

■ SK Monetization Measurement Formula and Necessary Data (Society)

No.	Category		Affiliate	Indicator	Equation	Baseline			Monetization Proxy		
						Content	Value	Reference	Content	Value	Reference
1	Society	Process	All	Poverty alleviation through the employment of vulnerable groups on the labor market(basic livelihood security recipients)	(Earned income of the employed vulnerable group on the labor market – Pre-employment income of the vulnerable group on the labor market) * Number of people	Monthly pre-employment income of basic livelihood security recipients	1,403.31 USD	Ministry of Employment and Labor, Minimum wage notification (2020.08.05)	N/A		
2	Society	Process	All	Poverty alleviation through the employment of vulnerable groups on the labor market(next lowest income bracket)	(Earned income of the employed vulnerable group on the labor market – Pre-employment income of the vulnerable group on the labor market) * Number of people	Monthly pre-employment income of next lowest income bracket	1,403.31 USD	Ministry of Employment and Labor, Minimum wage notification (2020.08.05)	N/A		
3	Society	Process	All	Poverty alleviation through the employment of vulnerable groups on the labor market(career-interrupted women)	(Earned income of the employed vulnerable group on the labor market – Pre-employment income of the vulnerable group on the labor market) * Number of people	Monthly pre-employment income of career-interrupted women	1,403.31 USD	Ministry of Employment and Labor, Minimum wage notification (2020.08.05)	N/A		
4	Society	Process	All	Poverty alleviation through the employment of vulnerable groups on the labor market(elderly men)	(Earned income of the employed vulnerable group on the labor market – Pre-employment income of the vulnerable group on the labor market) * Number of people	Monthly pre-employment income of elderly men	407.21 USD	Statistics Korea, Modified data based on Household Income and Expenditure Survey	N/A		
5	Society	Process	All	Poverty alleviation through the employment of vulnerable groups on the labor market(elderly women)	(Earned income of the employed vulnerable group on the labor market – Pre-employment income of the vulnerable group on the labor market) * Number of people	Monthly pre-employment income of elderly women	133.03 USD	Statistics Korea, Modified data based on Household Income and Expenditure Survey	N/A		
6	Society	Process	All	Poverty alleviation through the employment of vulnerable groups on the labor market(severely disabled men)	(Earned income of the employed vulnerable group on the labor market – Pre-employment income of the vulnerable group on the labor market) * Number of people	Monthly pre-employment income of severely disabled men	444.12 USD	Korea Employment Agency for Persons with Disabilities(KEAD), Modified data based on Survey on the Economic Activities of Disabled Persons	N/A		
7	Society	Process	All	Poverty alleviation through the employment of vulnerable groups on the labor market(mildly disabled men)	(Earned income of the employed vulnerable group on the labor market – Pre-employment income of the vulnerable group on the labor market) * Number of people	Monthly pre-employment income of mildly disabled men	875.92 USD	Korea Employment Agency for Persons with Disabilities(KEAD), Modified data based on Survey on the Economic Activities of Disabled Persons	N/A		
8	Society	Process	All	Poverty alleviation through the employment of vulnerable groups on the labor market(severely disabled women)	(Earned income of the employed vulnerable group on the labor market – Pre-employment income of the vulnerable group on the labor market) * Number of people	Monthly pre-employment income of severely disabled women	390.79 USD	Korea Employment Agency for Persons with Disabilities(KEAD), Modified data based on Survey on the Economic Activities of Disabled Persons	N/A		
9	Society	Process	All	Poverty alleviation through the employment of vulnerable groups on the labor market(mildly disabled women)	(Earned income of the employed vulnerable group on the labor market – Pre-employment income of the vulnerable group on the labor market) * Number of people	Monthly pre-employment income of mildly disabled women	489.72 USD	Korea Employment Agency for Persons with Disabilities(KEAD), Modified data based on Survey on the Economic Activities of Disabled Persons	N/A		
10	Society	Process	All	Expenditure for the special levy for the disabled employment	Total amount of related expenses applied	N/A			N/A		
11	Society	Process	All	Improving employees' quality of life through education	Total amount of related expenses applied	N/A			Depending on each affiliates N/A		
12	Society	Process	All	Improving employees' quality of life through family-friendly institutions(childcare leave)	Number of months of childcare leave * Average wages of employees on childcare leave	N/A			average monthly minimum wage in Korea	2950.05 USD	Ministry of Employment and Labor
13	Society	Process	All	Improving employees' quality of life through family-friendly institutions(paid reduced working hours)	Reduced working hours × Average wage(Hourly wage rate)	N/A			average hourly minimum wage in Korea	17.79 USD	Ministry of Employment and Labor
14	Society	Process	All	Improving employees' quality of life through family-friendly institutions(unpaid reduced working hours)	Reduced working hours × Minimum wage(Hourly wage rate)	N/A			hourly minimum wage in Korea	6.71 USD	Ministry of Employment and Labor, Minimum wage notification (2020.08.05)
15	Society	Process	All	Improving employees' quality of life through family-friendly institutions(other work-family balance assistance performances)	Other work-family balance assistance implementation total input cost applied	N/A			Depending on each affiliates N/A		
16	Society	Process	All	Ensuring employee safety through disease & illness prevention/health care	Total cost of disease & illness prevention-related assistance	N/A			Depending on each affiliates N/A		
17	Society	Process	All	Damage to employees' safety due to industrial accidents	Total amount of industrial accident insurance benefits	N/A			Depending on each affiliates N/A		
18	Society	Process	All	Achievements in fair contract fulfillment by shortening the number of days taken for subcontract payment	Annual total amount of subcontract payments * (Average payment deadline of large companies - average payment days)/365 days * Average interest rate of commercial banks	Average payment deadline of large companies	14.9 days	Korea Commission for Corporate Partnership, 2020 Fair Transaction Agreement performance result evaluated	Average interest rate of commercial banks	2.95%	Bank of Korea, the weighted average lending rate of the deposit bank > the amount of new loans
19	Society	Process	All	Damage to suppliers due to unfair trade	The costs of damage to suppliers due to unfair trade practices	N/A			N/A		

■ SK Monetization Measurement Formula and Necessary Data (Society)

No.	Category		Affiliate	Indicator	Equation	Baseline			Monetization Proxy		
						Content	Value	Reference	Content	Value	Reference
20	Society	Process	All	Achievements in contribution to mutual growth/win-win cooperation through financial support(Free contribution)	Full amount of contributions	N/A			N/A	N/A	
21	Society	Process	All	Achievements in contribution to mutual growth/win-win cooperation through financial support(interest-free or low-interest loan) ※ For general SMEs	Amount of loan * (Average interest rate of commercial banks – Interest rate offered)	Average interest rate of commercial banks	2.95%	Bank of Korea, the weighted average lending rate of the deposit bank > the amount of new loans	N/A	N/A	
22	Society	Process	All	Achievements in contribution to mutual growth/win-win cooperation through financial support(interest-free or low-interest loan) ※ For SMEs with low credit ratings	Amount of loan * (Interest rate of Network Loan – Interest rate offered)	Average interest rate on SME loan	4.6%	Korea Federation of Banks, The interest rate on SME loan	N/A	N/A	
23	Society	Process	All	Achievements in contribution to mutual growth/win-win cooperation through technology support/protection(Free contribution in cash)	Total amount of free contribution in cash	N/A			N/A	N/A	
24	Society	Process	All	Achievements in contribution to mutual growth/win-win cooperation through technology support/protection(Free contribution in kind)	Estimated market price of products for in-kind support * quantity of product for in-kind support	N/A			Depending on each affiliates	N/A	
25	Society	Process	All	Achievements in contribution to mutual growth/win-win cooperation through technology support/protection(Free or low-interest loan in cash)	Amount of loan * (Average interest rate of commercial banks – Interest rate offered)	Average interest rate of commercial banks	2.95%	Bank of Korea, the weighted average lending rate of the deposit bank > the amount of new loans	N/A	N/A	
26	Society	Process	All	Achievements in contribution to mutual growth/win-win cooperation through technology support/protection(Free or low-interest loan in kind)	시장대여가격X대여 건수 Market lending price x number of loans	N/A			N/A	N/A	
27	Society	Process	All	Achievements in contribution to mutual growth/win-win cooperation through technology support/protection(etc.)	Purchase-linked amount of products that support technology development * Value-added rate for the business type (Suppliers)	N/A			the value-added rate of the business type of the supplier	different value-added rates by industries	using data on National Tax Service, Statistics Korea, Bank of Korea
28	Society	Process	All	Achievements in contribution to mutual growth/win-win cooperation through recruitment support	Recruitment support cost	N/A			N/A	N/A	
29	Society	Process	All	Achievements in contribution to mutual growth/win-win cooperation through management support	Management support cost	N/A			N/A	N/A	
30	Society	Process	All	Achievements in contribution to increased income of vulnerable producers through fair trade in deprived areas	Amount of fair trade with deprived areas * Value-added rate of the business type	N/A			the value-added rate of the business type of the supplier	different value-added rates by industries	using data on National Tax Service, Statistics Korea, Bank of Korea
31	Society	Process	All	Achievements in contribution to increased income of vulnerable producer group through social contribution purchase	Total transaction amount of social contribution purchase * Value-added rate of the business type	N/A			the value-added rate of the business type of the supplier	different value-added rates by industries	using data on National Tax Service, Statistics Korea, Bank of Korea
32	Society	Process	All	Compliance with global socially-responsible purchase	the total transaction cost	N/A			N/A	N/A	
33	Society	Process	All	Achievements in contribution to strengthening the soundness of the global supply chain	Total input cost for a system for improving the soundness of global supply chain	N/A			N/A	N/A	
34	Society	Process	All	Safe working conditions through safety & health management of suppliers	Total amount of supplier's safety and health management support cost	N/A			N/A	N/A	
35	Society	Process	All	Damage to supplier's person or property caused by industrial accidents	Total amount of the property and personal damage (industrial accidents) related to the company's value chain	N/A			N/A	N/A	
36	Society	Process	All	Purchasing performance through Happy Narae	Affiliate's purchase amount of social enterprise * Social enterprise's value-added rate of the business type	N/A			value-added rate calculated by Happy Narae	different value-added rates by year	Providing data by Happy Narae
37	Society	Philanthropy	All	Performance through corporate philanthropic support programs	The performance of corporate philanthropic activities is measured, and the market price of the social benefits obtained by the beneficiaries through philanthropic activities is estimated and measured.	N/A			Depending on each affiliates	N/A	
38	Society	Philanthropy	All	Happynarae (a subsidiary distribution platform)'s performance of supporting the social enterprise ecosystem through profit sharing is measured by recognizing the contribution of each affiliate	Total social performance of the Happynarae support project * Social enterprise's (Affiliate's total purchases from Happynarae / total purchase by Happynarae)	N/A			N/A	N/A	
39	Society	Philanthropy	All	Employee volunteering performance(Work that requires no special skills or education)	Total hours of volunteering activities hours by type * statutory minimum wage (hourly rate)	N/A			statutory minimum wage (Work that requires no special skills or education)	6.71 USD	Ministry of Employment and Labor, Minimum wage notification (2020.08.05)

■ SK Monetization Measurement Formula and Necessary Data (Society)

No.	Category		Affiliate	Indicator	Equation	Baseline			Monetization Proxy			
						Content	Value	Reference	Content	Value	Reference	
40	Society	Philanthropy	All	Employee volunteering performance(Caring)	Total hours of volunteering activities hours by type * hourly pay for a 1st-grade social worker	N/A			hourly pay for a 1st-grade social worker(activities dealing with beneficiaries such as child care)	8.45 USD	Ministry of Health and Welfare, Guidelines for labor wage for employee in social welfare facilities	
41	Society	Philanthropy	All	Employee volunteering performance(Talent donation)	Total hours of volunteering activities hours by type * Hourly wage by type	N/A			Depending on each affiliates	N/A		
42	Society	Philanthropy	All	Employee volunteering performance(Pro bono activities)	Total hours of volunteering activities hours by type * Hourly wage by type	N/A			Depending on each affiliates	N/A		
43	Society	Philanthropy	All	Performance of cash and in-kind donations	Total amount of cash and in-kind donations	N/A			Depending on each affiliates	N/A		
44	Society	Product/Service	SK E&S	Reduction in cost for building national electricity system through distributed generation	(Market average of benefit coefficient of distributed energy source)*1[Bid amount on distributed generation(Kwh)]/Bid amount on distributed generation * 1000.00]	Market average of benefit coefficient of distributed energy source	0.00924 USD/KWh	-	1	0.00077 USD	-	
45	Society	Product/Service	SK E&S	Improving public interest by stable electricity supply in national scale (SCON)(SMP)	(Unindemnified amount of SCON-price of electricity at energy market)*1*unindemnified amount of SCON[unindemnified amount of SCON]	price of electricity at energy market	0	Result from in-house research	1	0.00077 USD	-	
46	Society	Product/Service	SK E&S	Improving public interest by stable electricity supply in national scale (SCON)(facilitate tax)	(Unindemnified amount of regional development tax-charged amount of regional development tax)*1*Unindemnified amount of regional development tax[Unindemnified amount of regional development tax]	regional development tax	0	Result from in-house research	1	0.00077 USD	-	
47	Society	Product/Service	SK Broadband	Improving competitiveness of micro enterprises by providing IPTV local advertisement	(Weighted average advertising expense for IPTV in market - Advertising expense for micro enterprise) * number of watching SKB advertisements	Weighted average advertising expense for IPTV in market	0.00383 USD/KWh	internal data		0.00077 USD	-	
48	Society	Product/Service	SK Broadband	Improving marketing competitiveness of micro enterprise by providing 'B tv local advertisement platform'	An increase in the sales of using 'B tv local advertisement platform' * number of subscribers	Exclusive service	0 USD			Effectiveness of sale increase by using 'B tv local advertisement platform'	595.21 USD	Results from in-house research
49	Society	Product/Service	SK Broadband	Increasing information accessibility of Vulnerable classes by discounting CATV Internet fees	Total discounted charges of CATV_internet for vulnerable classes	CATV_internet	0.00077 USD	internal data		0.00077 USD	-	
50	Society	Product/Service	SK Broadband	Increasing information accessibility of Vulnerable classes by discounting CATV additional service	Total discounted charges of CATV_additional service for vulnerable classes	CATV_additional service	0.00077 USD	internal data		0.00077 USD	-	
51	Society	Product/Service	SK Broadband	Increasing information accessibility of Vulnerable classes by discounting Internet fees	Total discounted charges of high-speed internet for vulnerable classes	High-speed Internet_general	0.00077 USD	internal data		0.00077 USD	-	
52	Society	Product/Service	SK Broadband	Increasing information accessibility of Vulnerable classes by discounting TV fees	Total discounted charges of TV for vulnerable classes	TV_general	0.00077 USD	internal data		0.00077 USD	-	
53	Society	Product/Service	SK Broadband	Increasing information accessibility of Vulnerable classes by discounting phone rates	Total discounted charges of telephone for vulnerable classes	Telephone_general	0.00077 USD	internal data		0.00077 USD	-	
54	Society	Product/Service	SK Broadband	Increasing information accessibility of children of low income by discounting Internet fees	(Internet charges for general - Internet charges for children of low income)*subscription lines	Internet_general	25.41 USD	internal data		0.00077 USD	-	
55	Society	Product/Service	SK Broadband	Increasing information accessibility of children of low income by discounting additional service	(Additional service charges for general - Additional service charges for children of low income)*subscription lines	additional service_general	2.31 USD	internal data		0.00077 USD	-	
56	Society	Product/Service	SK Broadband	Compensation for ICT service failure(over 1000 cases of VOC)	Total compensation for ICT service failure	without VOC	0 USD			0.00077 USD	-	
57	Society	Product/Service	SK Broadband	Improving awareness of multicultural by developing and providing multicultural contents	(Weighted average service fee for waiting VOD in IPTV market - SKB service fee for multicultural contents) * number of watching multicultural contents	Weighted average service fee for waiting VOD in IPTV market	0.34 USD/unit	Annual report of Ministry of Science and ICT and Company's own data		0.00077 USD	-	
58	Society	Product/Service	SK Broadband	Reducing operating cost of micro enterprises by providing service package specialized for micro enterprises	(Service fee for operating store in general - Service fee for operating store specialized for micro enterprise) * subscribers of service	operating store_general	92.40 USD	internal data		0.00077 USD	-	
59	Society	Product/Service	SK Broadband	Preventing attack of Ddos to computer network for education by providing 'Black hole Service'	(Filter out rate of Black hole Service for Ddos attack - Filter out rate of general service for Ddos attack) * subscribers of service	Non-disclosure	Non-disclosure	Non-disclosure	Damage cost of educational data	3,339,760.89 USD	Damage cost of data infringement in education sector(IBM Security Report)	

■ SK Monetization Measurement Formula and Necessary Data (Society)

No.	Category		Affiliate	Indicator	Equation	Baseline			Monetization Proxy		
						Content	Value	Reference	Content	Value	Reference
60	Society	Product/Service	SK Gas	Improvement of energy accessibility through the installation of LPG storage facilities in energy-deprived areas (convenience)	(Time to replace regular LPG containers-Time to replace containers after installation of the company's Small Bulk)*Minimum hourly wage*Number of LPG container replacements converted to the company's Small Bulk(Small Bulk supplied in household area (Last 5 years) * (LPG consumption for households use * 1000 / Number of LPG used for households use / 20) + Small Bulk supply in commercial areas(last 5 years) * (LPG consumption for commercial use * 1000 / Number of LPG used for commercial use / 50) ) * The company's domestic LPG fuel market share ]	Time to replace regular LPG containers	0.0004 USD	Korea Gas Safety Corporation, Gas Statistics; Petronet, Domestic Oil Information Consumption by Industry	Minimum hourly wage	6.71 USD	Ministry of Employment and Labor, Minimum Wage Notice
61	Society	Product/Service	SK Gas	Improvement of energy accessibility through the installation of LPG storage facilities in energy-deprived areas (safety)	(Amount per household due to LPG accident-Amount of first class physical damage caused by LNG accident)*1*Number of households supplied by the company in Small Bulk ( Small Bulk supplied in household area(last 5 years) + Small Bulk supply in commercial areas(last 5 years) ) * The company's domestic LPG fuel market share]	Amount per household due to LPG accident	0.91 USD	Korea Gas Safety Corporation, Gas Statistics; Korea Gas Safety Corporation, Gas Accident Status and Analysis Results; Lotte Non-life Insurance Compensation Terms	1	0.00077 USD	-
62	Society	Product/Service	SK Networks	Improving quality of life of mobility vulnerable group(social enterprises, social ventures, etc.) through the operation of Mobility Bank	(Before the introduction of Mobility Bank - After the introduction of Mobility Bank) * Reduction of vehicle costs through the use of Mobility Bank * Number of companies participating in Mobility Bank per month	Before the introduction of Mobility Bank	1	-	Reduction of vehicle costs through the use of Mobility Bank	271.34074 USD	Mobility Bank participants survey, Average monthly contribution performance
63	Society	Product/Service	SK Biopharmaceuticals	Reduction in additional medical cost of patients with epilepsy syndrome by taking XCOPRI	Non-disclosure	Non-disclosure	Non-disclosure	Non-disclosure	Reduction in medical cost of patients with epilepsy syndrome	8589.09 USD	Healthcare utilization and costs in adults with stable and uncontrolled epilepsy (peer-reviewed paper)
64	Society	Product/Service	SK Biopharmaceuticals	Increasing the productivity of guardians of patients with epilepsy syndrome after taking XCOPRI	Non-disclosure	Non-disclosure	Non-disclosure	Non-disclosure	Increased income of patients with epilepsy syndrome	10430.81 USD	GNI(World Bank), published academic paper about epilepsy and seizure
65	Society	Product/Service	SK Biopharmaceuticals	Increasing productivity of patients with epilepsy syndrome after taking XCOPRI	Non-disclosure	Non-disclosure	Non-disclosure	Non-disclosure	Increased income of guardians of patients with epilepsy syndrome	19123 USD	GNI(World Bank), published academic paper about epilepsy and seizure, US department of Labor
66	Society	Product/Service	SK Biopharmaceuticals	Improving the quality of life of patients with epilepsy syndrome after taking XCOPRI	Non-disclosure	Non-disclosure	Non-disclosure	Non-disclosure	Monetized proxy of increased quality of life of patients with epilepsy syndrome	2461.2 USD	published academic paper about epilepsy and seizure, US department of Labor
67	Society	Product/Service	SK Biopharmaceuticals	Improving the quality of life of the guardians of patients with epilepsy syndrome after taking XCOPRI	Non-disclosure	Non-disclosure	Non-disclosure	Non-disclosure	Monetized proxy of increased quality of life of guardians of patients with epilepsy syndrome	4208.19 USD	published academic paper about epilepsy and seizure, US department of Labor
68	Society	Product/Service	SK Innovation	Reduction in construction materials due to avoidance of power plant construction by participating in the DR market	(Portion of power plant contributing for evading peak in demand response 0)*LCOE of LNG power plant *electrical energy(Reduced amount of annual contracted electricity supply/365/24* 1000.00)	Portion of power plant contributing for evading peak in demand response	0.953	KEPCO	LCOE of LNG power plant	0.013 USD	KEPCO
69	Society	Product/Service	SK Innovation	Reduction in social cost by selling PMA (Polymer Modified Asphalt)	(Normal asphalt SV performance - PMA SV performance)*1*PMA sales amount	Normal Asphalt SV performance	71,704.6554 USD	Taesung Environmental Research Institute	1	0.00077 USD	-
70	Society	Product/Service	SK Innovation	Preventing drowsy driving accident by Netruck House Service	(the company's SV reference value after initiation of the service -the company's SV reference value prior to initiation of the service)*total social costs associated with traffic accident*annual number of service users	the company's SV reference value prior to initiation of the service	0	-	total social costs associated with traffic accident	4.556 USD	KoRoad, 'statistical analysis on traffic accidents' 및 'estimation and evaluation on traffic accidents' (2021)
71	Society	Product/Service	SK Innovation	Reduction in cost of space for car parking by Netruck House service	(the company's SV reference value after initiation of the service -the company's SV reference value prior to initiation of the service)*the amount of saving cost of parking space*number of served cars	the company's SV reference value prior to initiation of the service	0	-	the amount of saving cost of parking space	1.81 USD	Ministry of Land, Infrastructure, and Transport and Inha University, 'Social Benefit Analysis on Truck Rest Area'
72	Society	Product/Service	SK Innovation	Increasing truck drivers' benefits of healing and rest by Netruck House service	(the company's SV reference value after initiation of the service -the company's SV reference value prior to initiation of the service)*the value of willing to pay for the service*the number of annual service users	the company's SV reference value prior to initiation of the service	0 USD	-	the value of willing to pay for the service	5.88 USD	Ministry of Land, Infrastructure, and Transport and Inha University, 'Social Benefit Analysis on Truck Rest Area'

■ SK Monetization Measurement Formula and Necessary Data (Society)

No.	Category		Affiliate	Indicator	Equation	Baseline			Monetization Proxy			
						Content	Value	Reference	Content	Value	Reference	
73	Society	Product/Service	SK Innovation	Improving animal welfare by supplying specific spray oil for animals (preventing reduction in spawning rate)	(damage rate of spawning when using existing products- damage rate of spawning when using the company's products)*weighted average price of an egg*amount of product sold * number of applied eggs per 1 unit of the product x portion of Yubase in the product	decreased in spawning rate when using existing products	5%	-	Weighted average price of an egg	0.1134 USD	-	
74	Society	Product/Service	SK Innovation	Improving animal welfare by supplying specific spray oil for animals (reducing portion of defective or destroyed eggs)	(damaged rate when using existing products-damaged rate when using the company's product)*weighted average price of an egg*amount of product sold x*number of applied eggs per 1 unit of the product * portion of Yubase in the product	damaged rate when using existing products	2%	-	Weighted average price of an egg	0.1134 USD	-	
75	Society	Product/Service	SK Innovation	Improving animal welfare by supplying specific spray oil for animals (loss of weight)	(damaged rate when using existing products-damaged rate when using the company's product)*weighted average price of an egg*amount of product sold * number of applied eggs per 1 unit of the product x portion of Yubase in the product	damaged rate when using existing products	2.2%	-	Weighted average price of an egg	0.1134 USD	-	
76	Society	Product/Service	SK Innovation	Reduced labor time for couriers by providing Home Pick service	(Average working hours in a day of couriers at other companies-Average working hours in a day of couriers at Home Pick)/Minimum wage per hour*[working days in a year * number of couriers at Home Pick]	Average working hours of couriers at other companies	13.37hours		Korea Occupational Safety and Health Agency (KOSHA)	Minimum wage (per hour)	6.71 USD	Ministry of employment and labor, official notice on minimum wage
77	Society	Product/Service	SK Innovation	Supporting employment of aged couriers by providing Home Pick service	(average monthly salary for aged couriers at Home Pick-average monthly salary for low income workers)*1*working month of aged couriers[number of aged couriers at Home Pick* 12.00]	average wage for low income workers	1,848 USD		Korea Occupational Safety and Health Agency (KOSHA)	1	0.00077 USD	-
78	Society	Product/Service	SK Forest	Conserving watershed by forest development	The difference between with forest and without forest * operating fee for multipurpose dam * storage capacity of forest	Non-disclosure	Non-disclosure		Korea Forest Research Institute, A Study on the Quantification of Commonweal Functions in Forest(2010)	Non-disclosure	Non-disclosure	Non-disclosure
79	Society	Product/Service	SK Forest	Preventing soil erosion by forest development	(The amount of soil erosion without forest - The amount of soil erosion with forest) * prevention cost for soil erosion * forest area	Non-disclosure	Non-disclosure		Korea Forest Research Institute, A Study on the Quantification of Commonweal Functions in Forest(2010)	Non-disclosure	Non-disclosure	Non-disclosure
80	Society	Product/Service	SK Forest	Preventing a washout by forest development	(The amount of washout without forest - The amount of washout with forest) * recovery cost for washout * forest area	Non-disclosure	Non-disclosure		Korea Forest Research Institute, A Study on the Quantification of Commonweal Functions in Forest(2010)	Non-disclosure	Non-disclosure	Non-disclosure
81	Society	Product/Service	SK Forest	Supporting social enterprise by operating a training institute only for social enterprise	(The expense for using training institute in general - the expense only for using training institute for social enterprise) * the number of users	Non-disclosure	Non-disclosure		Non-disclosure	Non-disclosure	Non-disclosure	Non-disclosure
82	Society	Product/Service	SK C&C	Improving education accessibility for hearing-impaired by providing serviced called 'SpeechCatch'	(cost per time for stenographer - cost for using SpeechCatch service) * Rate of substitution for employing stenographer * serviced hour	Cost per time for stenographer	16.94 USD		Market data	Rate of substitution for employing stenographer	1	Non-disclosure
83	Society	Product/Service	SK C&C	Supporting social enterprise by providing free Social Value Measurement System called 'SVMS'	The total amount of usage fees of SVMS for social enterprise	Other social value management system	0		Company's own data	Rate of substitution for SV measurement system		Non-disclosure
84	Society	Product/Service	SK C&C	Reducing medical expense of cerebral hemorrhage by providing diagnostic medical images via AI	(The accuracy of diagnostic medical images via AI - The accuracy of diagnostic medical images of doctors) * the reduced amount of medical expense by decreasing misdiagnosis * the number of using AI service	Non-disclosure	Non-disclosure		Non-disclosure	Non-disclosure	Non-disclosure	Non-disclosure
85	Society	Product/Service	SK C&C	Improving monitoring work of illegal property deals by providing AI service	The service fee of monitoring work of illegal property deals * the number of success in monitoring works	Non-disclosure	Non-disclosure		Non-disclosure	Non-disclosure	Non-disclosure	Non-disclosure
86	Society	Product/Service	SK C&C	Improving national health by providing 'Vitality app' promoting walking	(Weighted average number of walking in compensated application markets - Weighted average number of walking in uncompensated markets) * the effectiveness of promoting walking * the number of success in mission in Vitality app	Weighted average number of walking in uncompensated application markets	4145 step		Samsaung Health App	Non-disclosure	Non-disclosure	Non-disclosure
87	Society	Product/Service	SK C&C	Securing legal authority by providing digitalized analysis service of house's value	The average market price of legal fee * the number of prevention by using service	Non-disclosure	Non-disclosure		Non-disclosure	Non-disclosure	Non-disclosure	Non-disclosure

■ SK Monetization Measurement Formula and Necessary Data (Society)

No.	Category		Affiliate	Indicator	Equation	Baseline		Monetization Proxy			
						Content	Value	Reference	Content	Value	Reference
88	Society	Product/Service	SK Chemical	Reduction in the dosage of a digestive by taking medicine for arthritis made by natural ingredients (Joins)	(Market average of prescription ratio of digestive to patients taking arthritis medicine - prescription ratio of digestive to patients taking arthritis medicine made by SK Chemical) * daily expense on digestive / number of patients who purchased Joins (Joins sales * (ratio of patients taking 3 tablets a day/3.00 + ratio of patients taking 2 tablets a day/2.00 + ratio of patients taking 1 tablet a day))	Market average of prescription ratio of digestive to patients taking arthritis medicine	57%	Result from in-house research	daily expense on digestive	0.09 USD/ppl	Result from in-house research
89	Society	Product/Service	SK Chemical	Reduction in the medical treatment cost by influenza vaccination (below age 4)	(Incidence of influenza among people below age 4 - Incidence of influenza among vaccinated people below age 4) * Medical cost of influenza infection * Influenza vaccine sales (below age 4) / Influenza vaccine sales (below age 4)	Incidence of influenza among people below age 4	0.075474414	Korea Disease Control and Prevention Agency, Results of 2015-2016 seasonal surveillance on influenza outbreak	Medical cost of influenza infection	76.721 USD/ppl	National health insurance statistical yearbook 2016
90	Society	Product/Service	SK Chemical	Reduction in the medical treatment cost by influenza vaccination (below age 9)	(Incidence of influenza among people below age 9 - Incidence of influenza among vaccinated people below age 9) * Medical cost of influenza infection * Influenza vaccine sales (below age 9) / Influenza vaccine sales (below age 9)	Incidence of influenza among people below age 9	0.08414017	Korea Disease Control and Prevention Agency, Results of 2015-2016 seasonal surveillance on influenza outbreak	Medical cost of influenza infection	76.721 USD/ppl	National health insurance statistical yearbook 2016
91	Society	Product/Service	SK Chemical	Reduction in the medical treatment cost by influenza vaccination (below age 14)	(Incidence of influenza among people below age 14 - Incidence of influenza among vaccinated people below age 14) * Medical cost of influenza infection * Influenza vaccine sales (below age 14) / Influenza vaccine sales (below age 14)	Incidence of influenza among people below age 14	0.051744733	Korea Disease Control and Prevention Agency, Results of 2015-2016 seasonal surveillance on influenza outbreak	Medical cost of influenza infection	76.721 USD/ppl	National health insurance statistical yearbook 2016
92	Society	Product/Service	SK Chemical	Reduction in the medical treatment cost by influenza vaccination (below age 19)	(Incidence of influenza among people below age 19 - Incidence of influenza among vaccinated people below age 19) * Medical cost of influenza infection * Influenza vaccine sales (below age 19) / Influenza vaccine sales (below age 19)	Incidence of influenza among people below age 19	0.022045775	Korea Disease Control and Prevention Agency, Results of 2015-2016 seasonal surveillance on influenza outbreak	Medical cost of influenza infection	76.721 USD/ppl	National health insurance statistical yearbook 2016
93	Society	Product/Service	SK Chemical	Reduction in the medical treatment cost by influenza vaccination (below age 49)	(Incidence of influenza among people below age 49 - Incidence of influenza among vaccinated people below age 49) * Medical cost of influenza infection * Influenza vaccine sales (below age 49) / Influenza vaccine sales (below age 49)	Incidence of influenza among people below age 49	0.018474773	Korea Disease Control and Prevention Agency, Results of 2015-2016 seasonal surveillance on influenza outbreak	Medical cost of influenza infection	76.721 USD/ppl	National health insurance statistical yearbook 2016
94	Society	Product/Service	SK Chemical	Reduction in the medical treatment cost by influenza vaccination (below age 64)	(Incidence of influenza among people below age 64 - Incidence of influenza among vaccinated people below age 64) * Medical cost of influenza infection * Influenza vaccine sales (below age 64) / Influenza vaccine sales (below age 64)	Incidence of influenza among people below age 64	0.016017501	Korea Disease Control and Prevention Agency, Results of 2015-2016 seasonal surveillance on influenza outbreak	Medical cost of influenza infection	76.721 USD/ppl	National health insurance statistical yearbook 2016
95	Society	Product/Service	SK Chemical	Reduction in the medical treatment cost by influenza vaccination (over age 65)	(Incidence of influenza among people over age 65 - Incidence of influenza among vaccinated people over age 65) * Medical cost of influenza infection * Influenza vaccine sales (over age 65) / Influenza vaccine sales (over age 65)	Incidence of influenza among people over age 65	0.009822082	Korea Disease Control and Prevention Agency, Results of 2015-2016 seasonal surveillance on influenza outbreak	Medical cost of influenza infection	76.721 USD/ppl	National health insurance statistical yearbook 2016
96	Society	Product/Service	SK Chemical	Preventing the decrease of productivity by influenza vaccination (below age 40)	(Incidence of influenza among people below age 49 - Incidence of influenza among vaccinated people below age 49) * minimum wage of employee * reduced amount of time by vaccine that employee cannot work / Influenza vaccine sales (below age 49) * 8 * employment rate (2017) * number of outpatient visit when infected to influenza (below age 49)	Incidence of influenza among people below age 49	0.018474773	Korea Disease Control and Prevention Agency, Results of 2015-2016 seasonal surveillance on influenza outbreak	minimum wage of employee	6.71 USD	Ministry of Employment and Labor, Notices on the minimum wage of employee
97	Society	Product/Service	SK Chemical	Preventing the decrease of productivity by influenza vaccination (below age 64)	(Incidence of influenza among people below age 64 - Incidence of influenza among vaccinated people below age 64) * minimum wage of employee * reduced amount of time by vaccine that employee cannot work / Influenza vaccine sales (below age 64) * 8 * employment rate (2017) * number of outpatient visit when infected to influenza (below age 64)	Incidence of influenza among people below age 64	0.016017501	Korea Disease Control and Prevention Agency, Results of 2015-2016 seasonal surveillance on influenza outbreak	minimum wage of employee	6.71 USD	Ministry of Employment and Labor, Notice on the minimum wage of employee

■ SK Monetization Measurement Formula and Necessary Data (Society)

No.	Category		Affiliate	Indicator	Equation	Baseline			Monetization Proxy		
						Content	Value	Reference	Content	Value	Reference
98	Society	Product/Service	SK Chemical	Reduction in the medical treatment cost by shingles vaccination	(Incidence of shingles among people over age 65 - Incidence of shingles among vaccinated people over age 65) * Medical cost of shingles infection / shingles vaccine sales (over age 65) / shingles vaccine sales (over age 65)	Incidence of shingles among people over age 65	0.018580253	<a href="https://www.huffingtonpost.kr/afterherain/story_b_18026850.html">https://www.huffingtonpost.kr/afterherain/story_b_18026850.html</a>	Medical cost of shingles infection	1781.72 USD/ppl	Shin et al., 2015, Correlation between medical fee and age of patients admitted for herpes zoster (Korean article)
99	Society	Product/Service	SK Chemical	Reduction in the medical treatment cost of Post herpetic Neuralgia by shingles vaccination	(Incidence of shingles among people over age 65 - Incidence of shingles among vaccinated people over age 65) * Medical cost of Post herpetic Neuralgia outbreak / Preventive effects of shingles vaccine on Post herpetic Neuralgia / shingles vaccine sales * outbreak rate of Post herpetic Neuralgia * preventive rate of Post herpetic Neuralgia	Incidence of shingles among people over age 65	0.018580253	<a href="http://www.thedoc.co.kr/news/article/View.html?idxno=6739">http://www.thedoc.co.kr/news/article/View.html?idxno=6739</a>	Medical cost of Post herpetic Neuralgia outbreak	10,010 USD/ppl	Hong et al., (2016), Epidemiology of post herpetic neuralgia in Korea: an electronic population health insurance system based study. Medicine, 95(14).
100	Society	Product/Service	SK Chemical	Reduction in the medical treatment cost by varicella vaccination (below age 4)	(Incidence of varicella among people below age 4 - Incidence of varicella among vaccinated people below age 4) * Medical cost of varicella infection / Varicella vaccine sales (below age 4) / Varicella vaccine sales (below age 4)	Incidence of varicella among people below age 4	0.000419318	Korea Disease Control and Prevention Agency, Morbidity Statistics	Medical cost of varicella infection	28.49 USD/ppl	Result from research (average medical cost in 1997)
101	Society	Product/Service	SK Chemical	Reduction in the medical treatment cost by varicella vaccination (below age 9)	(Incidence of varicella among people below age 9 - Incidence of varicella among vaccinated people below age 9) * Medical cost of varicella infection / Varicella vaccine sales (below age 0) / Varicella vaccine sales (below age 9)	Incidence of varicella among people below age 9	0.000864413	Korea Disease Control and Prevention Agency, Morbidity Statistics	Medical cost of varicella infection	28.49 USD/ppl	Result from research (average medical cost in 1997)
102	Society	Product/Service	SK Telecom	Improving income of micro enterprise by operating Happy Habit Project *Happy Habit Project: campaign for reducing use of disposable plastic cups	Sales increase by Happy Habit Project * Value added rate of food industry	Company's SV reference value prior to initiation of the service	0		Value added rate of food industry	32.14%	National Tax Service
103	Society	Product/Service	SK Telecom	Preventing emergencies (or dying alone) by providing caring service for single-person household	The number of users * monthly benefits of emergency and safety alarm service * contribution rate (50%)	Company's SV reference value prior to initiation of the service	0		Monthly benefits of emergency and safety alarm service	30.21 USD	Cost-Benefit Analysis of emergency safety alarm service (2018), Korea Social Security Information Service
104	Society	Product/Service	SK Telecom	Improving efficiency of national safety management by providing NUGU AI service	The accumulated amounts of time using NUGU AI service * Average hourly wages of 9th-grade civil servant of national health	Company's SV reference value prior to initiation of the service	0		Average hourly wages of 9th-grade civil servant of national health	9.57 USD	The civil service pay roll, Ministry of Personal Management
105	Society	Product/Service	SK Telecom	Preventing voice phishing cases by providing service for blocking a phone for outgoing call	The number of blocking outgoing calls * the experience rate of financial fraud * social benefits of preventing the case of voice phishing	Company's SV reference value prior to initiation of the service	0		① experience rate of financial fraud ② social benefits of preventing one case of voice phishing	① 3.5% ② 5,035 USD	① Report on experience of financial fraud and prevention education (2020), Korea Financial Investors Protection Foundation ② Research on damage cost of voice phishing (2019), Financial Supervisory Service
106	Society	Product/Service	SK Telecom	Preventing crime by providing an Local Based Service of electronic ankle (target for sex crime)	(Second offense rate of sex crime after initiation of electronic ankle - Second offense rate of sex crime prior to the service) * Social prevention cost of sex crime * the number of wearing electronic ankle * contribution rate (50%)	second offense rate of sex crime prior to initiation of the service	14.10%	Ministry of Justice, Report of Effectiveness of electronic ankle (2017)	Social prevention cost of sex crime	9893.02 USD/case	An Estimation of Social costs of Crime (2010), Korean Institute of Criminology
107	Society	Product/Service	SK Telecom	Preventing crime by providing an Local Based Service of electronic ankle (target for murder)	(Second offense rate of murder after initiation of electronic ankle - Second offense rate of murder prior to the service) * Social prevention cost of murder * the number of wearing electronic ankle * contribution rate (50%)	second offense rate of murder prior to initiation of the service	10.30%	Ministry of Justice, Report of Effectiveness of electronic ankle (2018)	Social prevention cost of murder	164,086.94 USD/case	An Estimation of Social costs of Crime (2010), Korean Institute of Criminology
108	Society	Product/Service	SK Telecom	Preventing crime by providing an Local Based Service of electronic ankle (target for robbery crime)	(Second offense rate of robbery crime after initiation of electronic ankle - Second offense rate of robbery crime prior to the service) * Social prevention cost of robbery crime * the number of wearing electronic ankle * contribution rate (50%)	second offense rate of robbery crime prior to initiation of the service	27.80%	Ministry of Justice, Report of Effectiveness of electronic ankle (2019)	Social prevention cost of robbery crime	1,474.06 USD/case	An Estimation of Social costs of Crime (2010), Korean Institute of Criminology
109	Society	Product/Service	SK Telecom	Preventing voice phishing cases by providing service for blocking a phone for receiving call	(Weighted average of filter out rate of Cell phone scam calls in market - SKT's filter out rate of cell phone scam calls) * social cost of voice phishing * the number of blocking scam calls * the share of illegal loan in scam calls * the experience rate of financial fraud * the ratio of voice phishing in financial fraud	Weighted average of filter out rate of Cell phone scam calls in market	88.73%	-	Social cost of voice phishing	5,035.47 USD/case	Damage situation of voice phishing (2019), Financial Supervisory Service





■ SK Monetization Measurement Formula and Necessary Data (Society)

No.	Category		Affiliate	Indicator	Equation	Baseline			Monetization Proxy		
						Content	Value	Reference	Content	Value	Reference
124	Society	Product/Service	SK hynix	Reducing private education expenses of subject in the informal curriculum through Happyschool	(Average market price for private education of subject in informal curriculum - Happyschool's tuition of subject in informal curriculum) * 1 * Number of students taking the Happyschool of subject in informal curriculum	Non-disclosure	Non-disclosure	Non-disclosure	Non-disclosure	Non-disclosure	Non-disclosure
125	Society	Product/Service	SK hynix	Technical support for business partners companies by fostering technology innovation companies	Amount of purchase of joint development products of technology innovation companies * contribution rate to joint development * value-added rate of semiconductors	Non-disclosure	Non-disclosure	Non-disclosure	Non-disclosure	Non-disclosure	Non-disclosure
126	Society	Product/Service	SK hynix	Technical support for business partners through analysis/measurement infrastructure sharing	Physical Property Analysis: Alternative Market Price of Physical Property Analysis * Number of usages - Physical property analysis measurement Fee paid by business partners to external analyzer Chemical Property analysis: Alternative market price of chemical property analysis * Number of usages - Chemical analysis measurement usage fee + Financial support on chemical analysis consulting	Non-disclosure	Non-disclosure	Non-disclosure	Non-disclosure	Non-disclosure	Non-disclosure
127	Society	Product/Service	SK hynix	Supporting training of business partners through semiconductor academy	Alternative market price of Semiconductor academy * Number of Students - Semiconductor academy tuition	Non-disclosure	Non-disclosure	Non-disclosure	Non-disclosure	Non-disclosure	Non-disclosure

※ Contact: CSES SV measurement centre(Joonhwan Oh/Hyungeun Park : svmc@cses.re.kr), SK Social Value Planning & Coordination Team(Hyeongjin Kim : supex.su50576@sk.com)