

# Annex to the G20 Development Working Group 2015 Annual Progress Report

STATUS REPORT ON THE ELEVEN EXEMPLARY PROJECTS IDENTIFIED BY THE 2011 G20  
HIGH-LEVEL PANEL

September 2015

\* Submitted by the:

- Asian Development Bank (ADB),
- Inter-American Development Bank (IADB), and
- World Bank Group (WBG).

## 1. West Africa Power Pool (WAPP) - Côte d'Ivoire, Sierra Leone, Liberia, and Guinea Power System Redevelopment Project<sup>1</sup>

### i. Cost estimate and MDBs involved

The WAPP-CLSG project is part of the WAPP program and has an estimated cost of US\$1.4 billion. Phase 1 of the CLSG project, currently under preparation, has a cost of US\$500 million.

Partners involved include the AfDB, EIB, KfW and WBG. Governments of the four participating countries are also contributing to the financing of the project.

### ii. Project description

The 15 member states<sup>2</sup> of the Economic Community of West African States (ECOWAS) occupy some five million square kilometers and are currently home to about 250 million people. Half of the present population lives in poverty, with per capita income barely above US\$300 per year. Despite the region's large energy endowment, the per capita consumption of electricity is amongst the lowest in the world, with approximately 171 kWh per person per year in 2010. Faced with this power system expansion challenge, ECOWAS Member States adopted an ECOWAS Energy Policy in 1982 and put in place the West African Power Pool (WAPP) in 1999 – a cooperative power pooling mechanism for integrating national power system operations into a unified regional electricity market – with the expectation that this mechanism will, over the medium to long term, assure their citizens a stable and reliable electricity supply at affordable cost.<sup>3</sup>

As a “flagship infrastructure project” of the New Partnership for African Development (NEPAD),<sup>4</sup> the WAPP aims to facilitate the balanced development of the diverse energy resources of the ECOWAS Member States for their collective economic benefit, through long-term energy sector co-operation, unimpeded energy transit and increasing cross-border electricity trade. To this end, the WAPP has been helping countries in the ECOWAS region develop regional priority projects. These priority projects are identified through a regional Masterplan, which is regularly updated, and subsequently endorsed in WAPP fora. The Masterplan was most recently updated in December 2011.

One of these priority projects is the WAPP-CLSG Regional Transmission Line Project, which benefits Côte d'Ivoire, Liberia, Sierra Leone and Guinea. The project involves the construction of 1349 km of 225 kV double circuit overhead transmission line<sup>5</sup>

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<sup>1</sup> 2015 update provided by the WBG.

<sup>2</sup> Benin, Burkina Faso, Cape Verde, Côte d'Ivoire, The Gambia, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, and Togo.

<sup>3</sup> ECOWAS/ CEDEAO (2006). 29th Session of the Authority of Heads of State and Government. Decision A/Dec. 18/01/06 Adopting the Articles of Agreement Relating to the Establishment and functioning of the West African Power Pool, Niamey, 12 January 2006; and Decision A/Dec.20/01/06 Granting the Status of a Specialized Institution of ECOWAS to the WAPP Organization, Niamey, 12 January 2006.

<sup>4</sup> NEPAD was established to implement an integrated socio-economic development framework for Africa, and was formally adopted at the 37<sup>th</sup> Summit of the Organisation for African Unity in July 2001.

<sup>5</sup> Phase 1 will finance the installation of the first circuit, and Phase 2 will finance the second circuit.

connecting Côte d'Ivoire, Liberia, Sierra Leone, and Guinea. The transmission line will consist of approximately 130 km in Côte d'Ivoire, 115 km in Guinea, 600 km in Liberia and 560 km in Sierra Leone. The transmission line capacity will be 150 MW after Phase 1, and 290 MW after Phase 2, once the second circuit is installed. The route will pass through the sites of future hydraulic plants (Yiben and Bikongor in Sierra Leone; Mano and Mt. Coffee in Liberia; and Souapiti in Guinea). In order to electrify rural areas, 225 33 kV substations will be connected to the line, which is also equipped with energized shield wire. Construction will commence in 2016 and commissioning is scheduled for 2018.

The total cost of the Phase 1 project is estimated at approximately US\$500 million, and it is being co-financed by the World Bank, the AfDB, the EIB, and KfW, in addition to the contributions of the four participating countries. The WBG has provided a credit of US\$144.5 million for the construction of the lines and the institutional development of the regional transmission company responsible for project implementation, TRANSCO-CLSG, and also provided a grant of US\$31.5 million to the WAPP for strengthening of WAPP integration and the development of hydroelectricity generation projects. AfDB is providing financing of US\$133.08 million, EIB US\$105.18 million and KfW US\$40.8 million, and the four governments US\$20.8 million.

No shortfall is envisaged at present for Phase 1 of the CLSG project, but resources are yet to be mobilized for the subsequent phases (US\$900 million).

### **iii. Project update**

The West Africa Power Pool (WAPP) enjoys priority status with the AU, and the CLSG is a key sub-project. All beneficiary countries are committed and have signed the associated project Protocol, the International Treaty has been signed by the four Heads of State and ratified by the four Parliaments, and financing have been approved by the four financiers. The WAPP secretariat is implementing the activities to strengthen the WAPP integration under a \$31.5 million IDA grant, and TRANSCO CLSG, the regional transmission company owned in equal parts by the electricity utilities of the four countries, has been created, staffed and is now fully functional and operating, as the project implementation unit for the construction of the CLSG Line. Headquarters of TRANSCO are located in Abidjan and currently TRANSCO is in the process of opening local offices in the other three participating countries. The four governments have already provided the funds needed for the financing of the Resettlement Action Plan, and procurement for the construction of the lines has started and the bidding process is expected to be launched.

TRANSCO is also working closely with the four national utilities and their respective authorities to finalize the first purchase power agreement between Côte d'Ivoire as seller and the three other countries as buyers. This first power purchase agreement will also be important for the long term sustainability of the CLSG project, since the transmission company TRANSCO will be expected to be self-financed with the proceeds from the transmission fees for electricity exchanges, once the line starts operations.

## 2. Ethiopia and Kenya Power Systems Interconnection<sup>6</sup>

### i. Cost estimate and MDBs involved

At present, the project cost estimate is about US\$1.1 billion and it is fully financed.

The development partners include AfDB, the AFD and the World Bank.

### ii. Project description

The 1,000 km interconnector, with a transfer capacity of 2,000 MW, would integrate Ethiopia into the East Africa Power Pool (EAPP), comprising Burundi, Kenya, Rwanda, Tanzania and Uganda), serving a combined population of 100 million.

The project's development objective is to promote power trade and regional integration, contribute to the EAPP countries' social and economic development, and reduce poverty in the concerned countries. The project aims at exporting power from Ethiopia to Kenya initially, and then later to other countries in the region. This will result in an improved supply of electricity in Kenya and other EAPP countries in the long run.

### iii. Project update

The World Bank's Board approved the project in July 2012. AfDB approved it in December 2012 and AFD in June 2013. Implementation continues to advance, with the project's implementing entities, Kenya Electricity Transmission Company Ltd. and Ethiopian Electric Power, having formed a Joint Project Coordination Unit and each having established a national Project Implementation Team.

Procurement of contractors has recently been completed for the High Voltage Direct Current overhead transmission line (financed by AfDB and AFD) and is nearing completion for the converter stations at each end of the line (financed by the World Bank).

The earliest commissioning date for the interconnector is end-2018.

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<sup>6</sup> 2015 update provided by the WBG.

### 3. Inga Hydropower<sup>7</sup>

#### i. Cost estimate and MDBs involved

The next phase of the development of the Inga site, Phase 3 Low Head (Basse Chute in French), is estimated to cost US\$10 billion, which excludes financing costs.

Interested multilateral and bilateral donors include the WBG, EIB, AfDB, KfW and AFD.

#### ii. Project description

The Inga site represents an estimated potential capacity of 40,000 MW. The World Bank Group, together with partners (including AfDB, EIB, and KfW) has been supporting the rehabilitation of existing Inga infrastructure<sup>8</sup> to boost generation output and upgrade transmission and distribution networks.

An AfDB-financed feasibility study, finalized in October 2013, recommended the development of the Inga site in phases, to match the demand growth in DRC and other African countries and phased investments over time. The feasibility study provides a good overview of technical, institutional, and financial options but needs to be complemented by more in-depth project preparatory studies on geological/geotechnical, sedimentation/hydraulic and environmental/social aspects, as well as on transmission lines.

Inga 3 Basse Chute (BC) is the next phase of the Inga site development, with 4,800 MW installed capacity. The Inga 3 BC development consists of a diversion of part of the water of the Congo River into the Bundi tributary and a dam across the Bundi valley. It will not require the construction of a dam on the Congo River itself.

The Government of DRC (GoDRC) has decided to develop Inga 3 BC as a Public Private Partnership (PPP). The Government of DRC initiated a competitive process to select a private concessionaire in 2010. The process is ongoing and three consortia are pre-qualified; they will be allowed to reconfigure to adapt to changes in the scope of the project.

#### iii. Project update

The World Bank and the AfDB have approved financing for a Technical Assistance (TA) project to support the GoDRC to implement its vision for Inga 3 BC development. AfDB financing for the TA project was approved in November 2013. IDA financing was approved in March 2014. The TA project provides assistance to the Government for : (i) the establishment of the Inga Development Authority as a world-class autonomous institution; (ii) the provision of advice to refine the PPP structuring, select the private concessionaire, and negotiate the Power Purchase Agreements with the Republic of South Africa, the mining industry in Katanga and the national electricity utility; and (iii) the preparation of technical, economic, environmental and social assessments according to international best practices.

Rounds of meetings have been held with IFIs, the GoDRC and their advisors to define

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<sup>7</sup> 2015 update provided by the WBG.

<sup>8</sup> Inga 1 and Inga 2 were built in the 1970's and 1980's with 1,800 MW installed capacity, only 50% of which is available.

Inga 3 BC structuring and the concessionaire selection process in order to protect the Government's interests in controlling Inga future developments while ensuring bankability for private lenders. Complementary environmental, social, and technical studies are being launched. Institutional governance arrangements of the independent Inga authority (ADEPI) have been established and a law on Inga is under preparation. The law will formally establish ADEPI.

The Request for Proposals for the Inga 3 BC concessionaire will be launched in early 2016. In order to ensure bidders will bid a firm price, and so that the GoDRC's interests are preserved, a number of issues need to be clarified before finalizing the selection of a concessionaire: (i) minimum power allocation to public grid; (ii) arrangements to protect public interest in future Inga phases; (iii) tax regime; (iv) engineering, environmental, and social standards; (v) selection criteria; and (vi) use of public (concessional) financing.

## 4. North-South Corridor (NSC)<sup>9</sup>

### i. Cost estimate and MDBs involved

The current cost is estimated to about US\$1.2 billion, following discussions at the High Level Financing Conference in Lusaka held in April 2009.

Partners involved includes the AfDB, DFID, JICA, the EU, the World Bank Group, and other bilateral donors.

### ii. Project description

The project aims to improve the state of physical transport infrastructure (roads, rail, border posts, ports), as well as the regulatory environment for trade facilitation (by simplifying and reducing cross-border clearance procedures, harmonizing transit and transport regulations, and simplifying administrative requirements, etc.) along southern Africa's key trading arteries.

The 3,900 km North-South Corridor (NSC) actually comprises two distinct sub-corridors: (i) the northern part of the NSC (known as the Dar es Salaam / TAZARA corridor) extends for 1,860 km from port of Dar es Salaam in Tanzania to Kapiri Mposhi in Zambia, of which 904 km is in Zambia and 970 km is in Tanzania, with branches to Malawi, Northern Mozambique, and the DRC; and (ii) the southern half of the NSC extends from Durban heading straight north to the DRC, via Botswana, Zimbabwe, and Zambia.

The corridor connects five landlocked countries (Botswana, Malawi, Zambia, Zimbabwe, and southeastern DRC) – with a total population of 40 million people. In addition, it is linked with Mozambique, Tanzania and South Africa as gateway to external markets through seaports. The smooth functioning of the corridor involves close coordination of infrastructure investments and trade facilitation among the eight countries involved.

### iii. Project update

JICA and AfDB approved, at the end of 2011, funding of US\$260m for the Kazungula Bridge Project on the corridor and at the border between two participating countries, Botswana and Zambia. Construction is scheduled for completion in 2018. Dialogue is also ongoing with other institutions (e.g. DBSA) and governments on developing scope and similar partnerships for future projects to boost the efficiency of the corridor, which is being championed by the South African President, as part of the Presidential Infrastructure Champion Initiative.

The World Bank approved funding for the first two phases of the regional Southern Africa Trade and Transport Facilitation Program (SATTFP): in May 2013 an IDA credit of US\$210m to Tanzania and IDA grant of US\$3m to the Dar es Salaam Corridor Committee, and in April 2015 a US\$69m IDA credit to Malawi. The SATTFP includes a sequential improvement in the physical, institutional and social infrastructure in participating countries along the NSC, and the strengthening of the management of the corridor. Phase 1 is financing rehabilitation of the 138 km Mafinga-Igawa road section of the corridor in Tanzania and establishment of a One-Stop Border Post at Songwe-

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<sup>9</sup> 2015 update provided by the WBG.

Kasumulu. Phase 2 will rehabilitate the Karonga–Songwe road portion of the corridor in Malawi and modernize border post facilities on the border with Tanzania (at Songwe) and with Mozambique (at Dedza, Mwanza, and Muloza). Phase 3 of the program is expected to cover Mozambique or Zambia, subject to readiness in each country to join the program. Mozambique has issued a formal request to join the program, however, as of March 2015, none of the other countries have formally confirmed their desire to join at this stage.

Options for further developments are being sought among financiers, including the option of private sector participation (concession) in light of the significant investment needs and the need for high volume and trade traffic to justify the investment.



## 5. Isaka-Kigali-Musongati Railway<sup>10</sup>

### i. Cost estimate and MDBs involved

Total construction costs are estimated at US\$5.5 billion.

Known partners at this stage include the AfDB and, in a related initiative, the WBG.

### ii. Project description

The project involves the extension of the existing 970 km Tanzanian railway line from Dar es Salaam to Isaka onwards for a further 494 km from Isaka on to Kigali in Rwanda. There are also plans to add a spur from Keza in Tanzania to Musongati in Burundi (197 km).

The project will complete the rail network from the port of Dar es Salaam to the landlocked capitals of Rwanda, and potentially also Burundi. The link will go through the Inland Clearing Depot or dry port at Isaka in central Tanzania, which was designed to speed-up the delivery of transit goods to Rwanda and Burundi.

### iii. Project update

The AfDB has provided funding for feasibility studies for the conversion of the Dar es Salaam – Isaka line to standard gauge, and for the construction of a new standard gauge line from Isaka to Kigali and Musongati, and these studies have now been completed.

The project was presented to prospective donors and investors at the Central Corridor Presidential Roundtable Forum held in Dar es Salaam in March 2015. The presidents of Tanzania, Uganda, Rwanda and Burundi attended the Forum, along with the Minister of Transport from the Democratic Republic of the Congo, plus various industry representatives.

In a related project, the WBG is providing US\$300 million for the Tanzania Intermodal and Rail Development Project, which supports the rehabilitation of the existing Dar es Salaam – Isaka narrow gauge line.

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<sup>10</sup> 2015 update provided by the WBG.

## 6. Jordan Railway Project<sup>11</sup>

### i. Cost estimate and MDBs involved

Total project cost is estimated at \$5 billion.

The WBG, IsDB, EIB, AFD, JICA, Arab Fund, Saudi Fund, Kuwait Fund, and Abu Dhabi Fund have previously expressed some interest in financing the Project.

### ii. Project description

The Kingdom of Jordan is planning to develop a new railway network which will connect major centers, ports and entry points within Jordan to its neighboring countries (Syria, Saudi Arabia and Iraq) so as to foster improved regional cooperation, as well as a connection to the European railway network through Turkey.

### iii. Project update

The project is currently on hold, as the Government of Jordan is unable to provide a sovereign guarantee for the total financing plan. There is also a significant financing gap.

In order to bridge this financing gap, technical assistance is needed to explore various structuring alternatives, possibly leveraging private sector support through PPP modalities or through guarantees

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<sup>11</sup> 2015 update provided by the WBG.

## 7. Scaling up Solar Energy in MENA for Export to European Markets<sup>12</sup>

### i. Cost estimate and MDBs involved

Estimated to cost US\$6 billion, the scale-up of Concentrated Solar Power (CSP) is being supported in five MENA countries (Morocco, Algeria, Tunisia, Egypt, Libya, and Jordan) by a multi-donor group, which includes: the Clean Technology Fund, EU Neighborhood Investment Facility, AfDB, WBG, IsDB, EIB, KfW (with German Government grants), and AFD.

### ii. Project description

MENA countries are embarking on scaling-up concentrated solar power (CSP) investment program to reduce their current consumption of oil and gas in the power sector as well as export power to their European neighbors. The program includes 1200 MW of CSP generation and also cross-border interconnections for export. CSP is also seen as a major green growth and employment opportunity for MENA. The Mediterranean Solar Plan was launched in 2008 as a partnership between MENA and the EU to promote Mediterranean integration through solar energy exports from MENA to EU green energy markets, given the massive comparative advantage of MENA in solar energy.

However, due to a combination of causes, including (i) the transition process in the MENA countries, which has made countries focus on more immediate needs and less costly technologies (photovoltaics); and (ii) the economic downturn in Europe and the marked increase in renewable energy generation at the same time, progress on the implementation of the Mediterranean Solar Plan has been lagging. In particular, the export of electricity from northern Africa to Europe seems to be on hold. Nevertheless, a single country alone – Morocco – appears to be able to meet the overall investment target for CSP of about US\$6 billion.

### iii. Project update

Morocco has made significant progress since announcing in 2009 its plan to install 2000 MW of solar generation as part of its Morocco Solar Plan, which is now referred to as the 'Noor' Plan. Morocco created the Moroccan Agency for Solar Energy (MASEN) to implement this plan by bringing online three large-scale CSP plants totaling approximately 1,500 MW by 2020.

The initial 160 MW phase of the first 500 MW CSP plant in Morocco's 2000 MW Noor Plan near the city of Ouarzazate is expected to come online in early 2016, and the balance of 350 MW is expected to start construction in September 2015. Work on tendering two additional 500 MW CSP plants in other locations in Morocco is expected to commence in 2016.

Egypt has also showed increasing interest in implementing a CSP hybrid plant that combines a CSP module onto an existing gas-fired power plant to increase its efficiency and reduce its gas consumption per kilowatt hour produced. Costs of CSP technologies have already begun to reflect the increased interest in CSP projects in MENA and other regions, with costs expected to reach grid parity by 2030.

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<sup>12</sup> 2015 update provided by the WBG.

On the PV front, Jordan has begun construction of its first Shams Ma'an PV plant, and Egypt has begun several rounds of tendering new PV facilities.

The CTF has made available a technical assistance envelope of US\$10 million through the AfDB and the World Bank to see how CSP could be jumpstarted in other countries of the MENA region.

The effective opening of green energy markets is awaiting decisions in key EU member states. Further efforts are required on the European side, particularly in the key member states of France, Germany, Italy, and Spain. This could be enhanced by the Deauville Partnership's pledge of concrete support to MENA partner countries through market access and aid, as well as by the revised European Neighborhood Policy's pursuit of those objectives.

## 8. Turkmenistan-Afghanistan-Pakistan-India (TAPI) Natural Gas Pipeline<sup>13</sup>

### i. Cost estimate and MDBs involved

Estimated capital expenditure (based on 2015 technical feasibility study) is US\$8.7 billion.

ADB has acted as the Secretariat for the TAPI pipeline project since 2003 and has provided more than US\$4 million in technical assistance grants to date. In 2013, ADB was appointed Transaction Advisor by the state-owned gas companies of Turkmenistan, Afghanistan, Pakistan and India. As Transaction Advisor, ADB has actively been involved in identifying and selecting a Consortium Leader to spearhead the implementation of the planned pipeline and has facilitated the establishment of a pipeline consortium entity.

### ii. Project description

The TAPI pipeline, with an estimated length of 1,600 km (from the Turkmenistan-Afghanistan border to the Pakistan-India border), will export up to 33 billion cubic meters of natural gas per year from Turkmenistan to Afghanistan, Pakistan and India over 30 years.

The project will bring multiple benefits to the participating countries. Turkmenistan is known to have the world's fourth largest proven gas reserves, and the pipeline will allow it to diversify its gas export markets to the southeast, into southern Afghanistan, Pakistan and northern India. The buyers (which are the respective state-owned gas companies of Afghanistan, Pakistan and India), in turn, will benefit from enhanced and longer term energy security. Overall, the TAPI pipeline will have transformational impact on regional cooperation and boost other initiatives aimed at bringing peace and economic stability to the region.

### iii. Project update

In August 2015, State Concern<<Turkmengaz>> (Turkmengaz) was unanimously endorsed as the Consortium Leader. Turkmengaz will now lead the other shareholders to further develop the TAPI Project, including undertaking detailed design, route surveys, procurement and financing efforts.

The Shareholders Agreement and the Investment Agreement are close to being finalized.

In November 2014, the pipeline consortium entity – TAPI Pipeline Company Limited – was incorporated in the Isle of Man with each of the four TAPI gas companies initially having equal shareholdings. The Board of Directors of TAPI Pipeline Company Limited has been constituted and its first meeting was held on 19 November 2014.

Several key agreements have been successfully concluded and signed at the governmental and commercial levels. The Inter-Governmental Agreement and the Gas Pipeline Framework Agreement were signed in December 2010. The Gas Sales and Purchase Agreements (GSPA) between Turkmengaz & Inter State Gas Systems Pvt. Ltd (ISGS) and Turkmengaz & GAIL (India) Limited (GAIL) were signed in May 2012. In July 2013, the GSPA between Turkmengaz and Afghan Gas Enterprise (AGE) was signed.

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<sup>13</sup> 2015 update provided by the ADB.

The Operations Agreement between Turkmengaz and the buyers (AGE, ISGS, and GAIL) was signed in July 2014.

ADB engaged consulting teams, for and on behalf of the four TAPI gas companies, to undertake due diligence on the legal, domicile selection and tax, technical feasibility and safeguards, risk and financial feasibility, security, insurance needs and availability, and seismic hazard aspects of the project. The technical and financial feasibility studies and the information memorandum were completed in July 2015.

## 9. ASEAN Infrastructure Fund (AIF)<sup>14</sup>

### i. Cost estimate and MDBs involved

In 2011, the member countries of the Association of Southeast Asian Nations (ASEAN) and the ADB agreed to set up an infrastructure fund (AIF) with a total equity contribution of about US\$485 million. The AIF was legally established in 2012 and became operational in 2013; and began its lending operations in 2014.

### ii. Project description

The AIF will tackle major infrastructure deficiencies in ASEAN countries and will lend for long-tenor sovereign/ sovereign guaranteed infrastructure projects. Total lending commitment by AIF until 2020 is estimated at about US\$4 billion (combined with ADB's co-financing).

The AIF will contribute to enhanced access to key infrastructure services within the ASEAN region, leading to improved regional cooperation including greater trade and connectivity, and synergy with other ASEAN regional integration initiatives including the ASEAN Bond Market Initiative. One of the primary operational targets is to identify and finance appropriate regional projects to the extent possible.

Through this initiative, and with ADB's financial, technical and operational support, ASEAN's investments will be catalyzed, representing an important effort at south-south cooperation.<sup>15</sup> The AIF model thus holds the promise of leveraging future potential equity contributions and co-financing, and subsequently demonstrating a means of unlocking a portion of the region's own resources (such as domestic savings and foreign exchange reserves) for its needs through future debt issuance.

### iii. Project update

In 2014, the AIF was able to finance three projects for a total of US\$165 million (two projects in Indonesia [water and energy sectors] and one project in Viet Nam [energy sector]). In 2015, about four projects are expected to be financed, for a total of about US\$200 million.

In addition, further co-financing by other development partners has been included along with the AIF financing in the above-mentioned projects. The AIF is currently working on a plan to catalyze private investments for the region's infrastructure development.

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<sup>14</sup> 2015 update provided by the ADB.

<sup>15</sup> ASEAN Members' strong support for the AIF is indicated in the ASEAN Finance Ministers Meetings' joint statement (internet link: <http://www.asean.org/news/asean-statement-communiques/item/joint-statement-of-the-1st-asean-finance-ministers-and-central-bank-governors-meeting-afmgm-kuala-lumpur-malaysia-21-march-2015-theme-our-people-our-community-our-vision>).

## 10. Regional Program for Scaling-up Clean Biomass Energy in the Greater Mekong Subregion<sup>16</sup>

### i. Cost estimate and MDBs involved

The ADB had been aiming to set up this program for an aggregate amount of US\$355 million.

### ii. Project description

The project aimed to scale up the use of biomass technologies (biogas and biochar) within the Greater Mekong Subregion (GMS). The two components were: (i) a regional program of US\$80 million to support efficient utilization of biomass in GMS countries; and (ii) a US\$275 million Asian Rural Biogas Fund to be on-lent by financial institutions for private sector participation and including grants for developing the associated markets wherever feasible. The project was expected to transform the rural poor in Cambodia, Lao PDR and Viet Nam from being emitters of greenhouse gas and black carbon to become active participants in production of clean bioenergy, carbon sequestration, and food security enhancement.

### iii. Project update

ADB recommends the de-listing of the project from the ongoing G20 report, for two reasons.

First, from the private sector perspective, ADB intended to launch the Asian Rural Biogas Fund. However, KfW and IFC decided to launch a much broader program focusing on regions beyond GMS and beyond bioenergy.

Second, from the public sector perspective, ADB decided to adopt a phased approach for scaling up bioenergy in the GMS, with a limited initial investment of about US\$30 million focusing on three LDCs in GMS - Cambodia, Lao PDR and Myanmar.

ADB hopes that this phased approach will lead to realizing much larger investments on bioenergy in all GMS countries in the near future.

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<sup>16</sup> 2015 update provided by the ADB.



## 11. Pacific Corridor<sup>17</sup>

### i. Cost estimate and MDBs involved

Feasibility studies supported by the IADB show an aggregate economic cost of US\$3.12 billion for the road works and approximately US\$630 million for the improvement of the border crossings along the Pacific Corridor.

### ii. Project description

Recognized as the principal axis of physical integration in the Isthmus, the Pacific Corridor has as its key objective the integration of the Mesoamerican region by facilitating the transport of goods and persons. It starts in the city of Puebla, Mexico, and follows the coastal route parallel to the Pacific Ocean until Panamá City, covering a total length of 3,565 km which crosses seven countries – Mexico, Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica and Panama – linking together 11 border crossings that are considered key infrastructure nodes. The corridor also connects important ports and airports, which increases its role as a logistic backbone for the region. The ports involved in the Pacific Corridor mobilize nearly 60 million tons of goods.

### iii. Project update

As of December 2014, roughly 57% of the investment needs for the Pacific Corridor have been covered. The remaining 43% is equivalent to US\$1.343 billion. During the last 10 years, the IADB has approved lending to finance interventions along the corridor – mainly road sections – in the amount of US\$1.7 billion.

On December 16, 2013, the IADB approved a loan with El Salvador for US\$115 million for highway improvements in on the 300 km road between the La Hachadura border crossing in Guatemala and El Amatillo border crossing with Honduras, which is a critical segment of the Pacific Corridor.<sup>18</sup> This operation is aimed to contribute to a 64 % increase in exports, imports, and international transit of goods passing through the El Amatillo border crossing between El Salvador and Honduras: in 2010, 1.6 million tons of cargo passed through El Amatillo, an amount that is expected to increase to 2.6 million tons by 2019.<sup>19</sup>

Likewise, on July 17, 2015, the IADB approved a loan for US\$100 million to improve Costa Rica's border crossings with Nicaragua and Panama.<sup>20</sup> These resources are designated for the border crossings in Paso Canoas, Peñas Blancas, Tabillas and Sixaola.<sup>21</sup> This operation will, in turn, be coordinated with a US\$55 million loan approved for Nicaragua<sup>22</sup> on the same date to improve its border posts with Costa Rica and Honduras.<sup>23</sup> A loan to Panama for a similar program is currently being prepared.

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<sup>17</sup> 2015 update provided by the IADB.

<sup>18</sup> <http://www.iadb.org/en/news/news-releases/2013-12-19/improvement-for-the-mesoamerican-pacific-corridor,10702.html>.

<sup>19</sup> <http://www.iadb.org/en/projects/project-description-title,1303.html?id=ES-L1085>.

<sup>20</sup> <http://www.iadb.org/en/news/news-releases/2015-06-17/border-integration-in-costa-rica,11178.html>.

<sup>21</sup> <http://www.iadb.org/en/projects/project-description-title,1303.html?id=CR-L1066>.

<sup>22</sup> <http://www.iadb.org/en/news/news-releases/2015-06-17/nicaragua-to-improve-border-crossings,11179.html>.

<sup>23</sup> <http://www.iadb.org/en/projects/project-description-title,1303.html?id=NI-L1083>.

During the IADB's 2015 Annual Meeting in Busán, Governors approved the Update to the Institutional Strategy, which will drive the IADB Group's work for the next four years.<sup>24</sup> In addition to low productivity and innovation, and social exclusion and inequality, the Strategy prioritizes limited economic integration as one of the three key challenges to be addressed in the region. As such, it is expected that the IADB support more "exemplary regional projects" such as the Pacific Corridor in the future and in a way that is consistent with the six criteria suggested by the G20's High Level Panel (HLP) on Infrastructure (institutional capacity, political support, project maturity, transformational impact, and attractiveness for the private sector).

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<sup>24</sup> <http://www.iadb.org/document.cfm?id=39556684>.