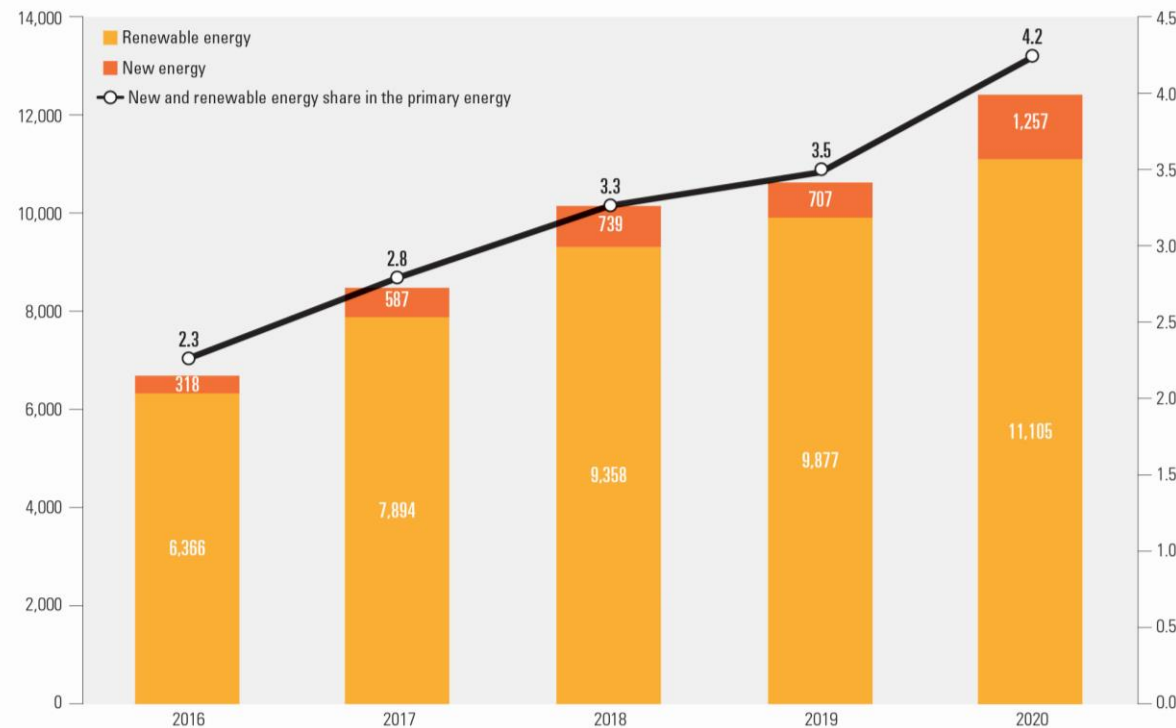
7 Affordable and clean energy

Prosperity

◆(Goal 7) Korea has been committed to raising the share of renewable energy, and as a result, its growth has been further accelerated recently

- Korea is simultaneously promoting both new energy sources - hydrogen and fuel cells - and renewable energy sources - solar energy, wind power, and bio (still behind other OECD countries)

Production of new and renewable energy and their shares in the primary energy; 2016~2020 (Unit: 1,000toe, %)

- Renewable energy
- New energy
- New and renewable energy share in the primary energy

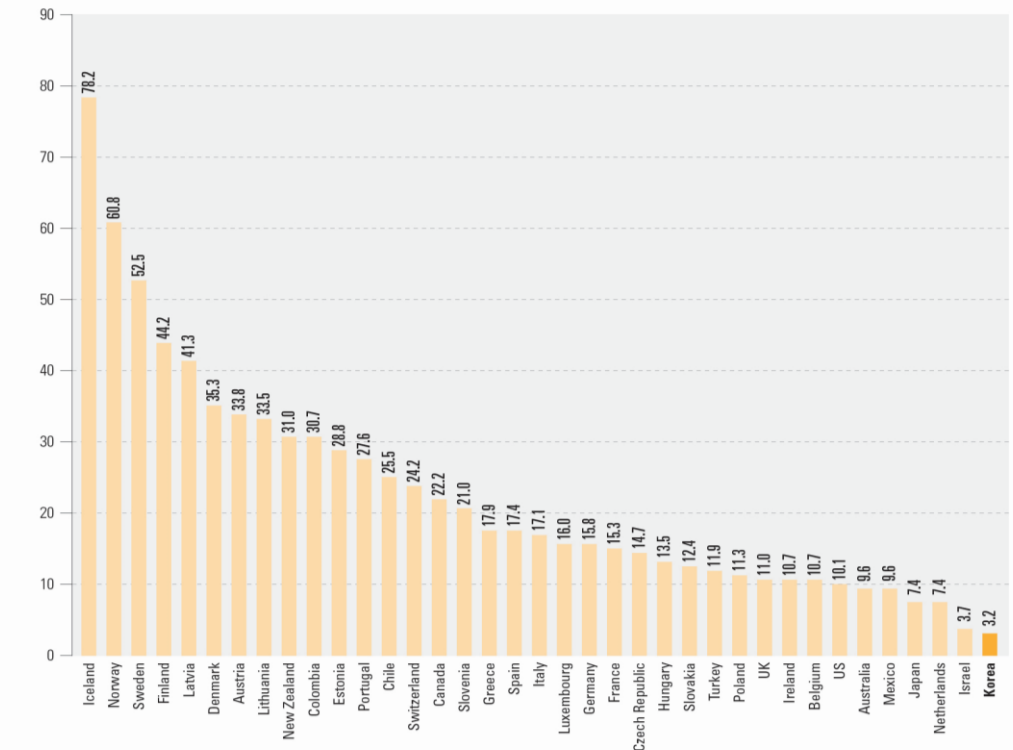| Year	Renewable	New	Share
2016	6,366	318	2.3
2017	7,894	587	2.8
2018	9,358	739	3.3
2019	9,877	707	3.5
2020	11,105	1,257	4.2

Source: Korea Energy Economics Institute, New & Renewable Energy Supply Statistics, each year
Note : Non-renewable waste was excluded from the renewable energy category in 2019 as the revised New and Renewable Energy Act took effect in October 2019. The energy was also removed from 2015~2018 data in the graph to make the figures comparable to the 2019 one. That made the numbers for the previous four years look different even though the same source as last year's report was used.

The percentage of renewable energy in final energy consumption of OECD countries; 2018 (Unit: %)

Country	%
Iceland	78.2
Norway	60.8
Sweden	52.5
Finland	44.2
Latvia	41.3
Denmark	35.3
Austria	33.8
Lithuania	33.5
New Zealand	31.0
Colombia	30.7
Estonia	28.8
Portugal	27.6
Chile	25.5
Switzerland	24.2
Canada	22.2
Slovenia	21.0
Greece	17.9
Spain	17.4
Italy	17.1
Luxembourg	16.0
Germany	15.8
France	15.3
Czech Republic	14.7
Hungary	13.5
Slovakia	12.4
Turkey	11.9
Poland	11.3
UK	11.0
Ireland	10.7
Belgium	10.7
US	10.1
Australia	9.6
Mexico	9.6
Japan	7.4
Netherlands	7.4
Israel	3.7
Korea	3.2

Source: Wordbank, World Development Indicators, Renewable energy consumption(% of total final energy consumption)(https://databank.worldbank.org/source/world-development-indicators, retrieved on November 10, 2021)

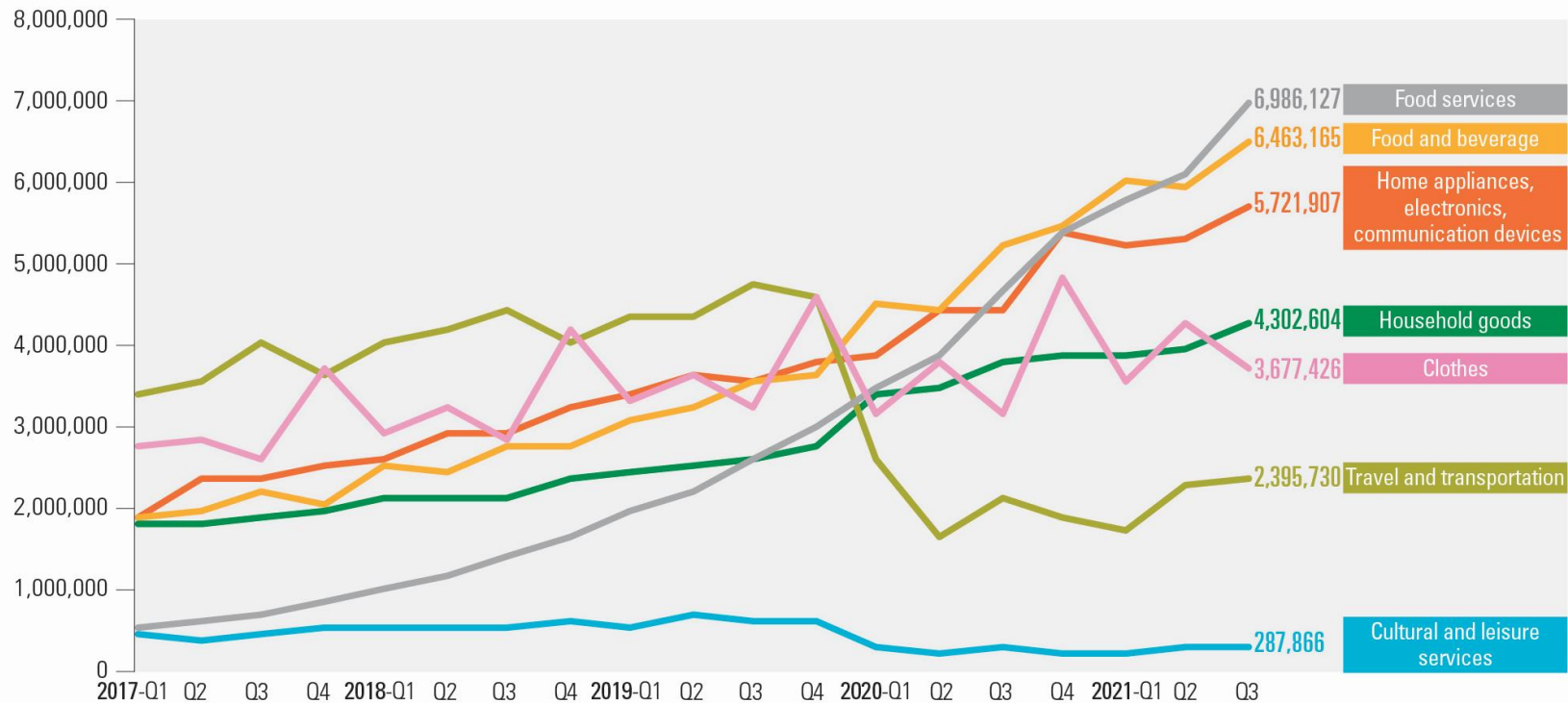# 9 Industry, innovation and infrastructure^{Prosperity}

◆(Goal 9) Demand for online transactions surged following COVID-19, and total online shopping transaction amounts reached nearly KRW 48.2573 trillion in Q3 2021, up by 19.7% year-on-year

- Transaction amount varies by product category (Travel & transportation ▼, Culture & leisure ▼, F&B ▲ Home appliances, electronics, communication devices ▲)

Trend of online shopping transaction amount by category; 2017~2021   (Unit: KRW million)
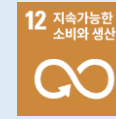

Source : Statistics Korea, Online Shopping Trend Survey(https://kosis.kr/statHtml/statHtml.do?orgId=101&tblId=DT_1KE10041&conn_path=I3, retrieved on January 7, 2022)
Note : Only some of the 23 categories are used.

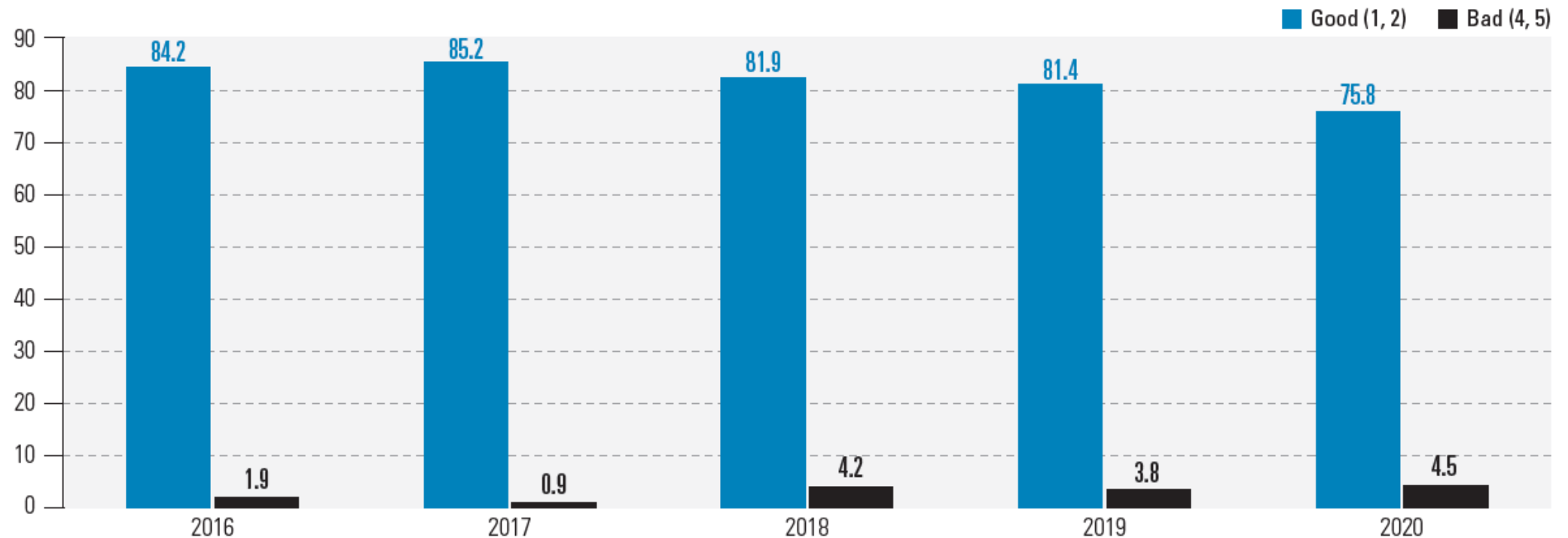Statistics Korea
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14 Life below water

◆(Goal14) Seawater quality remained good overall for the recent 5 years, but the proportion of Bad grades **rose to 4.5% in 2020** from 1.9% in 2016

The share of seawater quality grades; 2016~2020

(Unit: %)

■ Good (1, 2) ■ Bad (4, 5)

Year	Good (1, 2)	Bad (4, 5)
2016	84.2	1.9
2017	85.2	0.9
2018	81.9	4.2
2019	81.4	3.8
2020	75.8	4.5

Source : Ministry of Oceans and Fisheries & Korea Marine Environment Management Corporation, 2019 Annual Report on the Korean Marine Environment

Note : Considering the characteristics of the marine environment for each sea area, scores are calculated based on substances causing eutrophication(dissolved inorganic nitrogen concentration in the surface layer, dissolved inorganic phosphorus concentration), primary reactant(chlorophyll a, transparency) and secondary reactant(dissolved oxygen saturation in the low layer) and different grades are given[grade 1(very good), grade 2(good), grade 3(normal), grade 4(bad), grade 5(very bad)].

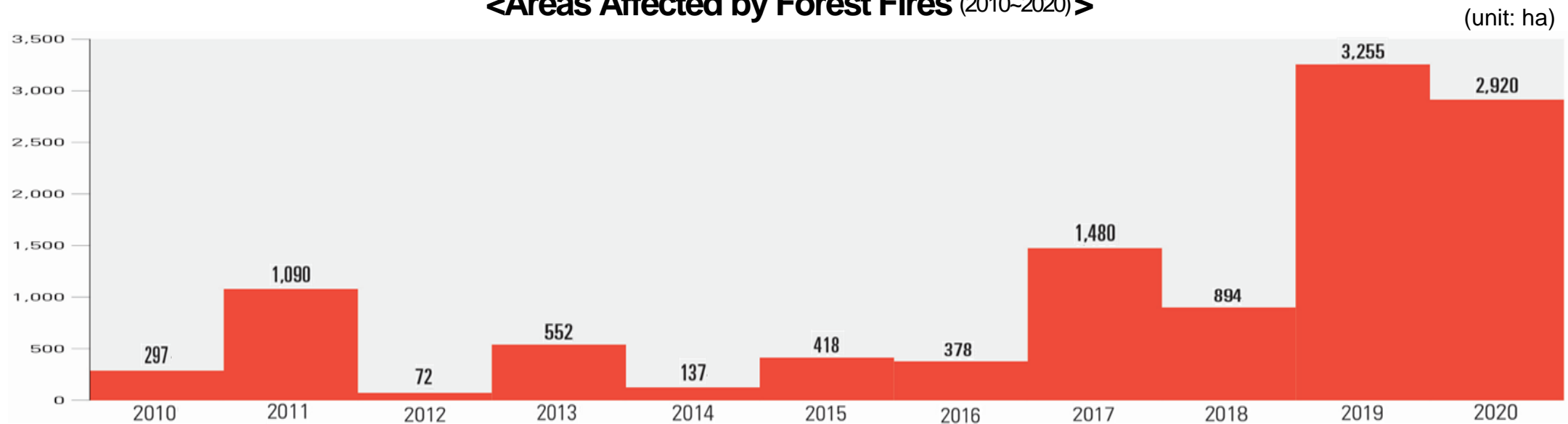Statistics Korea
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15 Life on land

◆(Goal 15) Between 2010 and 2020, Korea witnessed an **annual average rate of 0.16% in decline in forestry**, joining the group of 10 **countries*** which experienced such **a downward trend** out of 38 OECD countries

  * Countries on a downward trend (↓): Israel(0.91%), Columbia(0.27%), Mexico(0.19%), Netherlands(0.09%), Slovenia(0.07%), etc.

  ** Countries on an upward trend (↑): Iceland(1.42%), Chile(0.89%), Ireland(0.86%), Denmark(0.71%), Italy(0.60%), etc.

✓ **Areas damaged by forest fires** in Korea amounted to 429.6ha between 2010 and 2014, and to **1,557.5ha between 2015 and 2020** on an annual average basis, with affected areas becoming increasingly larger in size

\<Areas Affected by Forest Fires (2010~2020)**\>**

(unit: ha)

Source: Korea Forest Service, Forest fire occurrence

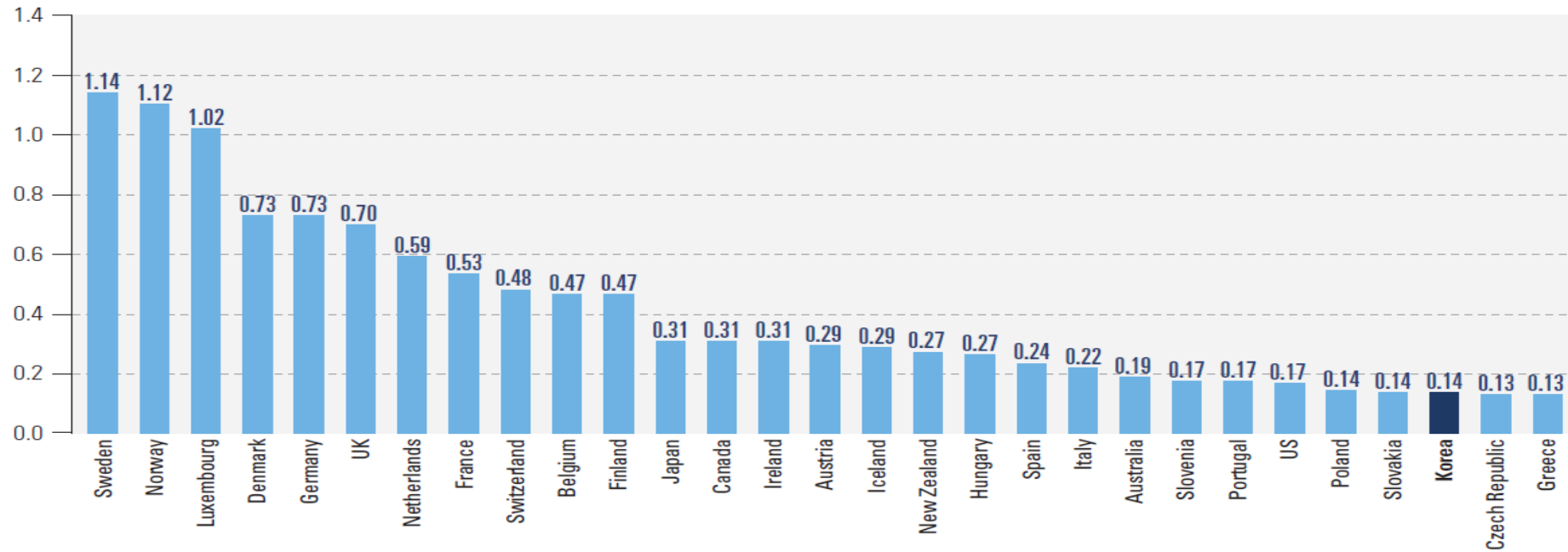# 17 Partnerships for the goals

◆(Goal 17) Korea's **ODA (Official Development Assistance) in 2020** stood at **0.14% as a percentage of GNI** (Gross National Income), **down by 0.01%p** from the previous year (0.15%)

✓ With the total average of 0.32% of 29 OECD DAC (Development Assistance Committee) members, Korea is ranked **27th**, on par with Poland (0.14%), Slovakia (0.14%), and the Czech Republic (0.13%)

ODA/GNI ratio of OECD DAC Members(based on expenditure); 2020

(Unit: %)

Country	Value
Sweden	1.14
Norway	1.12
Luxembourg	1.02
Denmark	0.73
Germany	0.73
UK	0.70
Netherlands	0.59
France	0.53
Switzerland	0.48
Belgium	0.47
Finland	0.47
Japan	0.31
Canada	0.31
Ireland	0.31
Austria	0.29
Iceland	0.29
New Zealand	0.27
Hungary	0.27
Spain	0.24
Italy	0.22
Australia	0.19
Slovenia	0.17
Portugal	0.17
US	0.17
Poland	0.14
Slovakia	0.14
Korea	0.14
Czech Republic	0.13
Greece	0.13

Source: Wilcks, J., N. Pelechà Aigües and E. Bosch (2021), "Development co-operation funding: Highlights from the complete and final 2019 ODA statistics", in Development Co-operation Profiles, OECD Publishing, Paris(https://www.oecd-ilibrary.org/sites/401f9a42-en/index.html?itemId=/content/component/5e331623-en&_csp_=b14d4f60505d057b456dd1730d8fcea3&itemIGO=oecd&item-ContentType=chapter&_ga=2.197826223.1279694035.1628080677-192542855.1608730099, retrieved on November 12, 2021)

Note : Out of the total DAC 30 member states, 29 countries were analyzed, excluding the EU.

Progress outcomes in summary

- While the ramifications of COVID-19 became more visible, this came in tandem with the government's policy interventions, market responses, and nation-wide cooperation and participation, painting a mixed picture of hope and despair

  ✓ Impact becoming visible across all areas – economy, society, environment, and international cooperation

  ✓ Economic difficulties leading to deteriorating residential conditions

  ✓ Dramatic surge in the generation of plastic packaging waste and per-capita domestic waste

  ✓ Reduction in ODA due to cross-border travel restrictions

  ✓ Negative impact disproportionally affecting socially vulnerable groups
  - ➢ High poverty rate among the elderly and high employment rate among youth and women
  - ➢ Housing conditions further aggravating among youth households and low-income households

  ✓ Increase in governmental financial support assisting households to make their ends meet
  - ➢ Inequality measured by the Gini coefficient is improving

  ✓ High vaccination rate achieved through the government's disease control efforts and the public's cooperation
  - ➢ Robust and resilient healthcare system functioning properly

  ✓ Number of employed people, which had declined, returning to pre-pandemic levels

  ✓ Rapid growth in online shopping transactions

  ✓ Steady increase in the proportion of eco-friendly, renewable energy

  ✓ Continued efforts for international aid through ODA undertakings
  - ➢ Establishing leadership as an aid donor in the international society

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Progress outcomes in summary *(continued)*

- Analysis outcomes available to date demonstrate that while **Korean society** is **making progress towards sustainable development** in alignment with the fundamental spirit of the SDGs,

- **Korea** needs to tackle the challenges of **inequality, poverty, and discrimination**

  - ✓ There remain disparities by gender, class and region as well as poverty among specific social groups

  - ✓ There are numerous improvements to be made in preserving the environment for future generations

  - ✓ There still exists discrimination against immigrant workers, female marriage migrants, and undocumented foreigners

III. Korea's SDG data platform

- Built based on open source (Apr. 2021) → Expanded English services (Sep. 2021)
- Provide a wide range of Korean data that correspond to the UN SDGs

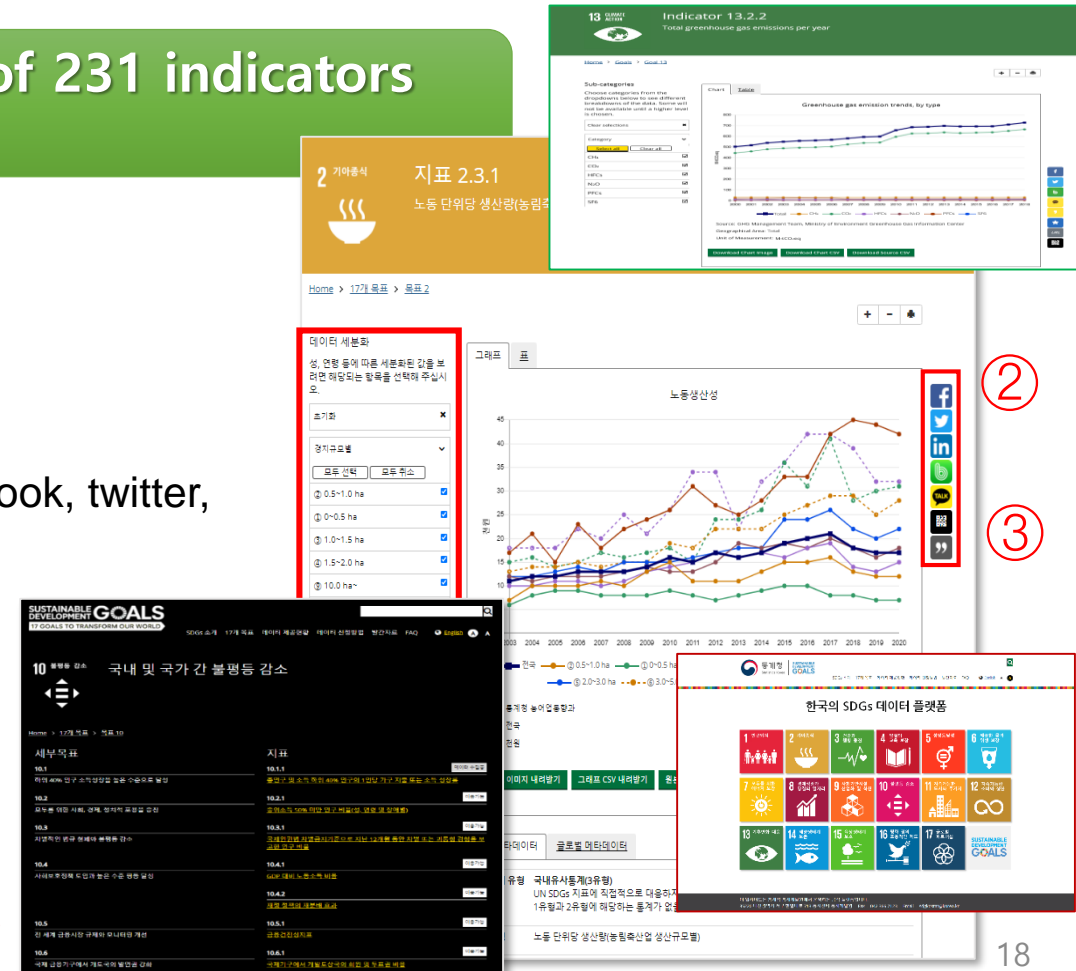⇒ **Domestic data available for 179 indicators out of 231 indicators**
(77% availability)

✓ Visualize disaggregated data by key feature

✓ Pursue inclusiveness and user convenience
  ① Screen for low-vision users
  ② Sharable through social network channels (facebook, twitter, Kakao, etc.)
  ③ Indicator-specific QR codes and quotations

✓ Average monthly visitor: Nearly 1,200 persons
  ✓ Domestic-overseas visitor ratio → 80 : 20 (%)

https://kostat.go.kr/sdg
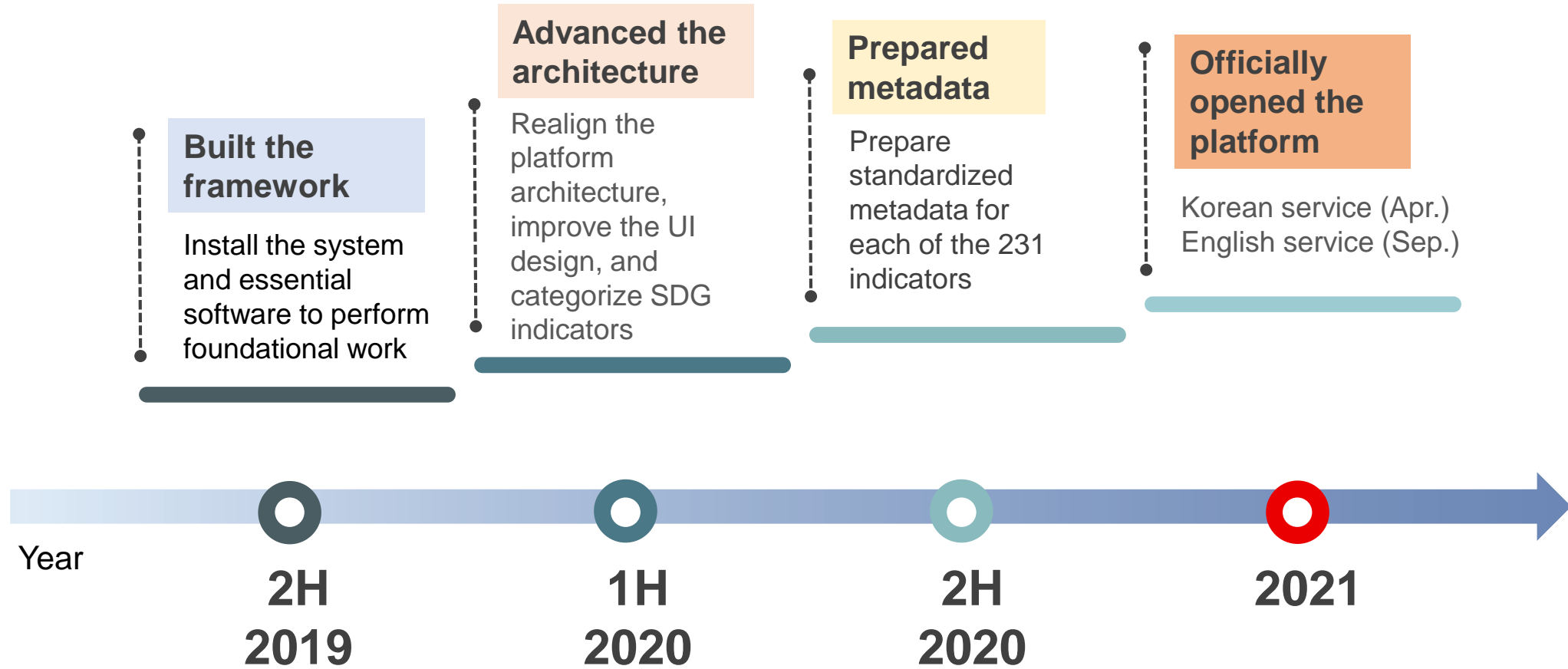
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Key features of Korea's SDG data platform

- **(Open data)** Open data and content can be freely used, edited, and shared for any purpose

- **(Disaggregated data)** Access is made available for disaggregated data to encourage interest in diverse groups, including vulnerable ones

- **(Metadata)** Basic information is provided for each indicator, including definition, preparation methodology and cycle, and data source

- **(Multilingual & accessible service)** Accessibility is ensured for users with disabilities, and mobile and other various access devices are supported

  - Enable high-contrast, inverted color functionality for low-vision users as well as English language service

- **(Standardized interface)** Standardized APIs enable global-level/international data generation and sharing

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Phased-in development of the data platform

Built the framework

Install the system and essential software to perform foundational work

Advanced the architecture

Realign the platform architecture, improve the UI design, and categorize SDG indicators

Prepared metadata

Prepare standardized metadata for each of the 231 indicators

Officially opened the platform

Korean service (Apr.)
English service (Sep.)

Year

2H 2019

1H 2020

2H 2020

2021

IV. Indicator metadata: development and R&D

- R&D on the standardization and improvement of indicators to ensure the availability of SDG data
    - ✓ Focus on data disaggregation (region, migration status, disability, etc.)

Build indicator metadata
(publication in 2016, 2020, and 2025)

➢ Disclose metadata in line with the global indicator revision cycle
➢ Indicator concept, measurement formula, source data → Comprehensive understanding

1st SDG Data Innovation Forum

- Take the viewpoint of data in sharing the status of Korea's progress towards the SDGs and discussing policy directions with a range of stakeholder groups (1st forum hosted this year, to be held annually)
  - May 25, 2022 (Wed.) 09:30~17:00, International conference room, Statistics Center in Daejeon (hosted in hybrid (on/offline) format)
  - Theme: Korea's status of progress towards the SDGs, data disaggregation, data innovation, etc.
    - ✓ Explore new data access methods, study cases of developing SDG indicators by using data from diverse sources
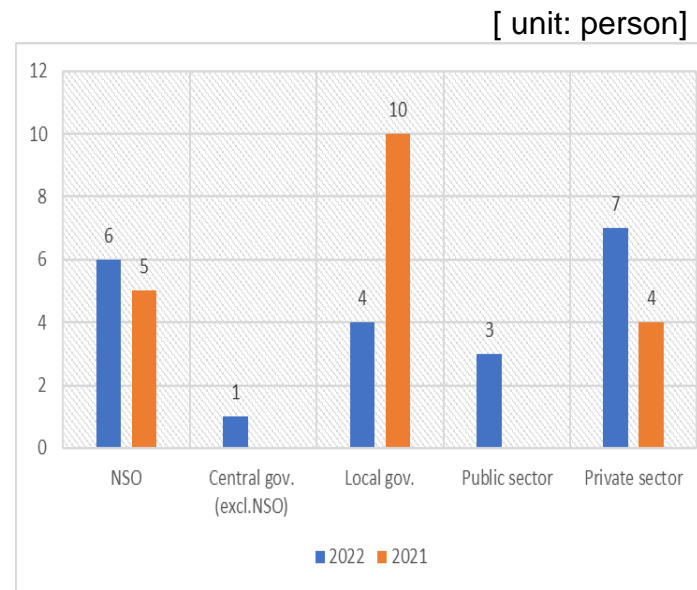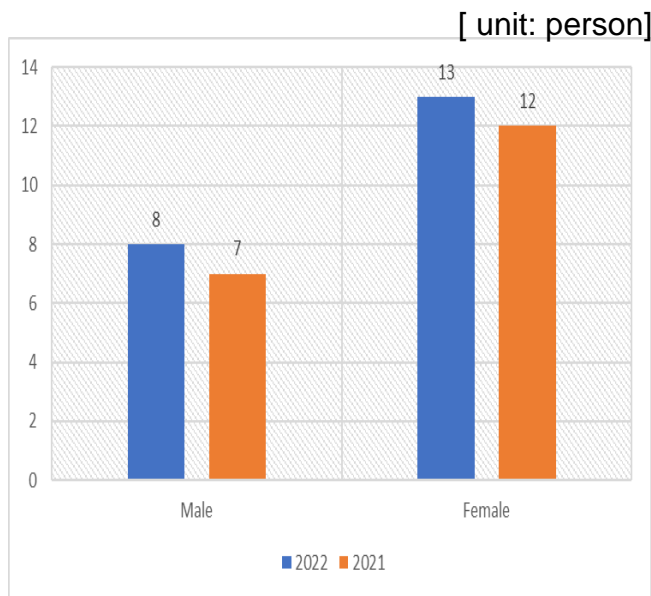
Training course provided to government officials and the public

➲ Training program : "Understanding SDGs"
- Opened the training course in 2021, 2022
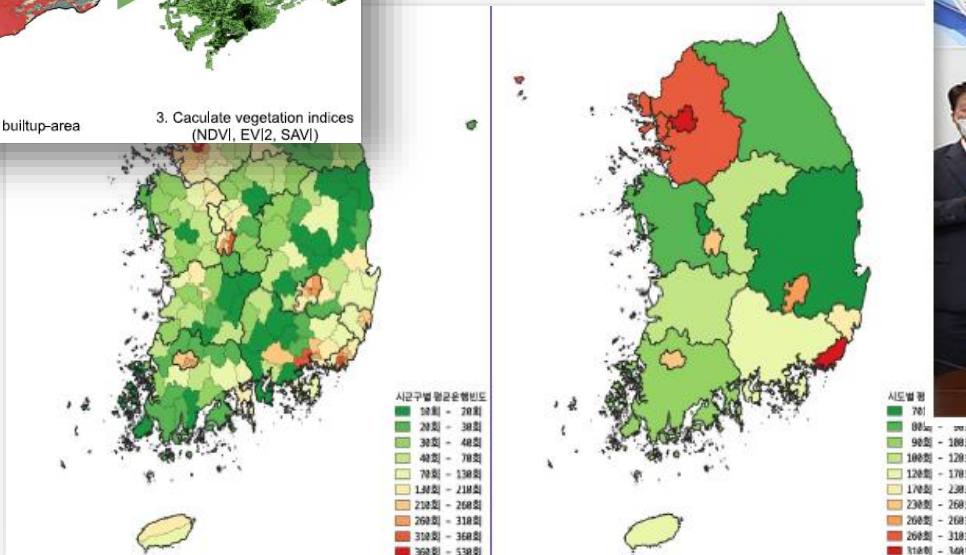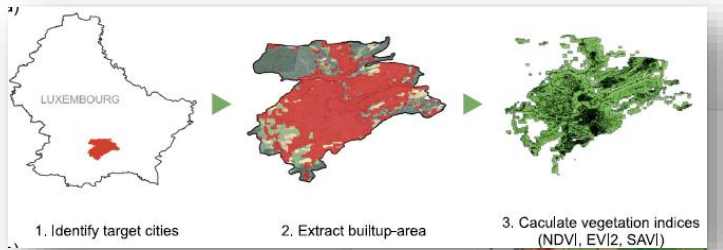- 2-day course: Concepts, Global and domestic trends, Indicator framework, Policy evaluation cases

V. Challenges in progressing towards the SDGs

- Secure fit-for-purpose statistics that best reflect Korea's status of progress

- Bolster the SDG data network in and outside of Korea

- Broaden opportunities for discussion and cooperation between data producers and users

- Research and develop new, innovative data access methods

R&D on innovative data access methods

➡ KOSTAT is **exploring unofficial data sources** and **integrating them with survey and census data** in developing SDG indicators

- Use of geospatial information (SDG 9.1.1 / 11.1.1 / 11.2.1 / 11.3.1)

➡ Also, KOSTAT is working to apply machine learning techniques to produce more timely and reliable statistical data

- Signed an MOU with IBS (National Institute for Basic Science)

Thank you

SDGs Data Platform for the Republic of Korea

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https://kostat.go.kr/sdg