Comments to AIIB's Energy Strategy: Sustainable Energy for Asia Issues Note for discussion

November 8, 2016

We welcome the AIIB's decision to open the Energy Issues Note for public comment and the disclosure of the draft document under 'Operational Policies' on its website. However, to date, it is not clear whether the final product – the AIIB's Energy Sector Strategy - will serve as a binding operational policy. We would therefore encourage the Bank to communicate to the public the process, and commit to a binding operational policy against which projects under loan consideration will be screened and selected.

We are pleased to see that the Issues Note proposes that the AIIB Energy Strategy embrace as overarching goals the results of the wide multi-stakeholder dialogues reflected in the Sustainable Energy for All (SE4ALL) initiative, and the agreement of 196 nations during the UNFCC Conference of the Parties (COP) 21 (30 November 2015 – 12 December 2015). It is our hope that a future binding AIIB Energy strategy will operationalise these goals. It is in this spirit that we submit the following comments.

Surprisingly, the Issues Note makes a strong reference to development commitments by the Bank in the framework of its energy sector approach. This contrasts with repeated statements by AIIB top management that the new institution is not a development bank, but a multilateral institution specialised in investment in infrastructure development in the Asian region.

At a minimum the AIIB should adopt robust do-no-harm policies covering all sectors of its operation, regardless of the nature of financing. The development of such policies, including the energy strategy, is still on-going. It is critical that these policies and a functioning accountability mechanism are in place before the AIIB expands its portfolio of free standing projects.

Responsible financing

The Bank chooses to take a "technology neutral" approach to the financing of fossil fuel electricity generation projects. It leaves the choice of the best mix of technologies to client countries. However, the AIIB bears its own responsibility regarding the carbon footprint of its investment portfolio.

According to the IMF,¹ opportunities to 'decarbonise' the global economy are severely hampered by existing national and international energy policies, most importantly the large-scale and often hidden post-tax energy subsidies for fossil fuels - see Annex 2.

¹ Coady, Parry, Sears and Shang, How large are global energy subsidies?, IMF, Working Paper No. 15/105, May 2015.

Public funding support for private investments in large scale energy infrastructure (for the processing and transportation of oil and gas, for instance) has an effect comparable to the post tax energy subsidies for fossil fuels that the IMF has referred to. As long as the investments for the infrastructure have not been written off, the infrastructure causes a lock-in effect (for instance, in gas consumption). Second, there are financial consequences in terms of future subsidies. Because energy exploration and production is getting economically less and less viable, government support will be increasingly vital for keeping production going. In other words, because no one will want an idle production site or terminal, the very construction of such infrastructure automatically builds in the need for future energy subsidies.

The AIIB will have the unprecedented opportunity to influence its client's energy investments. In particular, we would urge the Bank to take into account the local impact of mining/ extracting industries it finances and from which energy is sourced. Among the policy responses to address this must be a requirement that clients adopt a more proactive approach to environmentally and socially responsible supply chain management.

On leveraging the private sector

The potentially positive role of the public-private partnerships (PPP) for the energy sector is much overestimated. Experience from Europe and around the world demonstrates that at the end of the day PPPs bring little or no benefit for the public and that they represent greater risk than conventional procurement relationships. Such ventures are commonly set up in a way that the cost and the risk are non-equally distributed, making it too costly for the public and rendering obvious that private involvement serves to increase the public expense.

A power grid with high voltage lines enables countries to pool the available energy from different sources and secure a steady energy supply. The result will be a consolidated and constant supply of efficient energy, which would also be environmentally-friendly. However, grids are considered to enlarge business opportunities for the private sector at the same time.

This does not necessarily result in better access to energy for the poor; rather, what is promoted is the introduction of a (spot) market for energy. In a spot market, commodities are traded for immediate delivery: cash and commodity must be delivered on certain days after the trading date. Needless to say, a spot market in the energy sector can only function if sufficient infrastructure for transporting energy from different places and sources exists. Apart from the lock-in effects at a large-scale this generates market distortions and inefficiencies and does not guarantee affordable energy for the poor. It also does not promote a swift withdrawal from fossil fuels.

On 'access' and energy security

The AIIB Energy Strategy should be based on an updated understanding of energy security which builds on the principles of sustainability and a focus on basic human needs. At the same time, the cost estimate of various energy technologies - as frequently referred to in the Issues Note - should be understood and explicitly defined as including environmental and social externalities, and exclude any type of subsidy for fossil fuel projects.

Energy sustainability is defined in the Issue Note as 'access to adequate and reliable supplies of environmentally and socially acceptable forms of energy at competitive prices without compromising the energy needs of future generations.' This definition raises concerns, including (but not limited to) whether competitive pricing helps deliver energy to the poor, while protecting the non-energy (but environmental) needs of the present and future generations.

Further, along the line of ensuring energy security and equality, the Issues Note suggests 'reducing the negative health impacts caused by indoor combustion of solid fuels.' This immediately brings to mind the deployment of coal-powered thermal power plants built to generate electricity, replacing the use of indoor household coal for heating and cooking. Such an approach might eliminate the negative health impacts of indoor pollution, but it would not transform the overall foreseeable pollution caused by coal-fired thermal plants.

The Issues Note's specific reference to 'access' denotes the ability to purchase energy from domestic and foreign sources on a commercial basis, with no undue impediments imposed by governments, such as quotas on imports or exports.

This definition refers to the access of producers to the market for electricity, and not to providing energy to those who have little or no access to it. The latter would require an alternative approach based on supporting decentralized and sustainable in-country energy sources and encouraging governments to impose restrictions (for example, via taxation?) on certain energy sources to internalize their negative social and environmental impacts.

On decentralised electrical grid

The Issues Note emphasises that the Bank may envisage grid development that separates energy generation from consumption, and suggests that 'support for power transmission and distribution could be one of the core areas for AIIB interventions, alone or in association with other multilateral or bilateral institutions'.

The challenge remains that a number of the Bank's recipient countries have not yet realised the technical advance represented by today 's renewable energy, which can help overcome a traditional separation between producers and consumers (citizens and companies can progressively become small producers and remain consumers at the same time). Financing large-scale energy infrastructure projects, such as high-voltage transmission lines across borders and regions may mean putting massive investments into the outdated energy

systems that will freeze development of sustainable energy sources and more active involvement of citizens in energy production at a small scale.

As evidenced in the last two decades of experience in Central Asia, the attempt to build regional cooperation through the construction of large-scale transboundary energy projects does not necessarily increase regional energy integration. Moreover, some of these mega projects, including major dams, actually fuel transboundary conflicts.

Similarly, in the Asian Development Bank's Greater Mekong Subregion (GMS) program - another design aimed to facilitate regional energy integration - the construction of mega hydro power generation projects resulted in devastating economic, environmental and social impacts for local fishermen and farmers in Laos. The energy is exported to Thailand, not for meeting the electricity needs of energy poor households, but rather for commercial operations. Further, the dams built along the Mekong river have become a source of transboundary conflict between the countries upstream and downstream.

Alternatively, the exploration and development of decentralised and small scale renewable energy schemes are much needed in communities that both lack the access and finance to kick start small-scale infrastructure - both in logistics and distribution - through the use of renewable energy sources, e.g. energy-saving wood fuel stoves, solar water heaters, and other energy efficient technologies.

Building the energy system of the future

For decades development of energy systems has been focused on mega power generation, designed with a grid that supports centralised power generation systems. Today, the advancing state-of-the-art small scale renewable technologies, combined with the development of smarter grid management, have transformed visions of energy systems.

The AIIB has the unique opportunity to champion financing green energy system for future generations, and avoid repeating the past 'lessons learned' by other MDBs in financing outdated energy systems that have kept mega power generation at the center of yesterday's infrastructure development finance.

In pursuing the 'green' energy systems of the future, the AIIB could develop a structure that will give it a competitive edge over other IFIs, and also address complicated financial challenges related to the development of decentralised energy systems. Such systems will be far more stable and secure than the traditional grids of today. The Issues Note too often refers to large-scale generation and energy security, which is an approach that is lagging behind today's discussions, and can't serve as a base for genuine green investment.

Clearly, the need to finance decentralised renewable energy systems, as well as consumer side energy efficiency, requires new financial instruments to be deployed, covering a broader range of projects. The AIIB should take a lead on development of new innovative

approaches, rather than following the route of other IFIs, which continue to struggle with changing their investment preferences.

Policy coherence and an integrated climate policy

The Issues Note proposes, correctly, that the AIIB's Energy Strategy should contribute towards achieving the goals of the Paris Agreement - a "well below 2°, aiming for below 1.5°" target - which is stronger than the sum of current INDCs. Each project should therefore specifically demonstrate (*ex ante*), and assess (*ex post*) how it delivers mitigation beyond the INDC of the country in which the project is based. AIIB-financed projects would prioritise low-carbon development over carbon-intensive options, and thereby support countries' NAMA initiatives.

In keeping with the 'green' operational model vision, the Bank would need to develop a climate action policy that sets targets for financing of renewable and energy efficiency projects, and assess the medium term and long term climate impacts of such projects.

In order to reduce the carbon intensity of energy supply, and deliver Sustainable Development Goals 7 on universal access to affordable, reliable and sustainable modern energy, as well as promoting a low carbon energy transition that "leaves no-one behind", the Bank would need to commit to developing a binding climate action assessment policy which supports the operationalisation of the 'green' goal, as well as adopt explicit guidelines and criteria for all energy sources.

Fossil fuel power generation

Concerning the financing of fossil fuel projects in exceptional circumstances, clearly defined by fuel-based methodology, the Bank's future binding energy strategy should ensure the early retirement of existing fossil fuel projects, while not allowing the prolongation of existing fossil fuel infrastructure life, supported by an up-to-date national energy strategy of the country in which the project is located.

Given that the Issues Note does not rule out AIIB fossil fuel financing as such, it would be advisable that the AIIB ensure as a minimum the establishment of an Emission Performance Standard (EPS) for the energy sector of 350 g/CO2/kWh, in order to support the implementation of the Paris agreement in line with best international practices. In particular, the AIIB energy strategy should eliminate the risk of further high-carbon lock-in by excluding further lending to coal power plants and mining, as well as to oil projects, under any circumstances, while significantly limiting lending to other fossil fuel greenfield projects.

The Issues Note's strong emphasis on AIIB support for gas as a "transitional fuel" is of particular concern. Firstly, in order to meet climate objectives, strategic support for gas is

not possible, as research and scientific data already show². Secondly, and more concretely, support for capital-intensive gas infrastructure, such as pipelines, LNG terminals and storage plants, would lock in a fossil fuel based model of energy production for decades in Asia and beyond. Asian countries would better off leapfrogging the current energy model (including questionable gas infrastructure development) followed in Western countries, and instead pursuing a decarbonisation strategy for their economies. Thirdly environmental, social and human rights impacts associated with gas development are very negative, and indeed comparable to those produced by coal and oil development projects.

Thus the AIIB should already be putting in place a phase out strategy for gas-fired power projects by 2020, and begin to significantly limit the amount of funding for this sub-sector each year progressively to zero. Furthermore, the AIIB would do well to develop precise operational guidelines for justifying the exemption circumstances under which gas power projects may be financed.

Instead the AIIB should specialise in supporting energy efficiency and small scale, decentralised and community-controlled renewable projects. In this context, we emphasise that support for large hydro in the region has a well-known legacy of poor environmental, social, development and human rights impacts. A bias in favour of this technology as a "clean" energy raises serious concerns for us so and underscores the need for strict and high AIIB standards.

Oil and natural gas processing, transportation and distribution.

We welcome that the Issues Note does not see a role for public financial institutions in investing in the above sector. However, the Issues Note acknowledges, that "in some countries in Asia, national oil and gas companies also are active in these sub-sectors and governments may express interest in AIIB intervention. AIIB support could be based on the contribution of such projects to reliably and securely meet the country's energy needs. Development, rehabilitation and upgrading of natural gas transportation (including storage) and distribution networks would also be pursued in order to foster greater penetration of gas during the transition to a "decarbonised" power sector, especially in Asia where such penetration is low compared to other regions."

We believe that AIIB would do well in taking a step beyond this approach and support countries to develop thoroughly sustainable energy sectors. Any investments for new greenfield projects in the area would be problematic. However, this would not preclude the AIIB from playing a role in upgrading of old gas infrastructure to reduce and limit leakages.

The building of gas infrastructure for the supply of gas to consumer markets in Asia directly facilitates the subsidised exploration and extraction of natural gas for many years to come

http://www.yaleclimateconnections.org/2016/07/pros-and-cons-the-promise-and-pitfalls-of-natural-gas/

in countries like Russia. Countries are increasingly dependent on imports of natural gas from remoter areas. Without tax breaks and other government support from Russia the project (exploration and production) would not be economically viable. The major reason for loss of viability is that resources are becoming less and less accessible and therefore scarcer and more expensive. Tapping new reserves involves huge and expensive technical difficulties.

Because gas exploration and production are economically less and less viable, government support will be increasingly vital. In other words, because no one will want an idle production site or terminal, the very construction of such infrastructure automatically builds in the need for future gas subsidies.

According to the British Overseas Development Institute (ODI), the governments of rich countries (G20, including Russia) already spend US \$88 billion every year to support the exploration of fossil energy – this is more than double the amount that the oil and gas companies themselves invest. Quite often, government funding is channelled through multilateral development banks or infrastructure investment funds created for the purpose.

On energy efficiency

According to the Issue Note "...it is proposed that AIIB focus first on making the most of existing energy infrastructure stocks through rehabilitation and upgrade of existing generation plants, with special attention to fossil fuel based ones and aggressive loss reduction programs in power and gas transmission and distribution networks. At the same time, it would develop the required financial instruments and engage potential financial intermediaries to tap the huge but dispersed EE potential in industry and buildings and transport. Cooperation and coordination with the transport practice is essential for the latter".

This is a critically important proposal which emphasises that the development of energy efficiency at the consumption level should be a priority for the AIIB's future Energy Strategy. Investments into improvements of the fossil fuel based energy generation will likely lead to the lifetime extension of the capacities. It will not make sense for utilities to replace generating capacities once they will be upgraded with support of loans. As a result, it will extend the time recipient countries will rely on oil and coal.

Renewable Energy

The Issues Note includes hydro power as a focus for AIIB's investments in renewable energy. However, the impacts of large hydro projects, including resettlement, downstream impacts and climate impacts due to methane emissions, call their inclusion among sustainable energy sources deeply into question (please see annex).

Furthermore, this approach would make AIIB investments far less useful for the regional market which has experience in attracting commercial investments for the development of hydro projects.

Wind and solar should not be considered as less attractive for regional energy system development. Moreover, this is where AIIB investments can lead to the most significant benefits as they will help shape more sustainable energy systems, rather than supporting business as usual models in energy finance.

It should be stressed that renewable energy projects may have negative impacts. Therefore it is critical to develop a set of minimum criteria for sustainability of investments. The environmental impacts of renewable energy are site specific, but generalizations are still possible. At the project development stage, the same importance needs to be given to social and environmental aspects as to technical, economic and financial aspects. The assessment needs to cover the full range of policy, programme, and project options. Strategic impact assessments and life cycle analysis need to be integrated and undertaken as an initial step in the process and should give demand-side options the same significance as supply options. Renewable energy must be supported in order to enter energy markets, but the support must be limited to renewable energy that is produced in sustainable ways.

Therefore we would argue for the need to put in place explicit guidelines and criteria for all forms of renewable energy, in order to ensure that all financed renewable projects fulfil sustainability criteria

Hydropower sector development

In order to ensure the sustainability of development of the hydro sector, it is critically important to base any such investments on the international consensus developed around the principles and recommendations of the World Commission on Dams. There is further guidance on international best practices for protection of rivers, including the EU Water Framework Directive's respective guidelines and requirements of The EU's environmental Impact Assessment and Strategic Environmental Impact Directives.

Development of hydropower in the recipient country should be based on a national energy strategy that has undergone a Strategic Environmental Impact Assessment (SEA) procedure where a needs assessment, demand management and assessment of various alternatives for satisfying energy needs are given priority. Attention should be paid to the impacts of climate change on hydropower generation levels, and over dependence on hydropower must be avoided. Rehabilitation and increased efficiency of existing HPPs has to be given priority before new project development.

Small hydropower may be developed on not more than 30-50 percent of rivers in a catchment area. Determination of the exact boundary must be subject to prior assessment

during the preparation of river basin management plans and their strategic environmental assessment.

Based on strategic environmental assessment of the river basin management plans, "no go zones" should be created where implementation of any hydro project will be prohibited. "No go zones" should include river stretches located in or having direct impact on existing or proposed protected areas, including IUCN categories I-IV, areas protected within national categorization systems, nationally recognised important biodiversity areas not currently protected or proposed to be protected, as well as river stretches located in areas with high conservation value/importance territories (eg. upstream areas of rivers, riparian floodplains, intact (virgin) forests, mountainous wetlands, habitats of rare and endangered species and subspecies).

Classification of rivers and river stretches with respect to their potential appropriateness as locations for HPPs has to be conducted based not only on technical energy potential, but also based on ecological and landscape value. Water body status has to be determined (from high status to heavily modified) in order to define sufficient environmental flows downstream from the water intake. Maintaining of an environmental flow in the river (rather than minimal sanitary flow) is necessary to ensure that riverine ecosystems, climate change adaptation potential and the livelihoods of people depending on them are sustained. For project level sustainability screening for hydro power generation projects please see in *Annex*.

Nuclear Energy

We welcome the Issues Note proposal to exclude support for nuclear energy generation at the present stage. However, we are concerned that the Issues Note does not rule out AIIB support for the nuclear industry at a future date. This is clearly at odds with the policies at other IFIs, such as the World Bank, which include a clear ban on financing nuclear projects. Nuclear power has proven to be too expensive and too high risk. Technical solutions, such as storage of radioactive wastes, remain elusive. Furthermore, the critical issue of nuclear technology proliferation and its possible uses for military and even terrorist ends should preclude the AIIB from supporting nuclear energy projects of any kind.

Annex 1 - Hydro power projects

1. Project development should be based on timely and informed public participation procedures in which affected communities and other stakeholders including civil society

groups are pro-actively consulted (not only informed), where their views are properly taken into account and consent of the affected communities for project development is obtained.

- 2. Compensation measures for affected communities have to be mutually agreed and be legally enforceable.
- 3. In the case of derivative HPPs, based on the status of the river determined as the result of classification, a holistic methodology must be used to determine environmental flow.
- 4. Affected community livelihood needs (water, plants, animals, recreation etc.) should be assessed and sufficiently provided for during project construction and operation; impacts on water ecosystems (including on lakes, estuaries and other water bodies or their elements downstream) and climate should be assessed and prevented/mitigated during the project's construction and operation.
- 5. The hydropower project must not involve construction of any dam that affects the water flow regime and wildlife circulation; therefore, any project must:
- Not involve any dam that blocks the river flow entirely;
- Not involve mitigation like fish ladders and/or fish friendly turbines that have low passage efficiency;
- 6. Any hydropower project must:
 - Not derogate the current status of the river;
 - Not derogate the ecological services / functions of the river including wildlife reproduction, climate change adaptation potential, erosion protection and sedimentation;
 - Not involve any physical and large scale economic resettlement that will have a significant negative impact on livelihoods of the affected communities
 - Be integrated into the existing landscape in a way that it does not cause significant visible changes or disrupt wildlife movement;
 - Have a significant positive climate change impact or impact on a river's capacity to serve climate adaptation.
 - Not involve any existing or planned associated facilities such as other HPPs or transmission lines that would generate significant cumulative environmental and social impacts.

Annex 2 - IMF and post-tax energy subsidies

Post-tax subsidies arise when the price paid by consumers is below the supply cost of energy plus an appropriate corrective tax that reflects the environmental damage associated with energy consumption and an additional consumption tax that should be applied to all consumption goods for raising revenues.

From a development perspective the abolishment of post-tax subsidies for fossil fuels would generate very substantial fiscal, environmental and welfare gains to countries. According to the IMF report, eliminating post-tax subsidies in 2015 could raise government revenue with 3.6% of global GDP, cut global emissions by more than 20%, and cut premature outdoor air pollution deaths by more than half (that is, saving 1.6 million lives). Furthermore, because existing fossil fuel subsidies overwhelmingly benefit the rich, by eliminating these subsidies the freed up resources could also be used to reduce poverty and inequality.

Commenting organisations:

BothEnds, the Netherlands (http://www.bothends.org/)

CEE Bankwatch Network, Europe (http://bankwatch.org/)

Green Alternative, Georgia (http://greenalt.org)

Green Watershed, China (www.chinagreenwatershed.org)

Polish Green Network, Poland (http://zielonasiec.pl/)

Re: Common, Italy (http://www.recommon.org/)

Urgewald, Germany (https://www.urgewald.org/)

350.org, Australia (http://350.org.au/)