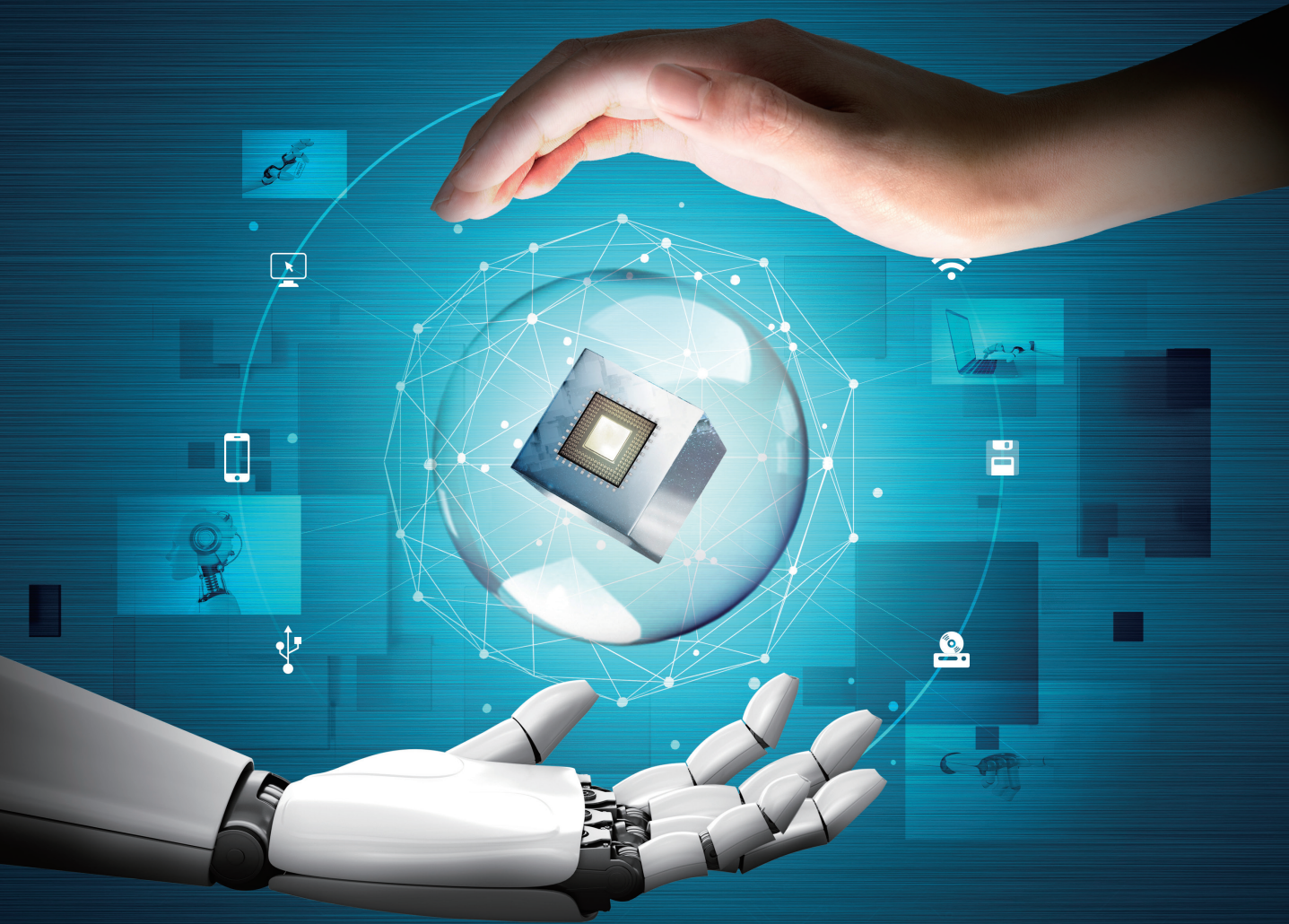


KOREAN NEW DEAL 2.0

National Strategy for a Great Transformation

July 2021



Government of
the Republic of Korea



Korean New Deal 2.0

National Strategy for a Great Transformation



Contents

I . Korean New Deal : One-Year Progress	5
II . Korean New Deal 2.0 : Background	10
III . Korean New Deal 2.0 : Overview	12
1. Task Enhancement	12
2. Fiscal Investment Plan	16
IV . Korean New Deal 2.0 : Implementation Plan	18
1. Digital New Deal	18
2. Green New Deal	27
3. Human New Deal	36
4. Regional New Deal	45
5. Institutional Improvements	53

Korean New Deal 2.0

National Strategy for a Great Transformation

I

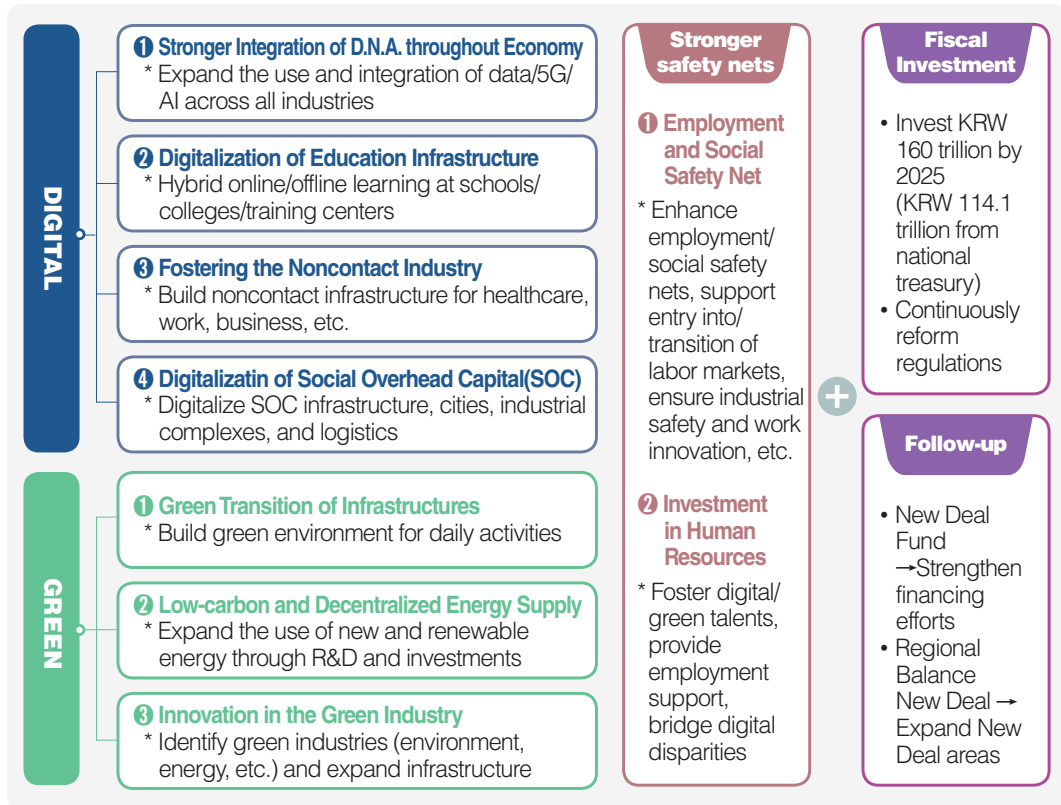
Korean New Deal : One-Year Progress

In the process of tough shutdown measures taken in response to the COVID-19 pandemic last year, the Korean economy faced a serious economic downturn¹ and an employment shock². Demand for online and noncontact services rapidly increased in response to the strict quarantine measures.

Coupled with raised awareness on climate change, these trends brought on extensive transformation of Korea's economic and social structures. Against this backdrop, the Korean government introduced the Korean New Deal Master Plan(July 14, 2020) to overcome the economic crisis caused by COVID-19 and preemptively respond to changes in economic and social structures.

1 GDP Growth from previous quarter (%): ('19.3/4) 0.4 (4/4) 1.3 ('20.1/4) Δ1.3 (2/4) Δ3.2

2 Changes in the number of employees (10,000): ('19.3/4) 36.6 (4/4) 42.2 ('20.1/4) 28.8 (2/4) Δ40.7 (3/4) Δ31.4



Fiscal Investment: The government created the momentum for change by securing sufficient fiscal investments during 2020 and 2021. In the digital sector, the New Deal revitalized Korea's innovation ecosystem by building Big Data platforms³, building and providing AI learning data⁴, and providing noncontact vouchers enhancing education infrastructure⁵, and digitalizing SOC infrastructure. In the green sector, the New Deal secured a foundation for low-carbon and green transition by increasing the deployment of electric and hydrogen cars, expanding charging infrastructure⁶, and

3 (Big Data) 16 platforms, 150 centers, and 4,036 data types have been built and made publicly available.

4 (AI Learning Data) 170 types of data have been built and made publicly available across eight areas including human voice and natural language(as of June 2021).

5 (Education Infrastructure) Wireless networks have been established at schools, covering a total of 310,000 classrooms (as of June 2021), and 255,000 outdated PCs have been replaced (as of April 2021).

6 Under the New Deal, 177,000 electric cars, 15,000 hydrogen cars, 72,000 electric chargers, and 96 hydrogen chargers have been provided (as of June 2021),

supporting the deployment of renewable energy. Regarding safety nets, the New Deal created a foundation for dampening the employment shock and achieving inclusive transformation by enhancing Korea's safety nets through the National Employment Support Program⁷ and livelihood support for vulnerable groups and investing in human resources through software expert training.

Institutional Reform: Korea completed key legislations and established a control tower to build a framework for change. In the digital sector, the government built an institutional foundation by key legislations such as enacting the National Knowledge Information Act, so called the Digital Jiphyeonjeon Act and revising the Framework Act on National Geospatial Information. The government also enacted⁸ the Data Framework Act. In the green sector, Korea increased⁹ the supply of renewable energy (RPS ratio increased), built Smart and Green Industrial Complexes, and built Green Industry Hubs. Regarding safety nets, Korea enacted and amended various laws and regulations including the Employment Insurance Act, the Income Tax Act and the Corporate Tax Act¹⁰ for timely identification of income data, and the laws related to human capital development¹¹.

7 The National Employment Support Program provides employment and income support to vulnerable employment groups (expected to support 640,000 in 2021)

8 Proposal (December 2020) → ministerial discussion (December-March, 2020) → public hearing (February 2021) → discussion at standing committee (June 2021)

9 RPS (renewable energy portfolio standard) ratio increased from 10 to 25% (Renewable Energy Act revised in April 2021), and the government implemented the world's first Hydrogen Act in February 2021, and launched the 2050 Carbon Neutrality Committee in May 2021.

10 The amendment changed the collection cycle for payment statements for daily laborer income (quarterly → monthly) and simplified payment statements for business income (semiannually → monthly).

11 The Lifelong Education Act was amended with regard to lifelong learning support for all Koreans (June 8, 2021), and the Higher Education Act was amended for the introduction of technical master programs (March 23, 2021).

Private Investment: Under the New Deal Plan, Korea engaged the private sector for the creation of ecosystems for new industries and expansion of private investments. In the digital sector, many private companies officiated its entry into AI and data businesses through the Data Dam Project, and accelerated the digital transformation of non-ICT sectors. In the green sector, new investment plans for renewable energy have been announced including an offshore wind power complex in Sinan¹²(KRW 48 trillion), a floating offshore wind power complex in Ulsan¹³(KRW 36 trillion), and a large-scale floating photovoltaic complex in Saemangeum. Regarding safety nets, private companies such as Samsung and SK expanded engagement and investment in human resources to train digital experts and bridge digital information disparities.

Public Participation: Over the past year, Korea achieved meaningful changes in people's daily life by providing more convenient services through the New Deal projects such as Doctor Answer 1.0, AI Secretary, green remodeling, and electric/hydrogen car charging infrastructure. Investor's interest in the Korean New Deal increased in the Korean market, as exemplified by the inflow of New Deal Funds¹⁴ in the private sector and the early sell out of public offering of K-New Deal Funds for retail investors.

Tackling Economic Challenge: The spread of noncontact transactions/ education, and rapid digital/green transition through low-carbon and green industrial ecosystems contributed to the efforts to overcome challenges posed by the COVID-19 pandemic, and Korea could build foundation for new growth engines including new digital industries (AR, VR, AI, etc.) and green mobility. The country maintained rapid and robust recovery trends in 2021, owing to increased export¹⁵ led by new industries and

12 The project plans to build the world's largest offshore wind power complex by 2030 (8.2GW), creating 120,000 jobs.

13 The project plans to build a floating offshore wind power complex (6GW) by 2030, creating 210,000 jobs.

14 42 New Deal Funds are currently in operation, with a total worth of KRW 3,070.1 billion (as of July 2, 2021).

15 Export (year over year, %): ('20.3/4)Δ 3.5 (4/4) 4.1 ('21.1/4) 12.5 (4) 42.1 (5) 45.6 (6) 39.7

increased investments Facility investment¹⁶ in IT and new and green technologies, and the Korean economy is expected to grow by 4.2% in 2021 (initial expectation: 3.2%). The global community regards the Korean New Deal as a leading national development strategy to overcome COVID-19 and respond to climate change, and joined the trends represented by the New Deal.



16 Facility investment (year over year, %): ('20.3/4) 7.7 (4/4) 2.8 ('21.1/4) 11.9 (4) 17.1 (5) 11.0

II

Korean New Deal 2.0 : Background

Since July 2020, when the Korean government announced the ‘Korean New Deal Plan’, economic and social structural changes induced by the COVID-19 pandemic has accelerated over the past year, making it necessary to upgrade the policy.

Intensified Polarization due to COVID-19

COVID-19 created concerns about increased polarization¹⁷ in the Korean society, with the pandemic disproportionately affecting low-income households, youths, and other vulnerable groups. COVID-19 also resulted in learning loss¹⁸, increased disparity in care and enjoyment depending on family environment and income levels, and increased employment/income/housing insecurity among youths¹⁹. The government has addressed the disparities by strengthening its employment and social safety nets and investing in human resources. However, further efforts are necessary to address the increased polarization during the pandemic.

Need for Preemptive Actions to Accelerate Response to Transformation of Economic/Social Structures

Korea currently pursues transition to a green and low-carbon economy in response

17 Percentage of fifth quintile in market income: ('19.3/4) 11.24 (4/4) 10.56 ('20.1/4) 14.77 (2/4) 14.38 (3/4) 13.08 (4/4) 11.85 ('21.1/4) 16.20

18 Findings of the 2020 National Academic Achievement Assessment (third year middle school, and second year high school students) showed an increase in level 1 students (lacking basic academic skills).

19 Changes in the number of young employees (10,000; year over year) ('19) 4.1 ('20)Δ18.3 ('21 1/1)Δ10.3 Students behind their student loan payments: 27,000, KRW 32.2 billion (2019) → 36,000, KRW 42.6 billion (2020)

to climate change, and faces accelerated digitalization of all sectors in response to increased demand for online/noncontact services. Also, workforce demand has rapidly increased²⁰, in the new growth areas such as software.

Preemptive support for industrial restructuring and labor transition are required to accelerate response to such structural transformation. Specifically, Korea needs to build a support system for strategic and preemptive industrial restructuring, including identification of demands from various industries and a support system for effective labor transition as well. Also required are efforts to boost human capital development and capacity building as well all labor forces.

Need for Global Digital Leadership

Korea appears to get ahead in the global digital competition by preemptively implementing the Digital New Deal policy (July 2020). However, recently, the United States, EU, and other major countries announced large-scale investment plans in high speed networks and AI. Korea needs to update and develop on the New Deal plan to consolidate its leadership in the global digital competition.

Increased Strategic Significance of Carbon Neutrality

Carbon neutrality became a ‘global new normal,’ as represented by carbon neutrality declarations²¹ by 25 countries, the Leaders’ Summit on Climate (April 2021), and the P4G Summit (May 2021). Korea will join the global trend, and it is vital to strategically utilize carbon neutrality to secure new engines for future growth.

20 Hiring of software employees in the software sector increased by 9.2%, and by 19.5% in other sectors (Software Research Institute, 2017-2019).

21 UK (‘19.6), France (‘19.11), EU(‘20.3), China (‘20.9), Japan (‘20.10), Korea (‘20.10), US (‘21.1), etc.

III

Korean New Deal 2.0 : Overview**1. Task Enhancement****1 Expand ‘Stronger Safety Nets’ into ‘Human New Deal’**

The government will significantly increase investment in human resources in response to low-carbon and digital transformation, fostering human capital in areas with increasing workforce demand such as digital and green industries and reinforcing support for lifelong learning for all people. Moreover, the government will strengthen support for youths and vulnerable groups who were most heavily affected by the COVID-19 pandemic.

The government also plans to provide intensive support for youths so that youth generation as human capital and main engines for economic restructuring can overcome the challenges posed by COVID-19, and address disparities in education and care services, and mitigate inequalities in cultural activities.

2 Enhance New Deal tasks by Area in response to changes in circumstances

Korea will add new tasks and expand/revise existing tasks in response to accelerated global competition for digital transformation and carbon neutrality.

Digital New Deal : The government will spread the Digital New Deal across its economy and society, in response to escalated competition and other changes in the global digital environment.

1 New Tasks

- ✓ Foster new industries in service sectors, among the value chain of Input-Processing-Service, where outcomes can be felt by people.
- ✓ Expand digital convergence into various sectors and build hyper-connected industries such as Metaverse and cloud.

2 Expansion on Existing Tasks

- ✓ Identify new tasks in areas closely related to people's daily lives such as health and education, utilizing the outcomes of the Digital New Deal 1.0.
- ✓ Expand the existing tasks including D.N.A.(Data, Network, AI), noncontact infrastructure, and SOC digitalization.

Green New Deal : The government will expand the scope of the Green New Deal, adding new tasks on carbon neutrality to actively participate and play a leading role in the international discussion on carbon neutrality.

1 New Tasks

- ✓ Building foundation for Implementation of Carbon Neutrality to support efficient implementation of the carbon neutrality strategy.

2 Expansion on Existing Tasks

- ✓ Expand and Reinforce the scope and scale of the existing Green New Deal project to accelerate the transition to a low-carbon economy.

Institutional Reform : The government plans to continue with existing institutional reform tasks, and add those related to the preemptive restructuring of industries.

1 New Tasks

- ✓ Build a strategic support system to preemptively prepare for transition to a digital and green economy.

2 Expansion on Existing Tasks

- ✓ Monitor if there is any difficulty on the ground of various New Deal projects, and pursue institutional reforms.

Regional New Deal : Korea will expand on substantial outcomes felt by the people and build a foundation for continuous implementation.

- ✓ Accelerate and expand on the outcomes of the regional projects of the Korean New Deal.
- ✓ Identify promising local government-led projects early on and ensure rapid implementation with support measures.
- ✓ Create a spontaneous investment ecosystem by inducing the expansion of private investments.

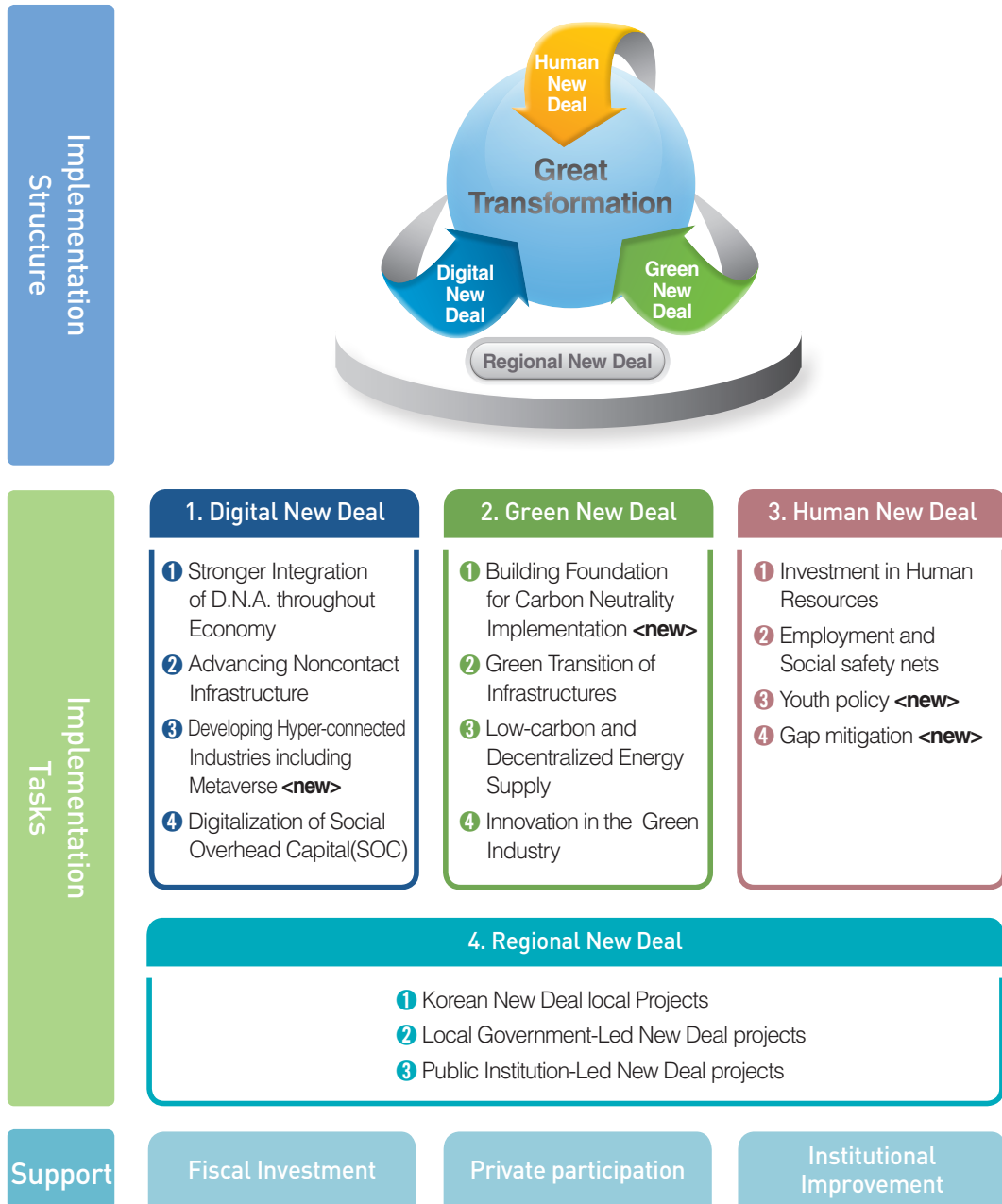


[Korean New Deal 2.0 Structure]

Vision

Become a leading country through great transformation

To a first-mover economy, low-carbon economy, and inclusive society



2. Fiscal Investment Plan

As the tasks are upgraded with the ‘Korean New Deal 2.0’, the government plans to increase the total budget (including local government budget and private sector funds) from KRW 160 trillion (New Deal 1.0) to KRW 220 trillion (up by KRW 60 trillion) by 2025. As for the national budget from the investment plan, the amount will be increased from KRW 114.1 trillion to KRW 160 trillion (up by KRW 45.9 trillion). For 2022, the national budget for Korean New Deal projects will increase from KRW 23.2 trillion to KRW 30 trillion (up by KRW 6.8 trillion) tentatively. Accordingly, the number of job creation, expected by the New Deal between 2020 and 2025, will increase from 1.9 million to 2.5 million (up by 0.6 million).

Fiscal Investment Plan for the Korean New Deal by Area (2020~2025)

(unit: trillion won, national treasury)

Area		2020 ~ 2025	
		New Deal 1.0	New Deal 2.0
Digital	1 Stronger Integration of D.N.A. throughout Economy	31.9	33.5
	2 Advancing Noncontact Infrastructure	2.9	3.2
	3 Developing Hyper-connected Industries including Metaverse	-	2.6
	4 Digitalization of Social Overhead Capital	10.0	9.7
	Sub total	44.8	49.0
Green	1 Building Foundation for Carbon Neutrality Implementation	-	4.8
	2 Green Transition of Infrastructures	12.1	16.0
	3 Low-carbon and Decentralized Energy Supply	24.3	30.0
	4 Innovation in the Green Industry	6.3	10.2
	Sub total	42.7	61.0

Area		2020 ~ 2025	
		New Deal 1.0	New Deal 2.0
Human	1 Investment in Human Resources	4.0	9.3
	2 Employment and social safety nets	22.6	27.0
	3 Youth policy	-	8.0
	4 Gap mitigation	-	5.7
	Sub total	26.6	50.0
Aggregated total		114.1	160
Regional New Deal		42.6	62

Fiscal Investment Plan for the Korean New Deal by Area (2022)

(unit: trillion won, national treasury)

Area	New Deal 1.0	New Deal 2.0
	2022	2022
Digital	8.6	KRW 8.7 trillion or more
Green	10.3	KRW 12.3 trillion or more
Human	4.3	KRW 9.0 trillion or more
Aggregated total	23.2	KRW 30 trillion or more
(Regional New Deal)	(10.2)	(KRW 12 trillion or more)

IV

Korean New Deal 2.0 : Implementation Plan

1. Digital New Deal

Overview

New Deal 1.0 (2020.7)

"Pursue digital transformation of overall economy"

- **Stronger Intergration of D.N.A. throughout Economy**
 - Promote integration and use of data/5G/AI
 - Pursue digitalization of businesses and industries

- **Digitalization of Education Infrastructure**
 - smart school, online/offline hybrid learning, etc.

- **Fostering the Noncontact Industry**
 - Achieve digital/noncontact transition of care and healthcare infrastructure; support online businesses of small enterprises

- **Digitalization of Social Overhead Capital(SOC)**
 - Digitalize traffic and disaster control; build Smart Industrial Complexes, Smart Cities, and Smart logistics systems

New Deal 2.0 (2021.7)

"Expand on digital convergence"

- **Stronger Intergration of D.N.A. throughout Economy**
 - + Expand My Data across all industries (amend Personal Information Protection Act) and support pseudonymous information processing
 - + Enact key laws on transition to digital economy
 - + Build an international 6G R&D cooperation networks

- **Advancing Noncontact infrastructure**
 - + Build high-performance WiFi networks at all schools earlier
 - + Operate Doctor Answer clinics and deploy smart emergency care services
 - + Advance smart stores using smart technologies (IoT, AI, etc.)

- **Developing hyper-connected industries including Metaverse**
 - Build open Metaverse platforms and support creation of metaverse contents
 - Pilot-test the convergence of 5G/AI-based robots/services to address social issues
 - Facilitate transition of public information systems to private cloud services
 - Pursue convergence/linkage projects for multi-department large-scale blockchain technologies
 - Enhance identification and application of smart IoT services

- **Digitalization of Social Overhaed Capital(SOC)**
 - + Expand on smart city data hubs

1 Stronger Integration of D.N.A. throughout Economy



New Deal 1.0 Summary

- ✓ Open public data to the public to foster merge and utilization, build AI learning data-set, provide data processing vouchers, and build the National Knowledge Information System, so called Digital Jiphyeonjeon
- ✓ Develop 5G-based noncontact convergence service models, develop AI smart factories and construction technologies, and foster digital innovation companies
- ✓ Provide noncontact public services, build national 5G networks, and digitalize government publications
- ✓ Support security investment to small and medium enterprises (SMEs) and build an open platform to analyze security vulnerabilities

Collecting, disclosing, and utilizing data in areas closely related to people's daily lives

The Personal Information Protection Act will be amended to build a foundation for the deployment of My Data across all industries, and promote the use of My Data in the public sector, healthcare, and other areas. The government will build an pseudonymous information support center and provide consulting on alias information to help businesses and institutions safely process pseudonymous information. In addition²², and enact three key laws for transition to a digital economy²³ to protect new digital technologies and promote data use.

22 The government will enact the 「Act on Promotion of the Use of Industrial Property Information (tentative title)」 and amend the 「Unfair Competition Prevention and Trade Secret Protection Act」.

23 the 「Data Framework Act」, the 「Act on Promotion of Digital Transformation of Industries」, and the 「Act on Smart Manufacturing Innovation for SMEs」

Expanding the integration of 5G and AI across all industries

The government plans to support the development of technologies for the new PIM AI semiconductor (integration of memory and processor) including convergence between memory and system semiconductors and the development of core manufacturing equipment. The government will also build international cooperation networks for research and standard development of 6G technologies.

Making a smart government that utilizes 5G and AI

In addition to continuous noncontact/digital transformation of administrative systems, the noncontact Legal Aid Electronic Reception System²⁴ will be constructed and the AI-based improvement of the law information service will be implemented.

Establish a K-Cyber Quarantine System

The government will establish safe digital environments through preemptive development of global leading technologies for data protection (homomorphic encryption and differential information encryption, etc.).

²⁴ Currently, users are required to visit the Legal Aid Corporation in person. Under the new system, they can apply for legal aid services remotely

2 Advancing Noncontact Infrastructure



New Deal 1.0 Summary

- ✓ Upgrade teachers' PCs and laptops, build an integrated K-edu platform, replace servers/networks at national universities, and build online education infrastructure at schools and universities including online education support centers
- ✓ Build digital smart hospitals (18), provide video communication equipment to healthcare facilities (5,000), develop care robots, and implement digital care pilot projects
- ✓ Provide noncontact meeting rooms for SMEs and ventures (1,562), support microenterprises with online sales channels, and support smartization of stores and workshops

Expand digital-based online education and vocational training infrastructure

The government will set up high-performance WiFi networks²⁵ at all elementary, middle, and high school classrooms earlier than the original plan, and produce and promote the use of noncontact AI education content²⁶ for universal easy access to AI education. The government also plans to build a foundation for fostering remote education²⁷ by setting up operational guidelines and supporting the construction and operation of remote education systems at schools, etc.

25 (Previous Plan) 350,000 classrooms by 2022 → (New Plan) 380,000 classrooms by 2021

26 Field-oriented educational content featuring actual AI/SW-based projects

27 Enact the 「Framework Act on Remote Education」, revise the Enforcement Decree of the Higher Education Act, etc.

Build smart health/care infrastructure

Leading models of smart hospital developed by the New Deal will be deployed, Doctor Answer Clinics and smart emergency healthcare services will be set up and operated at local hub hospitals. Care robots²⁸ (4 types) will also be developed and provided and a certification program will be developed to revitalize health management services.

Provide assistance to SMEs and microenterprises for online business

Intensive supports of smart technologies²⁹ (IoT, AI, etc.) will be provided tailored to microenterprise stores to step up phase from quantitative provision to qualitative advancement. To foster noncontact industries, the government will support development and pilot-test of core technologies in eight promising areas³⁰ for noncontact business commercialization.

28 Bedsore prevention, discharging support, meal support, and embarkation support for mobility assistance devices

29 (Previous) Simple commercialization technologies including smart order → (New) Focused on tailored smart technologies

30 Finance, healthcare, education, work, microenterprise, distribution/logistics, culture/entertainment, administration

3 Developing hyper-connected industries including Metaverse (New)



Background

- ✓ In response to the acceleration of digital convergence across all industries, Korea will focus on identifying and fostering hyper-connected industries such as Metaverse.
- * [metaverse]: The term signifies a transcendental (meta) world that combines the real and the virtual, where users enjoy leisure and perform economic activities based on 5G and virtual technologies (AR and VR).

Provide unprecedented support for ICT convergence businesses such as Metaverse and smart robots

The government will develop open metaverse platforms and build relevant data³¹, and provide support for the production of various metaverse contents including tourism universe. The government will also implement pilot-test the convergence of 5G/AI-based robots/services to address social issues such as rural aging and infectious diseases.

Develop foundational technologies in the digital era such as cloud, blockchain, and IoT

The government will develop cloud services with high public demand and support the attainment of security certification, to facilitate the transition to private cloud services in the public sector. Meanwhile, the government will also support the SaaS³² transition of software companies to innovate productivity and secure work continuity

31 Provide public access to data and tools in the platforms so that third party companies can use them to develop new services

32 Software as a Service: a service model which the users get access via internet without hardware, software, or other IT resources

at private companies.

For Blockchain technology, the government will implement a large-scale deployment project and set up a ‘Technology Innovation Support Center’ to support early growth, along with institutional improvements taking account of the characteristics of blockchain³³.

The government will identify smart IoT³⁴ services, support the application and deployment at institutions in need of IoT services, and provide testbeds for the demonstration of new technologies. In addition, the government will develop next-generation quantum internet to overcome the limitations of digitalization, ensure AI reliability, and respond to the drawbacks of digital technologies such as voice phishing.



33 Unable to correct or remove personal/location information in a block → widely recognize disposal methods for personal/location information in consideration of time/cost/technology constraints (amend the Enforcement Decrees of the Personal Information Protection Act and the Act on the Protection, Use, etc. of Location Information)

34 Technology that remotely and automatically control objects by analyzing and predicting the information sensed and transmitted by the objects using AI and big data

4 Digitalization of Social Overhead Capital(SOC)



New Deal 1.0 Summary

- ✓ Adopt digital management systems for roads and railroads; build 'digital twins' for roads, underground spaces, and ports, and build smart safety management systems for nationally managed dams
- ✓ Support the construction of integrated CCTV platforms (108 units) and national pilot smart cities, and build two Innovation Data Centers in smart industrial complexes
- ✓ Build smart joint logistics centers (11 at transportation centers, and 2 at port hinterlands), develop advanced logistics technologies, and demonstrate field applications

Build key digital infrastructure management system

To foster a self-driving ecosystem, the government will implement research projects to develop manufacturing standards and insurance plans³⁵ for level-4 self-driving cars³⁶.

Digitally innovate urban and industrial complex spaces

For Smart City, the government will expand data hubs based on integrated platforms to maximize data acquisition and convergence and implement R&D to accelerate link and utilization of AI and IoT.

For Smart Industrial Complexes, Korea will also help innovation data centers to share their data using approaches, and assist with on-site field training and online training to train experts on smart manufacturing.

³⁵ Develop assessment technologies for vehicle-to-everything (V2E) recognition and accident response (2021-2026)

³⁶ Develop safety assessment technologies for driving and collision scenarios (2021-2027)

Build smart logistics systems

Korea will digitalize port logistics infrastructure using data technologies such as AI, big data, to improve the efficiency of export/import logistics. Also, the government will develop service technologies to connect and optimize maritime/port/land logistics using AI, and develop automated transportation systems for transshipments (unmanned trams) and cargo transportation systems based on cooperative self-driving to improve cargo transmission efficiency at ports.



2. Green New Deal

Overview

New Deal 1.0 (2020.7)

"Transition to a Green and Low-Carbon Society"

- **Green transition of infrastructure**
 - Promote the transition of public buildings and water management to smart/green systems, and restore the green ecosystem
- **Low-carbon and decentralized energy Supply**
 - Improve energy operation efficiency, spread renewable energy, and deploy green vehicles
- **Innovation in the green industry**
 - Promote prospective green businesses, build Smart Green Industrial Complexes, and provide green finances, etc.

New Deal 2.0 (2021.7)

"Expand the scope based on carbon neutrality strategies"

- **Building a foundation for carbon neutrality implementation**
 - Improve greenhouse gas (GHG) measurement / assessment systems, improve efficacy of the emissions trading system (ETS)
 - Prepare a foundation for an industrial circular economy by building digital-based resource circulation industrial complexes
 - Set up a management system for carbon sinks such as forests
 - Encourage people to voluntarily participate through greenhouse gas reduction campaigns, etc.
- **Green transition of infrastructure**
 - + Expand the application of green smart schools and gradually raise energy building grades
 - + Support green remodeling of private buildings
 - + Complete outdated waterworks maintenance projects in advance
 - + Reinforce smart response to climate risks including developing satellite payloads for water resource and disasters
- **Low-carbon and decentralized energy Supply**
 - + Develop safety evaluation standards/ technologies for energy storage systems (ESS)
 - + Develop production and storage technologies of green hydrogen produced with marine energy, etc.
 - + Enhance support for renewable energy supply
 - + Deploy hydrogen buses and implement green transition of outdated vessels
- **Innovation in the green industry**
 - + Support business establishment, industrial complexes, and industrial units; develop reduction technologies specialized in different business types
 - + Enhance connection with innovative procurement
 - + Develop CO2 capture/storage/utilization technologies across all cycles
 - + Expand investments in the policy fund for green sectors

1 Building Foundation for Carbon Neutrality Implementation (New)



Background

- ✓ Korea announced its commitment to achieving carbon neutrality by 2050, as carbon neutrality emerged as a key component of the competitiveness of countries and industries (October 2020). Accordingly, the Korean government created a new item in its Green New Deal initiative, to 'Build a Foundation for Carbon Neutrality Implementation,' to ensure continuous and efficient implementation of carbon neutrality policies until 2050.

Prepare a foundation for GHG reduction including frameworks and experts

Korea will improve its reduction management framework including GHG measurement/assessment systems and the Emissions Trading System (ETS) to support the implementation of its 2030 NDC³⁷. In response to the establishment of international frameworks on carbon neutrality including the carbon border adjustment mechanism, Korea will develop carbon impact calculation methods³⁸ aligned with international requirements. Furthermore, Korea will actively engage in international discussions to build an international order based on fair rules.

³⁷ Nationally Determined Contribution

³⁸ Carbon impact calculation method compatible with international standards (currently 10 in Korea, and 146 in EU) and data quality improvement, etc.

Revitalize circular economy and expand carbon sinks

The government will establish a resource circulation digital system(industry co-existence map)³⁹ to build industrial complexes without waste discharge, and provide tailored support to reinforce the foundation for a circular economy including resource/fuel conversion, remanufacturing, and reuse of wastes.

Moreover, Korea will build a foundation for efficient management of carbon sinks, including carbon sink function measurement/assessment systems, and big data management systems for forest resources.

Raise people's awareness on carbon neutrality and support climate adaptation efforts

The government will develop and distribute content based on the carbon neutrality practice guide, and provide incentives⁴⁰ for low-carbon production and consumption. Also, the government will operate a PR portal to raise awareness on the concept and vision of carbon neutrality, and build/operate a website to promote climate actions. In addition, the government will build climate adaptation infrastructure for vulnerable groups (children, elderlies, etc.) including cool roofs, thermal environment improvement, wall greenification, etc.

39 Build infrastructure to link waste information among residing businesses within the complexes in real time, to provide a foundation for effective waste reduction for businesses

40 E.g. carbon point program, vehicle carbon point program, green card, etc.

2 Green Transition of Infrastructures



New Deal 1.0 Summary

- ✓ Spread Green Smart Schools to create green and digital education environment; pursue zero energy transition of public buildings including photovoltaic systems and environment-friendly insulations
- ✓ Foster smart green cities/urban forests; restore the health of national land/marine ecosystems
- ✓ Build smart water supply/sewage management systems and integrated water management systems (drinking water, water volume, quality, etc.)

Achieve zero-energy transition of public facilities closely related to people's daily lives

The targets of green smart school project⁴¹ will be expanded in consultation with city/provincial education offices for the early achievement of carbon neutrality, and zero energy building grades⁴² will be raised gradually. Also, Korea will enhance support and provide incentives⁴³ for encouraging private buildings to participate in green remodeling.

Restore green land/marine/city ecosystems

For urban areas, the government will restore and connect damaged green lands in cities to protect ecosystems and ecological axes in cities and use them as new carbon sinks.

41 (Current) 40-year or older schools (2,835 buildings) → (New) expand to include annexes (2,835 buildings and more)

42 (Current) energy self-sufficiency rate: 20%(minimum) → (New) raise to 20% or higher depending on school circumstances

43 Expand low-interest support, reduce subsidies, and acquisition tax, etc.

For rural areas, the government will improve GHG management systems tailored to rural areas⁴⁴, and encourage voluntary carbon reduction by discovering⁴⁵ and supporting means of reduction.

For coastal areas, the government will restore ecological functions and health in coastal areas by expanding protection areas and reinforcing management systems⁴⁶ for hazardous materials at sea.

Build a safe and clean water management system

The government will complete the maintenance projects for outdated water pipes to improve water quality and prevent leakage by 2024 (original plan: by 2028), and conduct feasibility study for project expansion.

In addition to existing projects (AI flood forecast, desalination of sea water, etc), Korea will develop satellite payloads for water resource and water disasters⁴⁷, and innovative technologies for water management⁴⁸ as a measure of responding to climate challenges.

44 Low carbon agricultural product certification, GHG/energy target management systems for agriculture/food businesses

45 Consider providing smart green infrastructure support, including energy efficiency systems for outdated agricultural/industrial complexes

46 Develop new methods to track marine contamination sources and advance ocean waste collection/treatment technologies, to enhance ocean waste management across the cycle from tracking, collecting, to processing

47 Develop imaging radar payloads and build a platform for providing observation data

48 Develop technologies to predict flood damage in cities and optimize water distribution depending on drought levels

3 Low-Carbon and Decentralized Energy Supply



New Deal 1.0 Summary

- ✓ Improve energy management efficiency and build eco-friendly and decentralized power generation system
- ✓ Implement R&D projects to expand renewable energy and develop ecosystem, and create a foundation for deployment
- ✓ Expand the distribution of green mobility (electric/hydrogen cars), convert outdated vehicles, conduct R&D projects

Build a smart grid for more efficient energy management

ESS Safety Evaluation Center (ESS⁴⁹) will be set up for developing evaluation standards and technologies for ESS safety, which will eventually help to deploy ESS by overcoming concerns about its fire risk.

Build a foundation for the spread of renewable energy and support fair transition

The government will develop technologies to use various sources including ocean energy⁵⁰ to produce and store green Hydrogen⁵¹, and produce energy from organic wastes such as livestock excretion.

49 A system that stores power in storage devices and supplies it as needed

50 Wave power, offshore wind power, and other renewable energy sources

51 Hydrogen produced with water electrolysis utilizing wave power

For institutional enhancement, a wind power one-stop shop organization⁵² will also be established to support government-led location identification and processing of permits and approvals, and adopt a certification program for clean hydrogen.

Moreover, the government will promote projects to increase energy efficiency in the agricultural sectors by supporting the installation of renewable energy facilities (geothermal, waste heat, etc.) to reduce GHG emissions from horticulture and other agricultural sectors.

Expand the distribution of green mobility such as electric and hydrogen cars

To ensure early consolidation of a hydrogen ecosystem encompassing production, distribution, and consumption, more demand for Hydrogen will be created by expanding hydrogen buses deployment and taking other measures

The government will also convert government vessels and ships to green vessels⁵³ and develop energy-reducing vessel technologies⁵⁴.



52 Set up the Wind Power Committee under the Prime Minister (tentative title)

53 New vessels or installation of exhaust reduction devices

54 Hydrogen-propulsion vessels, and mixed fuel technology for green vessels

4 Innovation in the Green Industry



New Deal 1.0 Summary

- ✓ Promote prospective businesses to lead the green industry and establish low-carbon green industrial complexes
- ✓ Promote R&D projects for green technologies to reduce GHG and fine dust, and support green finance

Promote prospective businesses to lead the green industry and establish low-carbon and green industrial complexes

To help businesses⁵⁵ reduce carbon emissions, support for the transition to green fuel (coal → clean fuel) and deployment of contaminant reduction facility/technologies will be provided in a way tailored to business characteristics.

The government will also develop and expand smart energy platforms⁵⁶ (10 sites by 2022) for Smart Green Industrial Complexes.

Support to improve Korean companies' green technology expertise and help them internalize supply networks will be provided through enhanced linkage with innovative procurement initiative by expanding certified innovative products and raising purchase targets.

⁵⁵ Build smart ecological plants (100 units by 2022) and expand clean factories (750 or more units by 2022)

⁵⁶ Monitor and control energy production and consumption through ICT-based data collection, energy flow visualization, and operation of an integrated grid control center

Build a foundation for green innovation via R&D and finance sectors

Korea will develop carbon reduction technologies specialized for businesses⁵⁷ with high carbon emissions including steelmaking, cement, petrochemical, and oil refinement, for more effective carbon reduction method. Korea will also expand support for the CCUS⁵⁸ technology development including new support projects across the full cycle (from source technology development to technical demonstration⁵⁹).

In addition, the government will boost the development of technologies to remanufacture and reuse used resources such as batteries, electrodes, and plastics for improved resource circulation⁶⁰, and expand financial support from policy finance for early-stage green industries such as hydrogen infrastructure and renewable energy businesses.



⁵⁷ (Steel) Develop CO₂ recovery and utilization technologies for steelmaking processes; (cement) develop technologies to expand the use of circulation resources to replace limestone; (petrochemical) develop carbon neutral chemical process technologies to replace petroleum-based fuels

⁵⁸ CCUS: Carbon Capture Utilization and Storage

⁵⁹ Develop carbon resourcification platform chemical manufacturing technologies; demonstrate CCUS product production technologies; and develop core technologies for the commercialization of CO₂ storage

⁶⁰ Develop and demonstrate technologies for products based on used batteries (EV, ESS, increase to KRW 4.4 billion or higher); develop remanufacturing technologies for low-carbon high-added value electrodes; develop technologies to advance recycling of waste plastics, etc.

3. Human New Deal

Overview

New Deal 1.0 (2020.7)

"Train human resources and expand employment and social safety nets"

• Investment in human resources

- Train digital/green human resources, and improve vocational training systems for future adaptation

• Employment and social safety nets

- Build tight employment and social safety nets, and support the livelihood and employment of vulnerable groups

New Deal 2.0 (2021.7)

"Achieve human-centered inclusive economic growth"

• Investment in human resources

- + Train human resources in high-tech sectors including software, medical science, and BIG3
- + Further expand software education-hub colleges (41 to 64 by 2025)
- + Establish new digital academy with leading companies

• Employment and social safety nets

- + Abolish dependent requirement for livelihood benefits early on and develop measures to alleviate catastrophic medical bills
- + Enhance support for children discharged from institutional care

• Youth Policy

- Develop asset building support programs tailored to different income level youth groups
- Mitigate rent burden on youths and expand support for Qualified Acquisition-House Program for youths
- Increase the amount of national scholarships and expand beneficiaries of ICL to graduate students
- Support employment in new industries (AI, software, etc.); and consider extension of sunset periods of tax benefits for employment expansion

• Gap mitigation

- Adopt Education Enhancement package (Master Plan for Education Recovery)*
- * ① Reinforce basic academic skills; ② support multicultural students and students with disabilities; ③ support improvement of social skills; ④ increase scholarships for low income groups
- Establish Social Service Centers + enhance care services for single parents, the elderlies, people with disabilities, and children
- Provide cultural activity grants to low-income earners

1 Investment in Human Resources



New Deal 1.0 Summary

- ✓ Provide AI & SW training for 100k individuals, training in green convergence technology for 20k individuals
- ✓ Restructure job-training system for future adaptability, including digital convergence training support
- ✓ Enhance digital accessibility for rural communities and vulnerable groups, including building hyper speed internet networks.

Train human resources in high tech sectors including software

For semiconductor industry, 8,000 or more high-quality/expert and bachelor-level talents will be trained until 2025 through various training courses for enhanced design capabilities including Polytech semiconductor convergence campuses.

The government will also train 20k or more talents in the new industries related to medical big data, AI, and medical devices until 2025 by enhancing research support and fostering environments for balanced clinical research and lab research to build a foundation for training doctors and scientists.

Moreover, the government will train more than 3k convergence technology experts in electronics, IT, software, etc. through job transition education by 2025 to build social and industrial ecosystems centered around future cars.

In particular, the government will train 89k additional software talents by 2025 through enhanced employee training, co-research projects in AI, expansion of business-university cooperation models and public-private partnership.

Korea will also expand the scope of support based on projected workforce demand from new technology sectors and expand from 6 sectors including AI and big data in 2021 to 22 sectors including future cars and system semiconductors in 2022.

Train digital and green experts

Korea will increase Software Education-Hub colleges to 64 units by 2025 and increase the number of students at the Innovation Academy to 750 a year.

In addition, Korea will provide AI training to employees in key industries and researchers at government-funded research centers, and train ‘career-interrupted women’ and retirees into software experts.

Restructure the vocational training system for future adaptability

The country will establish a new academy for digital human capital, where industry leaders in big data, game, and other sectors lead training programs, as well as a venture and startup academy for which associations, businesses, and training institutions jointly design training programs focused on onsite training.

Enhance digital accessibility for rural communities and vulnerable groups

The country will improve convenience in rural and fishery areas with smart village services designed to extend benefits of the 4th Industrial Revolution.

2 Employment and Social Safety Nets



New Deal 1.0 Summary

- ✓ Establish a universal employment safety net by expanding employment/ industrial accident insurance beneficiaries
- ✓ Enhance inclusive social safety nets including projects for the adoption of Korean-version sickness benefits
- ✓ Support entry into, and transition of, labor markets, and innovate industrial safety and working environments

Establish a universal employment safety net

The government will expand beneficiaries of employment insurance in phases to include workers in non-standard employment forms (July 2021) 12 non-standard employment forms⁶¹.

As for the Industrial Accident Compensation Insurance, support for the beneficiaries will be expanded for non-standard employment workers by adding software freelancers from July 2021.

Enhance inclusive social safety nets for shared prosperity

Korea will abolish dependent requirement for livelihood benefits originally scheduled to be abolished in stages by 2022 early on.

Support for catastrophic medical expenses borne by vulnerable groups will also be enhanced. Currently, the government subsidizes 50% of out of pocket payments, but it will increase the subsidy percentage for low income earners to as much as 80%

⁶¹ (July 2021) 12 non-standard employment forms; (January 2022) 2 platform workers; (July 2022) other workers in non-standard employment forms and platform workers; (2025) self-employed workers

depending on income and increase the cap for subsidy as well.

The government will strengthen support program for children discharged from government protection at 18 to prepare for independence and enjoy a fair starting point in life.

The government will also expand the infrastructure for protecting child abuse victims by establishing new protection agencies and shelters.

Support livelihood and employment security for people not eligible for the employment insurance

The government will improve the employment support program, by abolishing work experience requirement for selection-type youth support programs and alleviating income/asset requirements⁶².

Support new entry and transition to labor markets

The government will advance support for AI employment services by developing smart counseling support services such as the National Job Information Platform and the AI-based job matching system. Also, it will expand public training programs (Polytech) and support ‘new middle aged’ group (40’s to 60’s) get back to work.

Innovate industrial safety and work environments

The provision of preventive goods will be expanded to ensure safety at small business establishments (less than 5 employees), and consulting for remote work system for SMEs and middle-standing companies will be provided for work-life balance.

62 [Asset requirement] KRW 300 million → 400 million; [income requirement] median income 50% or lower → 60% or lower

3 Youth Policy(New)



Background

- ✓ Youth policy is introduced to enhance support for employment and living security for youths, faced with difficulties brought on by COVID-19, as future social asset and essential power for economic/social structural transition

Help youths build assets, achieve housing security, and lessen burden of education expenses

The government will provide asset building support programs tailored to different income level youth groups in order to help youths build assets.

Targets	Benefits	Contribution cap	Amount received at maturity
「Youth Tomorrow Savings Account」 Annual income KRW 24 million & median income 100% or lower	Government pays one to three times the amount saved by youths (KRW 100,000 per month)	KRW 1.2 million per year (three year maturity)	(Three years) KRW 7.2 to 14.40 million (Youth 3.6 million + Government 3.6 million to 10.8 million)
「Youth Hope Savings」 Total annual wage KRW 36 million or lower	Up to 4%p of savings grant (2% in year 1 → 4% in year 2)	KRW 6 million per year (two year maturity)	(After 2 years) KRW 12.0 million + market interest rate + savings grant around KRW 360k
「Long-Term Youth Income Deduction Fund」 Total annual age KRW 50 million or lower	Income deduction for 40% of fund contribution	KRW 6 million per year (3 to 5 years)	(After 3 years) KRW 18 million + fund profit*
「Service Member Tomorrow Preparation Savings」	Government pays three times the amount paid by service members	KRW 400k per month (maturity at discharge)	(Upon discharge) Receives up to KRW 10 million

* In case of paying the cap amount for three years, income deduction for up to KRW 7.2 million

The government will enhance housing finance support for housing security, by mitigating requirements for housing loans, extending housing expense support system for youths and Qualified Acquisition-house Program enrollment period from 2021 to 2023.

The government will also raise the cap on national scholarships to lessen the burden of education expenses, expand the beneficiaries of Income Contingent Loan (ICL) to include graduate students, and expand debt adjustment support for youths.

Expand jobs in future-oriented sectors and vocational skill trainings

To expand youth employment, the government will provide up to KRW 1.8 million per month for 6 months to SMEs and middle-standing companies employing youths in AI/software positions and consider adopting employment tax credit and extending the sunset period of income tax benefits for youths working at SMEs.

To improve the youths' vocational skills, the government will enhance work experience programs, in which large enterprises participate, providing training on basic vocational skills and on-site training experience.

Also, the government will encourage youth startups by creating new funds of funds (FOFs) for youths, providing startup loans, and exempting youths from charges imposed on IT-based startups (knowledge services).

4 Gap Mitigation(New)



Background

- ✓ Improve inclusiveness by mitigating inequalities and disparities in the post-COVID era, and enhance support for education, care, and cultural activities for socially vulnerable groups such as students, children, elderlies

Adopt Education Enhancement Package to mitigate the education gap

The government will adopt Education Enhancement Packages (Master Plan for Education Recovery) to mitigate the education gap. The government will offer supplementary classes after school and during vacations, place teachers specializing in basic academic skills for first and second-year elementary school students, and operate tutoring programs staffed by education college students.

The government will also offer special tutoring programs tailored to multicultural students and intensive support programs for students with different types of disabilities.

In addition, the government will help students improve their social skills by supporting group activities and field trips, and will help vulnerable students recover from high mental health risks.

Furthermore, the government will expand the Dream Ladder Project funded by the Lottery Fund, which offers scholarships and education programs to middle/high school students from vulnerable groups until their graduation of undergraduate schools.

Establish a 1+4 support system to mitigate care disparities

First, Social Service Centers⁶³ will be established in each province and city to enhance the pursuit of public interests by 2022, and the government will implement integrated local community care projects, and develop implementation models.

As for four components of care supports, Child Care Grants of KRW 1.2 million per year will be provided to livelihood benefit recipients, and additional child care grant of KRW 0.6 to 1.2 million per year to young single parents (ages 25 to 34). Korea will increase public nursing facilities and adopt integrated at-home benefits system⁶⁴, and improve benefits for activity support services provided to people with severe disabilities. The government will increase public/national daycare centers to expand public childcare services and enhance childcare for elementary school students through school care classes and local care centers.

Support cultural activities of low income earners

Cultural Activity Grants(KRW 100,000 per year) will be provided to basic living benefit recipients and low income earners to encourage culture/art/tourism/sports activities of culturally disadvantaged groups.

63 City/province social service centers (cumulative): (2019) 4 centers (2020) 11 centers (2021) 14 centers (2022) 17 centers nationwide

64 Provide care-mix including visitations, bathing, nursing, etc.

4. Regional New Deal

- ④ A foundation for continuous implementation will be built for the enhanced outcomes of signature projects in three areas (①K-New Deal local projects, ②Local government-led projects, and ③Public institution-led projects) and the fostering of spontaneous private investment ecosystems.

1 Korean New Deal local projects

The government will accelerate the outcomes of existing K-New Deal local projects, and introduce new Korean New Deal local projects including SOC digitalization, and carbon neutrality-focused green transition. It will also enhance the outcomes felt by the people by accelerating existing regional balance new Deal project outcomes by building smart power platforms for homes and fostering smart fish farming clusters.

▣ Model Cases

① Smart Power Platform for Home (2020-2022)

- ▶ AMI(Advanced Metering Infrastructure) will be established at 5 million high voltage apartment units through replacing power meters with smart meters and setting up communication facilities for power usage data transmission.

② Smart Fish Farming Cluster Development (2020-2025)

- ▶ The project involves building a large-scale cluster with smart fish farming testbeds, production, processing/distribution/export, R&D, startup training, human resource training, and other functions, and converting conventional facilities into advanced and green facilities.

To promote more substantial outcomes, new high-performing Korean New Deal local projects with a focus on digital and carbon neutrality will be introduced and produce outcomes felt by local residents.

Model Cases

1 Smart Village Deployment and Expansion (2019-2025)

- ▶ The project integrates smart information technologies into all areas of rural life, thereby addressing local issues and improving living convenience. It involves Smart village service development and demonstration, noncontact infrastructure development at senior citizen centers using ICT

2 Lifecare Platform Development for Vulnerable Groups (2021-2025)

- ▶ The project widens the range of field/contact-oriented support services into online and noncontact services. For example, it will link local government's meal card management systems with food delivery platforms

The project maximizes regional development effects by strengthening linkage between Regional New Deal and Special/Free Economic Zones, achieving digital/green transition and restructuring of regional industries. To this end, new Carbon Neutrality Regulation-Free zones⁶⁵ will be designated and Downtown Convergence Special Zones⁶⁶ will be expanded and core strategic industries for Free Economic Zones⁶⁷ will be identified. To maximize regional development effects, Balanced Development Indicators will be revised so that more points should be granted to more efficient local projects.

65 (Chungcheongnam-do) carbon-reduction construction materials (Chungcheongbuk-do) green hydrogen industry (Gyeongsangbuk-do) smart green logistics, etc.

66 Designation complete for Daejeon, Gwangju, and Daejeon; additional designation in Busan and Ulsan

67 E.g. (Incheon) bio and healthcare, ICT and robot (Gyeonggi-do) EV, unmanned mobility (Gwangju) automobile, energy, AI (Ulsan) hydrogen industry, secondary battery, etc.

Finally, the project seeks digital and green transition and restructuring of regional industries by investing KRW 294.2 billion in Regional Flagship Projects⁶⁸ (2021) and selecting Regional Innovation Leaders.

2 Local government-led New Deal projects

The government will provide support for local governments to identify local government-led projects early on and ensure rapid implementation by expanding administrative and fiscal incentives.

Model Cases

① (Jeollanam-do) Offshore Wind Power Complex (private capital KRW 46 trillion, 2020 to 2030)

- ▶ Build a large-scale offshore wind power complex (8.2GW) using the strong sea wind in the southwestern areas of Jeollanam-do.

② (Busan) Renewable Energy Self-Sustaining City in West Busan (private capital KRW 1.5 trillion, 2021-2023)

- ▶ Set up renewable facilities in Myeongj New Town; supply power and heat to West Busan

③ (Daegu) Build Robot Industry Value Chain and Shared Growth System (2021-2024)

- ▶ Develop role models for robotized factories; create Korean robot part brands; train experts

④ (Gangwon-do) noncontact Employment Support System Including AI Job Matching Service (2020-2025)

- ▶ Develop an AI-based My Job platform tailored to Gangwon-do; develop noncontact one-stop job services

68 E.g: (Busan) high tech convergence machine parts, green future energy (Daegu) digital healthcare (Chungcheongnam-do) smart human bio, green mobility (Jeollabuk-do) future-oriented smart machinery, carbon composite materials

The government will continue to exempt city/province projects from fiscal investment reviews⁶⁹, reduce negotiation period for over-issuance of local bonds (2 months → 1 month or shorter), thereby continuously simplifying review procedures.

The government will provide special grants as incentives to 15 outstanding local governments selected through the Regional New Deal Project Contest (252 submissions received) (August 2021~).

Local investments will be enhanced through the Regional Industry Vitality Fund (KRW 26 billion), the Regional New Deal Venture Fund (KRW 130 billion in Busan and Chungcheong-do, respectively), and the Korean New Deal Fund.

The government will expand investment capacity for local government-led New Deal projects by raising the investment cap for corporations investing in regional public institutions (currently 10%).

To increase the effect of local government projects, special grants and other supporting measures will be provided to effective and concrete local government-led projects compatible with the Korean New Deal.

Model Cases

① (Gangwon-do) Precision Medical Big Data Service Platform(2020-2024)

- ▶ The project involves commercializing big data for convergence of genetic, clinical, and life log data, and building a safe and organized data management system.

② (Daejeon) Drone Highway Development (2021-2023)

- ▶ The project establishes drone stations including control rooms and landing/takeoff facilities, drone highways across three rivers in Daejeon, and implement pilot-test of safe drone services.

69 (Case) AI demonstration testbed development (Gyeonggi-do), smart green city project (Pohang, Sangju) bio knowledge industry center construction (Seocheon), circulatory resource innovation cluster development (Jeju)

Model Cases

③ (Jeollabuk-do) Development and Commercialization of Kenaf-Based Green Bioplastic (2021-2024)

- ▶ The project builds an ICT-based production system of second-generation biomass (kenaf) in Korea, and develops original technology for kenaf-based bio plastic production.

④ (Gyeongsangbuk-do) Livestock excretion-Based Bio-Refinery Industry Development (2021-2022)

- ▶ The project involves building three livestock excretion-based solid fuel manufacturing facilities, supplying heating boilers specialized for livestock excretion-based solid fuel (15 locations), and providing livestock excretion-based solid fuel as alternative fuels for combined heat and power plants.

3 Public institution-led New Deal projects

Korea will expand Regional New Deal projects led by public institutions (12 projects across 4 areas), to accelerate the spread of Korean New Deal across regions.

Key Institution	Public Institution-led New Deal Projects	Outcomes	Future Plans
Incheon Port Authority	Smart logistics center construction at Port of Incheon	Launched the design phase of smart logistics center construction (June 2021)	Construction complete (2023) → expand to Port of Busan
Korea Electric Power Corporation, etc.	Smart digital powerplant construction	Developed five core technologies for AI-based smart powerplant (June 2021)	Apply powerplant failure diagnosis applications to powerplants (16 powerplants, December 2022)
Korea Gas Corporation	LNG production base/smart factory construction in Dangjin	Signed an ICT consulting contract for smart factory development (March 2021)	Smart factory construction (by 2025) and expansion to other areas

Key Institution	Public Institution-led New Deal Projects	Outcomes	Future Plans
Land and Housing Corporation	Sejong National Pilot City Project	Selected private negotiation partner in October 2020* * Sejong o1 Consortium (13 companies)	Provide (21) leading smart technologies through a public-private special purpose company (2021)
National Cancer Center	noncontact and VR-Based Integrated Healthcare Platform	Built AR-based platform infrastructure (June 2021)	Distributed cancer management VR video content across six regional cancer centers (August 2021)
Korea Transportation Safety Authority	Self-Driving Testbed (Hwaseong) Development and Advancement	Supported 1,658 self-driving technology development projects by providing access to K-City (self driving level 3) free of charge	Advance testbeds in phases, in accordance with the self-driving technology development roadmap (achieve self-driving level 4 by 2027)
Korea Securities Depository	Public-Private-Government Startup Space and Growth Programs	Raised KRW 700 million in joint fund through the Busan Startup Fund (December 2020)	Raised KRW 800 million in joint fund each year Develop and offer specialized programs for partner institutions (December 2022)
Korea Tourism Organization	Tourism Big Data Disclosure and Sharing	Built a tourism big data platform and opened a data lab (February 2021)	Develop My Tourism Data Lab Service (December 2021) for tourists and other stakeholders
Korea Midland Power	Hydrogen Drone Charging Station Development Using Wind Power in Jeju	Obtained a hybrid hydrolysis technology (JUne 2021)	Expand power to gas (P2G) production facilities depending on hydrogen demand in Jeju (produce 23,000 tons of green hydrogen by 2030)
Korea Western Power	Resident-Participatory Large-scale Floating Photovoltaic Energy Development	Currently developing floating photovoltaic energy with local residents (Saemangeum) * Project approval pending in Saemangeum	Facility to begin operation after the completion of the Saemangeum Project

Key Institution	Public Institution-led New Deal Projects	Outcomes	Future Plans
Korea Electric Power Corporation	Sinan Offshore Wind Power Complex Development	Signed a Jeollanam-do job and shared growth agreement (January 2021)	Commercial operation to begin (2026 and onwards) after complex construction (2024-2029)
Korea Asset Management Corporation	Zero Energy Implementation Through National and Public Land Development	Developed a zero energy building plan for Sejong 2 Research Building (January 2021)	Build Sejong 2 Research Building (by 2026) after preliminary feasibility study (2021)

Korea will implement Regional New Deal cooperation projects with public institutions using the fiscal budget for ten innovative cities (KRW 48.5 billion from national treasury in 2021), thus creating synergy for regional innovation.

Model Cases

① (Daegu-Korea Gas Corporation)

- ▶ Green Energy Campus Development (2021-2024) including funding from SME Shared Growth Fund (KRW 20 billion at the end of 2020 → KRW 30 billion at the end of 2021)

② (Jeollabuk-do - National Pension Service and Credit Guarantee Foundation, etc.)

- ▶ Asset Management-Focused Financial City Development (2020-2023) including Big Data Portal System Development (end of 2021 and onwards)

③ (Gangwon-do - National Health Insurance Service)

- ▶ Silver Healthcare Device Mecca Development, including Silver-Friendly Products Demonstration and Research Centers, Exhibition and Experience Centers Development and Operation (October 2021 and onwards)

4 Develop a sustainable Regional New Deal ecosystem

In addition to fiscal investments, the government will encourage and expand private investments E.g. Expand investments⁷⁰ to build a spontaneous investment ecosystem for local SMEs and ventures.

The government will also actively pursue the development and reinforcement of legal and institutional foundations for sustainable implementation of the Regional New Deal projects, including the amendment of the Special Act on Balanced National Development.

⁷⁰ E.g. Expand investments in offshore wind power generation (Sinan and Ulsan), expand hydrogen production and distribution (Dangjin, by-product hydrogen)

5. Institutional Improvements

1 Support for Preemptive Business Restructuring

Task 1 Build a system to discover and manage demand strategically

The government will analyze data regarding supply chains of different business types consisting mainly by large corporations, and identify the right timing for necessary restructuring of relevant companies in advance.

The Business Restructuring Partnership will be set up for the pooling of restructuring demand without barrier between different programs.

A supporting system will be built to provide tailored support to respective business characteristics and demands utilizing a business restructuring and transition system (approval) and various supporting measure including fiscal and financial support.

Task 2 Improve efficacy of business restructuring and transition

To build a legal foundation for expanding eligibility for business restructuring support, the government will propel amendment to the Enterprise Vitality Act and Business Transformation Act.

The special case rules to the Monopoly Regulation and Fair Trade Act of the Enterprise Vitality Act will be applied to entry into new carbon neutrality industries, under certain conditions (such as prevention of personal gains, etc).

The government will also amend the relevant laws in preparation for long-term business transformation plans.

Task 3 Strengthen incentives for enterprises conducting business restructuring and transition

The government will expand the R&D support for businesses with approved business restructuring projects, which was newly adopted in 2021 to enhance the R&D function of business restructuring enterprises.

It also plans to expand the business transition loan support fund of the Korea SMEs and Startups Agency (KSME) in keeping with the increased scope of SME business transformation.

The tax deferment rule (four-year deferment and three-year gradual inclusion of profits) will be applied to investments of proceeds from asset sales to support business restructuring⁷¹ for carbon neutrality.

Task 4 Promote Market-Friendly Approach to Preemptive Business Restructuring

Support through policy funds will be expanded in phase for business restructuring. For Phase 1, the government will develop a fund for enterprises with approved business restructuring plans⁷² while utilizing existing funds⁷³ as well. In Phase 2, building on the outcomes of the phase 1 fund management, the government will consider the development of a business restructuring support fund utilizing the Climate Response Fund.

Also, financial supports will be provided for facility investment and M&As based on demands from enterprises for restructuring toward low-carbon and digital transformation, and Korea will build a systemic monitoring system to ensure rapid integration of changes in industrial structures and improve the efficiency of financial supports.

⁷¹ Currently, the deferment only applies to obligation repayments after asset sales.

⁷² (Business Restructuring Fund) Develop a dedicated fund to support expanded investment from the private sector into enterprises with approved business restructuring plans (target amount: KRW 50 billion)

⁷³ (Existing Funds) Improve support criteria and take other measures for existing FOFs and New Deal Funds to improve the chance of support being provided to enterprises preemptively pursuing business restructuring

Task 5 Revitalize M&A Support

The government will revitalize M&A support through FOFs, Enterprise Structure Innovation Funds, and M&A platforms, and consider expanding tax benefits for promoting M&A support. For this purpose, the government will consider providing tax break including tax deferment to M&As through inter-corporation stock exchange, and extension of corporate tax benefits for technology innovation M&As by three years (2021→2024).

Task 6 Build Infrastructure for Preemptive Business Restructuring

A government-wide control tower for business restructuring will be established to implement large-scale business restructuring efforts and enhance linkage between economic and financial policies. The government will also conduct enterprise status surveys each year, compile the findings into a database and manage the status of the beneficiary enterprises.



2 Support for Fair Labor Transition In Response to Industrial Structure Changes

Task 1

Respond to Low Carbon Transition

A. Short-term Labor Transition Demand: automobile and coal-fired power generation

a. Encourage employment retention of employees through on-the-job transition training for new industries

A preemptive training system will be established so that employees can receive on-the-job transition training for new industries such as future mobility and renewable energy during employment. The Joint Training Platforms will be expanded so that vendor employees can share and utilize the high quality training facilities of large corporations. The government will also encourage labor-management cooperation during business restructuring and labor transition.

b. Reinforce support for job transition preparation and reemployment in case of inevitable workforce restructuring

Support will be provided so that employees planning job transition can prepare for the transition in advance through shorter work hours and in-house career change support services. When leaving the company for unavoidable reasons, job transition training and employment support should be provided to encourage rapid reemployment or start of business.

c. Preemptively address crisis in regions with extensive coal-fired power plants and internal combustion engine vehicle industries

In order to preemptively address crisis in regions with extensive coal-fired power plants and internal combustion engine vehicle industries, promising new growth industries such as future mobility, renewable energy, and green industries will be fostered using Shared Growth Job initiative, Industrial Complexes Remodeling, and Green Convergence Clusters. Moreover, support for local government-led job projects⁷⁴ will be provided to the regions through regional industry/employment monitoring, and rapid designation of employment/industry crisis areas will also be issued for the regions.

B. Medium/Long-Term Labor Transition Demand: Steel/Oil Refinery/Cement, etc.

For the industries, monitoring of employment status will be carried out so that preemptive and swift measures can be taken upon identifying signs of job decreases due to the unexpected acceleration of structural transition. Also, impacts of low-carbon and digital transition policies on jobs will be assessed, along with proposals of directions for employment-friendly policies.

Task 2

Respond to Digital Transformation

When supporting with smartization of SMEs and microenterprises, the benefits will be provided first to enterprises retaining and creating jobs and the linkage with employment subsidies will be enhanced too. The government will support the training of key human resources to lead digital transformation, and the strengthening the digital capability of employees.

⁷⁴ E.g. Workforce training and employment support for workers from the closed Chungcheongnam-do and Boryeong unit 1, 2 Reactors (KRW 8.2 billion in 2021)

Additionally, an employment safety net will be enhanced in preparation for constant job transition. An institutional and fiscal foundation for fostering people's basic digital capability and supporting lifelong job skill improvement will be prepared. Also, support will be provided to facilitate re-entry into labor markets by gradually expanding the coverage of the employment insurance and mitigating the eligibility requirements for the National Employment Support Program.

Task 3 Build Institutional Foundation

The government will provide consulting for bespoke labor transition programs in connection with enterprises' demand for business restructuring and transition, and a package support system⁷⁵ will be established to improve synergy among beneficiary projects.

The 「Act on Support for Fair Labor Transition」⁷⁶ will be enacted, and a labor transition analysis center will be established to predict changes in jobs in each industry following structural changes, and monitor each region and industry.

Task 4 Revitalize Social Dialogue

Korea will begin a social dialogue on fair labor transition for participation and cooperation among stakeholders including employers and employees. Discussion and opinion gathering will be achieved through an economic, social and labor council (e.g. industry-specific council). In regions where the major industries are going through restructuring and transformation, cooperative measures for shared growth will be discussed through Local Labor-Management-Private-Public Councils.

75 E.g. paid vacation training + special training for changes in industrial structures + labor transition grant → improve the delivery system to ensure package delivery to enterprises

76 Build legal basis for labor transition support, establish support measures for workers, enterprises, and local governments, and clarify the obligations of workers, management, and the government