Comments from Germany on Approval by Mail: Chile Large-Scale Photo-Voltaic Program (IDB/IFC)

Dear Patricia,

on behalf of Annette Windmeisser, I would like to send you our comments on the Chile Large-Scale Photo-Voltaic Program for your consideration.

Best regards,

Gottfried von Gemmingen

Referent/Policy Advisor

Referat Klimapolitik und Finanzierung / Division Climate Policy and Climate Financing

Bundesministerium für Wirtschaftliche Zusammenarbeit und Entwicklung / Federal Ministry for Economic Cooperation and Development

Clean Technology Fund Chile Large-Scale Photovoltaic Program (IDB/IFC)

- Comments GER -

Investment criteria:

Potential GHG Emissions Savings

- **GHG/ indirect demonstration impact:** The proposal claims assuming a 5x multiple but calculates 44.3 Mt / 7.4 Mt, is hence based on the assumption of a more optimistic multiple of 6x.

Development Impact

Local content/manufacturing: We assume that with the large and persistent
worldwide surplus capacity of PV module production lines, the potential of local
manufacturing for this component will be very limited in the short and medium
term.

Implementation Potential

- Cost assumptions for different plant sizes: Pls specify the rationale for assuming that the price for 70 MW and 90 MW project will be the same.

Effective utilization of concessional finance

- Appropriate level of concessionality: Given the planned large scale investments by private corporations, continuous decrease of technology cost and high irradiation of Northern Chile, some market actors claim that grid-parity might be achievable in the medium rather than long term. Since you are proposing senior debt to be priced as low as 75 bps, we would appreciate if you could further elaborate on your assumptions regarding long-term cost reductions.

Mitigation of Market Distortions

- Project selection: Apart from concessionality of financing terms, project selection will be key to avoiding market distortions, pls specify which criteria were / will be used.
- Local FIs: What is the current risk appetite of local banks for the more mature Solar PV projects? In which ways (apart from demonstration effect) will the local banking sector be encouraged to take risk in future solar PV projects?

Financial sustainability:

- Long-term Power Purchase Agreements: Is there a mechanism in place to secure long-term PPAs for CTF funded solar PV projects.
- Competitiveness vs. coal-fired electricity: Since Chilean Law generally regulates power dispatch as economic dispatch, future competitiveness of solar PV vs. coal-fired power will be key. What are your assumptions regarding this challenge and/or relevant future regulation?

Program Summary

- Merchant commercial strategy / sale of energy at spot market tariffs: What are the expected prices on this market and / or will there be any incentive/payment for NCRE in addition to the market price? In case price forecasts are available, do these factor in the potentially very significant (price) effect of the SING SIC interconnection (incl. the integration of the 2 existing dispatch centers) on the development of the Chilean power market? Is there a law/regulation that guarantees interconnection and dispatch of solar PV-generated power?
- **Potential investment terms:** The "Investment period" of 12 24 months seems very short. This would require that for the projects selected almost all rights and permits are already in place or at least applications issued. The same applies to grid connection rights and infrastructure (see also below question on risks).
- Risks: With the given time frame of 12 24 month, grid connection rights and infrastructure should already be in place for the project selected. Pls specify whether this is the case and if not how permitting will be fast tracked to avoid delays.

Performance Indicators

- **Replication factor:** According to the numbers given in the overview table, the factor is much closer to 6x rather than the indicated 5x. Pls correct accordingly.
- Job creation: Pls distinguish b/w permanent jobs and jobs limited to the
 construction phase only. Moreover, we feel the factor used for indirect impact of
 indirect job creations seems rather ambitious and would appreciate if you could
 explain how these were calculated and/or on which assumptions these are based.