AMENDMENT

to the

ADMINISTRATION AGREEMENT

between

THE INTER-AMERICAN DEVELOPMENT BANK

and

THE GOVERNMENT OF THE REPUBLIC OF KOREA

regarding

Project Specific Grant to the Inter-American Development Bank for the financing of an Externally Funded Complementary Workforce Employee to collaborate in the field of Smart Grid technologies and processes (RG-X1179)

THIS AMENDMENT is entered into between the Government of the Republic of Korea (the "Government"), represented by the Ministry of Personnel Management ("MPM") and the Inter-American Development Bank (the "Bank") (together referred to as the "Parties").

WHEREAS, the Government, acting through the Ministry of Security and Public Administration of the Republic of Korea ("MOSPA") and the Bank entered into an Administration Agreement (the "Agreement") on September 23, 2013 regarding a Project Specific Grant ("PSG") for Bank project No. RG-X1179 for the financing of an Externally Funded Complementary Workforce Employee to collaborate in the field of Smart Grid technologies and processes (the "EF-CWE"), as further described in the EF-CWE document (the "EF-CWE Document") attached to the Agreement;

WHEREAS, the Government has provided a contribution in the amount of U.S.\$380,000.00 (three hundred eighty thousand dollars of the United States of America) to finance the EF-CWE, per the terms of the Agreement;

WHEREAS, the Government has assigned its responsibilities under the Agreement from the MOSPA to the MPM, and the MPM hereby assumes all responsibilities, rights and obligations of the Government under the Agreement;

WHEREAS, the MPM has agreed to support the extension of the execution of the EF-CWE by providing an additional grant contribution in the amount of U.S.\$181,000.00 (one hundred eighty one thousand dollars of the United States of America) to the Bank in one single installment (the "Additional Contribution"), to be administered by the Bank pursuant to the terms and conditions of the Agreement; and

WHEREAS, the Agreement provides in Section 14 thereto that "[t]he Parties may amend any provision of this Administration Agreement in writing".

NOW, THEREFORE, pursuant to Section 14 of the Agreement, the Parties hereby agree to supplement the EF-CWE Document with the attached document titled, "RG-X1179 'EF-CWE: Government of Korea' (Additional Resources)" (the "Supplementary EFC Document"), and to amend the Agreement as contemplated in this amendment to the Agreement (the "Amendment"), as follows (throughout this Amendment, capitalized terms used but not defined herein shall have the meanings ascribed to them under the Agreement):

- 1. All references to MOSPA in the Agreement are hereby replaced *mutatis mutandis* as if the Government were a party to the Agreement.
- 2. All references to "Externally Funded Complementary Workforce Employee" and "EF-CWE" in the Agreement are hereby replaced *mutatis mutandis* with "Externally Funded Contractual" and "EFC", respectively, except that references to "EF-CWE Document" will be replaced by "EF-CWE Document and Supplementary EFC Document".

- 3. Section 1 of the Agreement is hereby superseded, which shall now read as follows:
 - "1. The Government will make available to the Bank a grant contribution in the amount of U.S.\$561,000.00 (five hundred sixty one thousand dollars of the United States of America) (the "Contribution") to be administered by the Bank to finance the EFC. The Bank will not commit resources in excess of the amount of the Contribution effectively received from the Government, following any exchange of foreign currency into U.S. dollars."
- 4. Section 3 of the Agreement is hereby superseded, which shall now read as follows:
 - Following the signature of this Administration Agreement by the Parties, the Government will transfer the Contribution to the Bank in three (3) installments as follows: (a) the Government will transfer U.S.\$204,000.00 (two hundred four thousand dollars of the United States of America) thirty (30) days prior to the initiation of the first year of the EFC's contract; (b) the Government will transfer U.S.\$176,000.00 (one hundred seventy six thousand dollars of the United States of America) two (2) months before the expiration of the first year of the EFC's contract; and (c) the Government will transfer U.S.\$181,000.00 (one hundred eighty one thousand dollars of the United States of America) thirty (30) days before the expiration of the second year of the EFC's contract. The Government shall transfer each installment, upon the Bank's written request, to the account designated by the Bank in writing (the "Account"). The Account is denominated in U.S. dollars and includes resources provided as grant funds by other donors for other Bank projects. The Contribution will be administered in the Account without distinction from other donors' contributions."
- 5. Section 6 of the Agreement is hereby superseded, which shall now read as follows:
 - "6. To assist in the defrayment of the administrative costs in relation to the Contribution, the Bank will charge and retain:
 - (a) a fee equal to five percent (5%) of the first two installments of the Contribution at the time the first installment is deposited by the Government into the Account;
 - (b) a fee equal to five percent (5%) of the third installment of the Contribution at the time the third installment is deposited by the Government into the Account; and
 - (c) any investment income generated by the Contribution pending its disbursement towards the EFC."

6. Section 12(b) of the Agreement is hereby superseded, which shall now read as follows:

"(b) For the MPM:

Ministry of Personnel Management

209 Sejong-dearo, Jongno-gu, 110-760, Seoul

REPUBLIC OF KOREA

Attention: In-chul, Shin

Director, Openness and Interchange Division

Tel.: +82-2-2100-6760 Fax: +82-2-2100-6758 E-mail: leesh514@korea.kr"

- 7. The execution and disbursement period of the EFC (which is hereby extended for an additional twelve (12) months until November 14, 2016) and the detailed budget for the EFC in connection with the Additional Contribution have been updated, as set forth in the Supplementary EFC Document.
- 8. All other terms and provisions of the Agreement not expressly modified herein shall remain in full force and effect. Further, this Amendment shall enter into force on the date of its last signature by the Parties, and shall constitute an amendment to, and form an integral part of, the Agreement.

IN WITNESS WHEREOF, the Inter-American Development Bank, and the Government of the Republic of Korea, represented by the Ministry of Personnel Management, each acting through its duly authorized representative, have signed this Amendment in two (2) original counterparts in the English language as of the dates indicated below.

INTER-AMERICAN
DEVELOPMENT BANK

Bernardo Guillamon Manager

Office of Outreach and Partnerships

Date: Sep. 22/2015

REPUBLIC OF KOREA MINISTRY OF PERSONNEL MANAGEMENT

> n-chul, Shin Director

Openness & Interchange Division

Date: 6CT. 2/2015

RG-X1179 "EFC: Government of Korea" (Additional Resources)

I. General Information

Trust Fund/Partner financing the additional resources for the EFC:

Government of Korea through a Project Specific

Gran

Person responsible for supervision:

Ariel R. Yepez, Chief, Energy Division (INE/ENE)

Requested additional amount/Budget increase

USD181,000

Additional contract period (months)

12 months

Contract modality

DTC

II. Justification

The Government of the Republic of Korea is expected to contribute an additional grant in support of a 12-month contract extension of an EFC hired by the Energy Division (INE/ENE) to focus on the area of smart grids and related energy, in order to enhance the collaboration between the IDB and the Republic of Korea.

The additional contract period will be from November 15, 2015 to November 14, 2016.

III. Budget

	Remaining resources from previous contribution ¹ in US\$	Monthly Amount in US\$ (new contribution)	New Contribution in US\$
Honorarium	0	10,815	129,780
Savings Plan 9%	0	974	11,688
Medical Insurance Allowance	0	750	9,000
Round Trip Airfare	6,000	-	
Installation Allowance	0	•	PV
Repatriation Allowance	2,500	-	-
Other	0		21,482
Administrative fee		-	9,050
TOTAL	8,500	12,533	181,000

Remaining resources are estimated as of November 14th, 2015 (end of previous contract). Any remaining unspent resources from the previous contract, as well as from the new contract, will be returned to the donor at the end of the execution period as stipulated in the Administration Agreement and its Amendment.

The resources for the return flight and for the repatriation allowance, committed under the previous contract, will be carried over to the new contract and will be disbursed upon the EFC's return to Korea.

IV. Responsibility in the Bank

The EFC will be working under the supervision of Ariel R. Yepez, Energy Division Chief. INE/ENE will be in charge of the donor reporting as specified in the Administration Agreement and its Amendment.

If, at the end of the contract execution, the balance shows a positive uncommitted and undisbursed amount, INE/ENE will be responsible for informing ORP/GCM to transfer the unspent balance as agreed by the donor and the Bank pursuant to the terms of the Administration Agreement and its Amendment.

Attachments: Original EF-CWE Document New EFC Terms of Reference

Inter-American Development Bank Externally-Funded Complementary Workforce (EF-CWE) Document

EF-CWE Nº: RG-X1179

I. GENERAL INFORMATION:

Name of EF-CWE: Government of Korea Contract modality (*PEC/TTC/DTC*): DTC Financing mechanism: (*TF, PSG, APO*): PSG

Trust Fund/Donor financing the EF-CWE: Ministry of Security and Public

Administration of the Government of Korea Hiring IDB unit/division: Energy Division

Unit of Disbursement Responsibility (UDR): INE/ENE

Responsible for supervision: Leandro Alves

Estimated Total Amount to be financed: US\$380,000.00 Contract period and disbursement deadline: 2 years.

II. JUSTIFICATION AND OBJECTIVES:

LAC is facing a series of challenges in the energy sector. The energy consumption in LAC countries goes hand-in-hand with its economic growth, pressing countries to increase their generation, transmission and distribution capacity as a mechanism to ensure the availability of energy, i.e. their energy security. Countries are facing challenges to increase their Energy Efficiency (EE) and the share of Renewable Energy (RE) into their energy matrix.

To address these issues it will require not only regulatory changes but the introduction of a holistic approach to the cities of the LAC region and the way end-users and the grids that supply them manage energy consumption and distribution. Countries like Italy, Germany and Korea have been adopting new distribution models, promoting demand side management in order to increase EE and to allow the introduction of RE. Successful introduction of these new sources into existing grids requires a new type of distribution system that responds more accurately and flexibly to the energy demand fluctuations. Further, it requires a change of the unidirectional network, i.e., making grids smarter.

This individual will bring this expertise to the Energy Division, thus enabling the Division to position itself, and hence, the IDB at the leading edge of global energy developments. This work will ensure that the Division fulfills the renewable energy and increase sustainability requirements of the GCI-9.

III. DESCRIPTION:

The EF-CWE will join the Energy Division's Energy Innovation Center (EIC) for a two-year period, and participate, as a team member, in projects that are co-financed by Korean funds and/or the Export-Import Bank of Korea and support the coordination between the co-financiers and the IDB, as well as identify additional cooperation resources that might be available from the GoK for smart grid projects in LAC. Further, the individual will work with the Energy Division on a variety of projects including: assessing the potential and cost effectiveness for RE systems and smart grid technologies in LAC. The work includes: project evaluation, identification of technical, economic and regulatory barriers, as well as of opportunities for viable development of these technologies.

Another aspect of the work will be to participate in existing and future projects and technical cooperation agreements in the field of EE, focused on developing new applications for smart grids' evaluation, development and implementation. These activities will focus on the integration of RE into the electricity grid, as well as topics such as, transmission systems, operation, dispatch, smart grids, and electricity markets.

Finally, under the sponsorship of the GoK, and in consultation with the EIC, the EF-CWE will endeavor to organize one (1) training (and/or information) workshop for officials of member countries and specialists of the IDB or one (1) capacity building technical workshop in the areas of EE and smart grids, to internal and external audiences.

For a detailed description see attached ToRs.

IV. BUDGET:1

4.1 The total budget for the contract of this expert is:2

	Monthly Amount in US\$	First Disbursement In USS	Second Disbursement In USS	
Honorarium	10,500.00	126,000	126,000	252,000.00
Savings Plan 9% b	1,038.00	12,456	12,456	24,912.00

Resources of this project to be received from MOSPA will be provided to the Bank through a Project Specific Grant (PSG). A PSG is administered by the Bank according to the "Report on COFABS, Ad-Hoes and CLPGS and a Proposal to Unify Them as Project Specific Grants (PSGs)" (Document SC-114). As contemplated in these procedures, the commitment from MOSPA will be established through a separate administrative arrangement. Under such arrangement, the resources for this project will be administered by the Bank and the Bank will charge an administrative fee of 5% of the contribution, which is duly identified in the budget of this project. The 5% administrative fee will be charged after the contribution had been received.

In this section please also indicate that "If at the end of project execution the project was closed with a positive uncommitted and unspent balance, the project team will be responsible for informing ORP/GCM to transfer the unspent balance as agreed to by the MOSPA and the Bank pursuant to the terms of the PSG Administration Agreement".

Medical Insurance Allowance ³	\$750.00	9,000	9,000	18,000.00
Airfare Round Trip ^e		6,000	6,000	12,000.00
Installation Allowance ^d		5,000		5,000.00
Repatriation Allowance ^d			2,500	2500.00
Administrative fee, if applicable		19,000		19.000,00
Other ^c .		26,544	20,044	46,588.00
TOTAL		204,000	176,000	380,000:00

a If the donor is making contribution in currency different than USS, consult with GCM.

V. RESPONSIBILITY IN THE BANK:

- 5.1 Technical Responsibility: Leandro Alves, Division Chief, (202) Leandro A@iadb.org
- 5.2 The project team will be responsible for the project in accordance to what has been established in the Administrative Agreement.
- 5,3 At the end of the contract, the EF-CWE in coordination with the project team will be responsible for the preparation and submission to the MOSPA of the project reporting in compliance with the stipulation of the Administration Agreement".

Only if applicable (TTC and DTC modalities), Individual or with eligible dependents.
 Only if applicable. Will be paid only if the EC-CWE (TFA, RF, APO) is not already in the United States, and in the event that after completing the program will return to their home country.
 Donors can pay travel expenses for missions, trainings, and/or any other budget category needed to fulfill their applicable laws that are

acceptable to the Bank.

TERMS OF REFERENCE EXTERNALLY FUNDED COMPLEMENTARY WORKFORCE EMPLOYEE FROM THE MINISTRY OF SECURITY AND PUBLIC ADMINISTRATION OF THE GOVERNMENT OF KOREA FOCUSED ON SMART GRIDS

The Energy Innovation Center (EIC) is an energy-sector knowledge hub that connects Latin America and the Caribbean (LAC) to the rest of the world. Its focus areas are:

- 1. Applied energy research;
- 2. Capacity building; and
- Identification and formulation of traditional and innovative energy projects in the region.

The EIC is an integral part of the Inter-American Development Bank's (IDB) Energy Division, which is, in its own right, a focal point of excellence within the Infrastructure and Environment Department. The EIC boosts the Energy Division's research capacity, and through extensive use of web-based dissemination and regional policy dialogues, becomes a catalyst for knowledge and best practices exchanges.

Key to the success of this endeavor is its people. To complement its cadre of energy experts, the EIC hosts a *Strategic Partnerships* program. This unique partnership brings government, companies and university experts to the EIC — where they become one of the team, for a two to three-year period. During their tenure, the Externally Funded Complementary Workforce Employees (EF-CWE) are expected to contribute to all three of the EIC's program areas. In turn, this opportunity allows companies or different levels of government as well as learning institutions, to acquire deeper knowledge of the region; opportunities to interact at the highest levels; and a chance to exchange knowledge with experts in a number of fields.

The following are the Terms of Reference for a EF-CWE from the Government of the Republic of Korea (GoK) to focus on the area of smart grids and related energy in order to enhance the collaboration between the IDB and the Republic of Korea.

I. BACKGROUND

- 1.1 The IDB is the main source of multilateral financing for economic, social and institutional development in LAC. It provides loans, grants, guarantees, policy advice and technical assistance to the public and private sectors of its borrowing member countries.
- 1.2 LAC is facing a series of challenges in the energy sector. The energy consumption in LAC countries goes hand-in-hand with its economic growth, pressing countries to increase their generation, transmission and distribution capacity as a mechanism to ensure the availability of energy, i.e. their energy security. Countries are facing challenges to increase their Energy Efficiency (EE) and the share of Renewable Energy (RE) into their energy matrix. The integration of these technologies into existing networks poses considerable challenges. These issues energy security, EE and RE are central to the future of the energy sector in the region.
- 1.3 To address these issues will require not only regulatory changes but the introduction of a holistic approach to the cities of the LAC region and the way end-users and the grids that supply them manage energy consumption and distribution. Countries like Italy, Germany and Korea have been adopting new distribution models, promoting demand side management in order to increase EE and to allow the introduction of RE. Successful introduction of these new sources into existing grids requires a new type of distribution system that responds more accurately and flexibly to the energy demand fluctuations. Further, it requires a change of the unidirectional network, i.e., making grids smarter.
- 1.4 The International Energy Agency defines smart grids as: "... an electricity network that uses digital and other advanced technologies to monitor and manage the transport of electricity from all generation sources to meet the varying electricity demands of end-users. Smart grids coordinate the needs and capabilities of all generators, grid operators, end-users and electricity market stakeholders to operate all parts of the

- system as efficiently as possible, minimizing costs and environmental impacts while maximizing system reliability, resilience and stability" (IEA, 2011).
- 1.5 Regarding the application of a smart grid, there are various options with varying levels of sophistication and complexity. Standard among applications is the use of advanced communication technologies to enable better use of the power systems' assets and broaden the range of services offered to consumers. While most smart grid technologies have been developed for applications in the most technologically advanced countries, it is important to also develop smart grid applications that address the needs of the full range of economies, assuring that these technologies are also available for solving energy access and efficient utilization problems in those countries with smaller economies which are often the most heavily affected by energy issues.

II. GENERAL OBJECTIVE(S)

The EF-CWE would:

- 2.1 Participate, as a team member, in projects that are co-financed by Korean funds and/or the Export-Import Bank of Korea and support the coordination between the cofinanciers and the IDB.
- 2.2 Identify additional cooperation resources that might be available from GoK for smart grid projects in LAC
- 2.3 Work with the Energy Division on a variety of projects including: assessing the potential and cost effectiveness for RE systems and smart grid technologies in LAC. The work includes: project evaluation, identification of technical, economic and regulatory barriers, as well as of opportunities for viable development of these technologies.
- 2.4 In coordination with the members of the Energy Division and hired consultants, participate in existing and future projects and technical cooperation agreements in the field of EE, focused on developing new applications for smart grids' evaluation, development and implementation. These activities will focus on the integration of RE

into the electricity grid, as well as topics such as, transmission systems, operation, dispatch, smart grids, and electricity markets.

- 2.5 The EF-CWE will advise the project teams to ensure that the information and analysis contained in reports, written material, or knowledge products covering smart grid technologies is well referenced, accurate, and of the highest standards.
- 2.6 Under the sponsorship of GoK, and in consultation with the EIC, the EF-CWE will endeavor to organize one (1) training (and/or information) workshop for officials of member countries and specialists of the IDB or one (1) capacity building technical workshop in the areas of EE and smart grids, to internal and external audiences. The specific subject of the workshop, as well as the time and location are to be discussed with the EIC.

III. QUALIFICATIONS

- 3.1 Experience: at least 10 years of work experience in a government function; at least 5 years of relevant experience in smart grids, climate change, renewable energy, information and communication technologies (ICT), and the relevant -R&D; experience in policy making is preferred.
- 3.2 Technological expertise in smart grid technologies including electricity transmission and distribution, energy storage system, advanced metering infrastructure, Electric Vehicle (EV) and ICT
- 3.3 Education: Advanced degree (Master's or higher) in Engineering, Computer Science, Economics, or other related fields
- 3.4 Languages: English and Korean fluency required, Spanish preferred.

IV. DURATION

4.1 2 year period

V. ADMINISTRATION

- 5.1 The EIC is responsible for providing the EF-CWE with an office, equipped with a computer, an e-mail account, phone number and other equipment that EIC deems necessary for the EF-CWE to perform the activities included in the ToRs.
- 5.2 The Korean Government is responsible for making available to the Bank a grant contribution in the amount of U.S. \$380,000.00 (Three Hundred Eighty Thousand dollars of the United States of America) (the "Contribution") to be administered by the Bank to finance the EF-CWE. The Bank will not commit resources in excess of the amount of the Contribution effectively received from MOSPA, following any exchange of foreign currency into U.S. dollars. These funds will cover the EF-CWE's remuneration, pension plan, health insurance, relocation, the costs of any Bank authorized travel associated with the EF-CWE's performance of the activities included in the ToRs, and a blackberry.
- 5.3 At the end of the contract, the EF-CWE in coordination with the project team will be responsible for the preparation and submission to the MOSPA of the project reporting in compliance with the stipulation of the Administration Agreement.

VI. SUPERVISION

6.1 The Head of Energy Innovation Center is the principal supervisor of the EF-CWE.
Ultimately, the EF-CWE responds to Leandro Alves, Division Chief of Energy Division.

Regional

INE/ENE

Smart Grid Technologies PSG (EFC)

TERMS OF REFERENCE

Background

LAC is facing a series of challenges in the energy sector. The energy consumption in LAC countries goes hand-in-hand with its economic growth, pressing countries to increase their generation, transmission and distribution capacity as a mechanism to ensure the availability of energy, i.e. their energy security. Countries are facing challenges to increase their Energy Efficiency (EE) and the share of Renewable Energy (RE) into their energy matrix.

To address these issues it will require not only regulatory changes but the introduction of a holistic approach to the cities of the LAC region and the way end-users and the grids that supply them manage energy consumption and distribution. Countries like Italy, Germany and Korea have been adopting new distribution models, promoting demand side management in order to increase EE and to allow the introduction of RE. Successful introduction of these new sources into existing grids requires a new type of distribution system that responds more accurately and flexibly to the energy demand fluctuations. Further, it requires a change of the unidirectional network, i.e., making grids smarter.

The EFE will bring this expertise to the Energy Division, thus enabling the Division to position itself, and hence, the IDB at the leading edge of global energy developments. This work will ensure that the Division fulfills the renewable energy and increase sustainability requirements of the GCI-9.

Consultancy objective(s)

Participate, as a team member, in projects that are co-financed by Korean funds and/or the Export-Import Bank of Korea and support the coordination between the co-financiers and the IDB.

Main activities

- Identify additional cooperation resources that might be available from GoK for smart grid projects in LAC;
- Work with the Energy Division on a variety of projects including: assessing the potential and cost
 effectiveness for RE systems and smart grid technologies in LAC. The work includes: project
 evaluation, identification of technical, economic and regulatory barriers, as well as of
 opportunities for viable development of these technologies.
- In coordination with the members of the Energy Division and hired consultants, participate in existing and future projects and technical cooperation agreements in the field of EE, focused on developing new applications for smart grids' evaluation, development and implementation. These activities will focus on the integration of RE into the electricity grid, as well as topics such as, transmission systems, operation, dispatch, smart grids, and electricity markets.

- The EFC will advise the project teams to ensure that the information and analysis contained in reports, written material, or knowledge products covering smart grid technologies is well referenced, accurate, and of the highest standards.
- Under the sponsorship of GoK, and in consultation with the Energy Division Chief, the EFC will endeavor to organize one (1) training (and/or information) workshop for officials of member countries and specialists of the IDB or one (1) capacity building technical workshop in the areas of EE and smart grids, to internal and external audiences. The specific subject of the workshop, as well as the time and location are to be discussed with the Energy Division Chief.

Qualifications

- Academic Degree/level and years of professional experience: Masters, 10-15 years
- · Language: English, Spanish, Korean
- Areas of expertise: Smart Grid
- · Skills: any other features deemed relevant to carry-out the work

Characteristics of the Consultancy

- Contractual category and modality: Defined Term Contractual (Funded by PSG), Monthly
- Contract duration: 12 months
 Place(s) of work: Headquarters
- · Responsible person: Ariel Yepez, Energy Division Chief.

Payment and Conditions: Compensation will be determined in accordance with Bank's policies and procedures. The Bank, pursuant to applicable policies, may contribute toward travel and moving expenses. In addition, candidates must be citizens of an IDB member country.

Visa and Work Permit: The Bank, pursuant to applicable policies, may submit a visa request to the applicable immigration authorities; however, the granting of the visa is at the discretion of the immigration authorities. Notwithstanding, it is the responsibility of the candidate to obtain the necessary visa or work permits required by the authorities of the country(ies) in which the services will be rendered to the Bank. If a candidate cannot obtain a visa or work permit to render services to the Bank the contractual offer will be rescinded

Consanguinity: Pursuant to applicable Bank policy, candidates with relatives (including the fourth degree of consanguinity and the second degree of affinity, including spouse) working for the Bank as staff members or Complementary Workforce contractuals, will not be eligible to provide services for the Bank.

Diversity: The Bank is committed to diversity and inclusion and to providing equal opportunities to all candidates. We embrace diversity on the basis of gender, age, education, national origin, ethnic origin, race, disability, sexual orientation, religion, and HIV/AIDs status. We encourage women, Afrodescendants and persons of indigenous origins to apply.