



Green Card Program

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I . Summary

Green Card Program is a public-private partnership that aims to provide incentives for consumers' eco-friendly lifestyle using credit card platform. Rewards or points are given to consumers to provide them with an easy access to low-carbon and eco-friendly lifestyle. The program offers economic benefits (in the form of points called "Eco-money") to consumers through credit or debit cards whenever they purchase low-carbon products or engage in energy-saving activities.

The purpose of Green Card Program is to motivate consumers to use eco-friendly products that emit less greenhouse gases (GHGs) in order to put in place a green and sustainable consumption pattern.

Green Card users gain economic rewards by i) purchasing eco-friendly products, ii) using public transportation, and iii) saving electricity, water, and gas.

For six years since its introduction, the program has contributed to the reduction of a total of 2,495 thousand tCO₂ emissions from energy saving, green product purchase and public transportation use. The GHG emissions reduced from energy saving is estimated 1,298 thousand tCO₂; 1,032 thousand tCO₂ from eco-friendly product purchase; and 166 thousand tCO₂ from public transportation use.

Green Card Program won the United Nations Momentum for Change Climate Solutions Award in November 2017. The Government of the Republic of Korea expects the program to contribute significantly to achieving the goal of turning Korea into a low-carbon and eco-friendly society.

II. Background: Korea's Effort to Shift into Low-Carbon Society¹⁾

As part of its effort to transform into a low-carbon society, the Korean Government has set a voluntary target of reducing GHG emissions by 30% from 2020 Business As Usual (BAU) levels in 2010. Upon its target-setting, the Government has laid out detailed action plan at multiple levels – public, private and civil society groups – to fundamentally change the existing consumption pattern and to move towards a low-carbon economy.

Public sector took the first step and put in place a mandatory purchase program within the sector for eco-labeled and Good Recycled (GR) certified products to expand low-carbon product market.²⁾ In addition, to encourage industries to participate in the efforts to reduce GHG emissions, the Government has drawn up various measures for promoting the production and distribution of low-carbon products.³⁾

Among the measures was the signing of the "Voluntary Industry Agreement on Green Purchase" with businesses, which was to encourage them to purchase low-carbon products. At the same time, the Government set up plans to raise public awareness of the effects of low-carbon consumption on environment and to bolster their engagement with the Government's drive for low-carbon society.

A consumer survey by the Government found that 96% of the respondents consider global warming as a serious problem, and 88.4% think they need to "act green" in daily lives to tackle the problem. On the contrary, some of the respondents found it bothering to act green everyday because a) eco-friendly products are expensive, and b) there are not many stores selling green products.

Under such circumstances, the Government offered various programs through which consumers can engage in green lifestyle that will ultimately bring a low-carbon society. One of the programs was Green Card Program.

1) The data and information on this leaflet are based on the publication entitled: 『Green Card』 (Ministry of Environment, Republic of Korea, 2017).
2) As a result, the public sector's mandatory purchase of low-carbon products and Good Recycled (GR) certified products increased to KRW 3,25 trillion in 2016 from KRW 250 billion in 2004.
3) The Korean Government expanded the carbon labeling system to promote the production and consumption of low-carbon products.

III. Purpose and Benefits

Green Card Program uses reward system of credit cards as an incentive for consumers. Consumers earn rewards which provide them with an easy access to low-carbon and eco-friendly lifestyle. The program offers benefits to consumers in the form of points called Eco-money in exchange for the purchase of low-carbon products with credit or debit cards or the participation in energy-saving activities.

1. Purpose: Creating Virtuous Cycle of Eco-friendly Consumption

The purpose of Green Card Program is to encourage consumers to use eco-friendly products and emit less GHGs in order to put in place a green and sustainable consumption pattern. Consumers who participate in the program and live eco-friendly life can receive and save Eco-money points in their Green Card accounts. Again, the saved points are used to purchase low-carbon products. This reward system creates a virtuous circle that reinforces eco-friendly consumption cycle.

2. Major Benefits for Green Card Users

Major benefits for Green Card users are as follows: i) rewards for eco-friendly consumption, ii) rewards for public transportation use, and iii) rewards within carbon point program.

Rewards for eco-friendly consumption are given in Eco-money points to consumers who purchase low-carbon or eco-friendly products from 40,000 retail stores across the country. The points are up to 24% of the purchase price. Rewards for public transportation use are given in Eco-money points to consumers who use public transportation. The points are up to 20% of the transportation fare. Rewards within carbon point program are given in Eco-money points to consumers who save energy at home, such as electricity, water and gas. They can receive up to 100,000 Eco-money points. Green Card users can receive discounts when they use public facilities such as national parks and electric vehicle (EV) charging stations.

Green Card users can receive a 50% or full discount on admission fees for national parks or 897 facilities operated by local municipalities either simply by showing their Green Cards or making payments with them.

Green Card users can receive a 50% discount on charging cost for EVs when they register their Green Cards in public EV charging system and pay for the cost with Green Cards (up to KRW 50,000 per month).

〈Table 1〉 Eco-money vs. Carbon Point vs. Eco-Mileage

Program	Eco-money	Carbon Point	Eco-Mileage
Definition	Points given as rewards for eco-friendly lifestyle or consumption	Energy saving program that gives Eco-money points as rewards for meeting energy saving targets (electricity, water, gas saving) at home	
Function	Checking records of Green Card use and Eco-money transaction	Serving as energy saving tool and measuring energy use to select targets	
Target	Green Card holder	All (except Seoul residents)	Seoul residents
Operator	BC Card co. Ltd.	Ministry of Environment / Korea Environment Corporation	Seoul City Government
Official Webpage	http://ecomoney.co.kr	http://cpoint.or.kr	http://ecomileage.seoul.go.kr

Source: Green Card, Ministry of Environment, Republic of Korea, 2017.

3. Main Stakeholders and Operational Structure

The main stakeholders of Green Card Program are the Ministry of Environment (governing body), the Korea Environmental Industry & Technology Institute (KEITI, program operator), the credit card company, and individual consumers.

The Ministry of Environment is the governing body of the program and is responsible for policy support and operation. The Ministry delegated its task of program operation to one of its affiliates, KEITI, which is responsible for the management of Green Card Program. In the program, KEITI encourages eco-friendly producers to participate in Green Card Program while promoting the program to general public.

The credit card company is tasked with attracting more Green Card users, encouraging financial institutions' participation, recruiting franchisees, promoting the program to card users and issuing of the cards.

〈Table 2〉 Stakeholders and Their Roles

Organization	Role
Ministry of Environment	<ul style="list-style-type: none"> - Strengthen linkage with eco-friendly product certification system - PR campaigns to credit card companies and consumers - Link with other programs and offer guidelines - PR campaigns to municipalities
Credit card company	<ul style="list-style-type: none"> - Develop and operate Green-POS⁵⁾, website, and point OS - PR and marketing to card users - Develop Green Card products, issue credit or debit cards, PR and marketing
Manufacturers	<ul style="list-style-type: none"> - Provide Eco-money points for eco-friendly products and services
Retailors	<ul style="list-style-type: none"> - Sell and promote eco-friendly products - Provide extra incentives for eco-friendly consumers

4. Other Features

The introduction of Green Card Program did not require a large-scale investment on facilities or a huge operating cost as the credit card company's existing infrastructure was utilized. As credit cards were already generally recognized as an essential means of payment in Korea, the program could attract many consumers to participate. Consumers can also make donations to environmental protection campaigns and programs with Eco-money points they have saved, which could contribute to raising awareness.

The operation of Green Card Program has been led by the Ministry of Environment in cooperation with other government bodies. This inter-ministerial cooperation on the program enables Green Card users to purchase a wide range of goods and services.

5) Green Point of Sales

Green Card Program has strong partnership with retail stores. To avoid potential inconvenience of consumers when they buy eco-friendly products and earn points at retail stores, point-of-sales (POS) systems were changed into Green-POS system. Eco-friendly products are automatically recognized and calculated on this system when they are purchased with Green Cards, and the points provided by eco-friendly manufacturers and retailers are marked on bills. This immediate reward system encourages consumers to engage in environmentally-friendly activities and purchase green products, increasing their repurchase rate of such green goods.

M. Progress and Status

1. Green Card Issuance

The first Green Card was issued in July 2011. The program offers various types of cards – credit cards, debit cards, and membership cards – for user convenience. The number of issued cards has been on the rise since the launch of the program, with nearly 15 million cards issued by December 2016. The program won the United Nations Momentum for Change Climate Solutions Award in November 2017 on the occasion of the UNFCCC COP23 in Bonn, Germany.



〈Table 3〉 Green Card Issuance (2011–2016)

(unit: No. of issued cards)

Year	2011	2012	2013	2014	2015	2016
Total	733,047	3,852,871	2,763,404	2,044,201	2,570,558	3,115,160

〈Table 4〉 Evolution of Green Card Program

Year	Activities
2011	– Launch of the program (July 2011)
2012	– 1 million cards issued (January 2012)
2013	– 5 million cards issued (February 2013)
2014	<ul style="list-style-type: none"> – 30,000 stores with Green-POS (May 2014) – Discount service for Incheon Asian Games (September 2014) – Agreement with Ministry of Land, Infrastructure and Transport for policy cooperation (Green Card – Green Remodeling) (September 2014) – Agreement with Ministry of Agriculture, Food and Rural Affairs for policy cooperation (October 2014)
2015	<ul style="list-style-type: none"> – 10 million cards issued (August 2015) – Agreement with Ministry of Health and Welfare and the Ministry of National Defense for policy cooperation (May 2015) – Agreement for task cooperation between a mandatory recycling certification system and Green Card Program (May 2015)
2016	<ul style="list-style-type: none"> – Agreement with Ministry of Culture and Tourism for policy cooperation (October 2016) – 15 million cards issued (December 2016)
2017	<ul style="list-style-type: none"> – Partnership agreement for 50% discount on EV charging cost (January 2017) – UN Momentum for Change Climate Solutions Award (November 2017)

Source: Green Card Program, Ministry of Environment, Republic of Korea, 2017.

2. Major Participants

As of 31 December 2016, 20 financial institutions, 209 companies, 1,957 products, 779 public facilities, and 40,464 retail stores are participating in the program.

3. Transaction Performance

Consumers' use of Green Cards has steadily increased. During 2015–2016, the transaction on Green Cards increased by 23% from KRW 9 trillion to KRW 11.1 trillion. The transaction volume has increased because of: i) consumers' enhanced awareness of eco-friendly consumption activities, ii) wider range of goods available on the program through policy cooperation with various government ministries, and iii) active PR activities of the Government and other program participants. The total transaction volume of Green Card Program since its first launch in 2011 until the end of 2016 amounted to KRW 36.4 trillion.

〈Table 5〉 Transaction Volume of Green Card

(unit: million KRW)

Year	2011	2012	2013	2014	2015	2016
Total	139,910	3,068,845	5,584,945	7,517,117	9,041,776	11,085,178
	36,437,771					

4. Eco-money Savings and Uses

The total amount of Eco-money points saved from using Green Cards reached 37.6 billion points as of the end of 2016. As described earlier, Green Card Program is an incentive scheme that gives consumers Eco-money points in the amount equivalent to a certain percentage of the costs of eco-friendly products and public transportation purchased with Green Cards. By the end of 2016, the points saved by consumers totaled 37.6 billion. Of the total saved points, purchase of green products amounted to about 945 million points (about 3% of the total points), and public transportation use amounted to 5.1 billion points.

〈Table 6〉 Eco-money Savings (2011–2016)

(unit: million KRW⁶⁾)

	Year	2011	2012	2013	2014	2015	2016
	Total						
Total	37,589	390	4,183	6,687	8,248	9,031	9,051
Eco-friendly products	945	–	63	114	182	335	251
Public transportation	5,135	59	580	893	1,167	1,203	1,234
Other items	31,509	330	3,540	5,680	6,899	7,493	7,567

Source: Green Card, Ministry of Environment, Republic of Korea, 2017.

6) 1 Eco-money Point = KRW 1

Of the total Eco-money points saved, consumers used a total of 19.146 billion points until 2016. Most consumers used their Eco-money points to get cash back or pay their credit card bills. Only few of them, however, used the points for the purpose of donation. The Ministry of Environment plans to launch more active PR campaigns to help consumers use their Eco-money points for giving back to society.

〈Table 7〉 Eco-money Uses (2011–2016)

(unit: million points)

	Year	2011	2012	2013	2014	2015	2016
	Total						
Total	19,146	28	1,100	3,314	4,220	4,945	5,541
Cashback	6,960	14	247	829	1,393	1,950	2,527
Automatic deduction from credit card bills	6,937	10	489	1,508	1,708	1,684	1,538
Conversion to other types of points	4,708	3	355	888	978	1,153	1,332
Other use at franchisees	539	–	9	89	141	157	143
Donations	2	–	–	1	–	–	1

Source: Green Card, Ministry of Environment, Republic of Korea, 2017.

V. Environmental and Economic Effects

1. Greening People's Lifestyle

Green Card Program motivates people to participate in eco-friendly actions. The program encourages them to save electricity, water, and gas, purchase eco-friendly products and use public transportation instead of driving. Increasing number of Green Card users stimulates eco-friendly consumption as well as GHG emission reduction activities, which directly and indirectly improves overall environmental conditions.

There are several positive environmental impacts from the program. First, increased use of public transportation reduces the rate of petroleum use. Second, as a greater number of people register in the carbon point system, electricity, water and gas are saved. Third, the level of pollutants in the environment decreases with the purchase of eco-friendly products.

2. Reduction of GHG Emissions

To quantify how much environmental pollution has been improved with Green Card Program, the Life Cycle Assessment (LCA) was conducted to analyze the environmental effects of the program throughout the whole production process of products and services.

The Ministry of Environment has found that Green Card Program, for six years since its introduction, has reduced a total of 2,495 thousand tCO₂ emissions from energy saving, green product purchase and public transportation use. The GHG emissions reduced from energy saving is estimated 1,298 thousand tCO₂; 1,032 thousand tCO₂ from eco-friendly product purchase; and 166 thousand tCO₂ from public transportation use.

V. Environmental and Economic Effects

〈Table 8〉 Reduction of GHG Emissions

(unit: ton CO₂)

	Year	2011	2012	2013	2014	2015	2016
	Total						
Total	2,495,239	8,232	180,139	362,857	499,940	633,863	810,207
Energy Saving	1,297,827	4,124	93,490	188,968	260,061	329,726	421,457
Eco-friendly product purchase	1,031,727	3,278	74,321	150,223	206,740	262,121	335,044
Public transportation use	165,685	830	12,328	23,665	33,139	42,017	53,706

Source: Green Card, Ministry of Environment, Republic of Korea, 2017.

3. Economic Benefits

The direct and indirect economic effects of Green Card Program for six years were estimated to be KRW 371 billions. Economic benefits from the program are increasing as the number of consumers participating in Green Card Program (or the number of Green Card accounts) grows.

〈Table 9〉 Economic Benefits

(unit: million KRW)

Year	2011	2012	2013	2014	2015	2016
Total	370,748	1,178	26,707	53,982	74,291	94,192
						120,397

Source: Green Card, Ministry of Environment, Republic of Korea, 2017.

VI. Way Forward

For years since its launch, Green Card Program has contributed to significantly enhancing consumers' green lifestyle as well as environmental conditions.

With strong commitment to assume a bigger role in motivating people's eco-friendly consumption, the Korean Government is making extra efforts to promote the program.

The first such effort is a plan to raise consumers' awareness of Green Card. According to a 2016 survey on 1,000 people aged 19 to 60, only 52% of the respondents said that they were aware of the program. This figure is higher than the result of the 2012 survey, but still shows the need to enhance consumers' awareness of the program. The Ministry of Environment is stepping up PR campaigns and marketing communications including through social network services to better communicate with consumers.

Second, the Government is working to expand the range of products enrolled in the program. The Ministry of Environment is encouraging manufacturers producing daily consumer goods to participate in the program to ensure consumers have a wider range of options. Environmentally-friendly products registered in the program are mostly products with an eco-label or a carbon footprint label. Aside from the food and beverage products certified by the carbon footprint label program, the list of products registered in the program is limited to dishwashing detergents, laundry soaps, and wallpapers.

To overcome such limit, the Ministry of Environment has expanded the list of products subject to the program to include low-carbon and eco-friendly agricultural products certified by other government ministries as well as the products certified by the Ministry of Environment.

Third, the linkage between the program and social contributions will be further strengthened. The Government will identify more entities to be invited to the program so that consumers can donate their Eco-money points to such entities. The Government is promoting such donations and social contribution activities using Eco-money points to help consumers recognize their participation in the program is not just a simple act of purchasing green products, but rather a contribution to a greater cause of helping those in need in our society.

An eco-friendly consumption pattern among consumers will be established only when their attitude and action start to change. Once such a green way of life is put in place across society, eco-friendly consumption could serve as one of the most cost-effective tools to reduce GHG emissions. In general, however, it takes long time to change people's mindset and attitude and see tangible results from policies or programs.

What's essential, therefore, is to develop policy instruments that will fundamentally support this long-term transformation into eco-friendly society. Green Card Program, which has been successfully operated until now by the Government, is such an example of policy instruments.

An expanded eco-friendly consumption pattern will put more positive pressure on manufacturers (or industries as a whole), enabling them to develop more green products. Then, Green Card Program will go beyond its original intention of providing incentives for consumers and establish a virtuous cycle of purchase, distribution and production of eco-friendly products. The program will contribute significantly to achieving the task of turning Korea into a low-carbon and eco-friendly society.



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