

PSP evaluation in context of the Technology Mechanism

Findings: highlights

Pilot Projects - observations

- Largely (pilot) demonstration projects - of new climate technologies
- Small projects (budget size)
- Support technology transfer (South-South and North-South)
- Catalyze private investment
- Support technology development (Mexico Wind, Senegal Typha)
- Some projects: supply/value chain development (most challenging objective) – Sri Lanka bamboo, and Senegal Typha
- Capital grants to incentivize technology adoption by users (firms, farmers) provided in half of the projects
- Two multi-country projects (Solar Chill, and Thailand cassava ethanol): show effect of national context/enabling environment
- T Focus: range from 1 narrow technology (Thailand ethanol) to range of T within technology category (Jordan irrigation, Guandong green freight; various solar T in Chile)

Evaluation

- **Observations**

- Uneven quality of MTRs (clarity, comprehensiveness, rigour)
- Effectiveness and efficiency not assessed in all MTRs; differences in approach (design, output, outcome; some reviewers less exacting than others)
- Mid-term, not final, except for Guandong Green Freight project
 - Narrative of outputs achieved, challenges and reasons for non-achievement more important/indicative than score

- **Effectiveness**

- Short narrative on effectiveness and efficiency
- Except for Guandong Green Freight, projects falling short on achieving outputs/targets on time
- Factors beyond control (negative and positive)
- Weak PMUs
- Some very challenging endeavours: overambitious? For example catalyzing private investment in biomass based electricity generation in Cambodia; Sri Lanka bamboo, complex project, many contingencies (land availability, regulatory, incentives, involvement/investment of SMEs)

Scaling and Lessons learnt

- **Scaling & replication**

- Most projects far from scaling: some pilots/small scale demonstration → laid groundwork
- In case of Guandong and Jordan projects: follow-up projects, including finance and further support/projects by same IA; also replication in other countries (Green Freight)
- Senegal Typha: French GEF follow up project
- Chile rooftop solar PV, but not as a direct result of project, through credit line for SMEs will/should contribute to scaling
- Russian Federation ODS some results, but EE difficult
- Question of incentives and financing but also technology cost, lack of market

- **Lessons**

- Small sample, very different projects
- Enabling environment
- Government leadership but also dialogue/engagement in development and implementation stage
- Importance of outreach
- Need for flexible design
- Need for studies/data/pre-feasibility studies
- Need for TT models/best practices
- Need for suitable/dedicated financing instruments

	EBRD - FINTECC	IADB	AfDB - ACTFCN	ADB and UNEP CTNFC
Project origination	EBRD pipeline	External – 5 Project Executing Agencies (PEAs)	Mitigation: external - private and public sector Adaptation: AfDB pipeline Knowledge: external research	Public sector: ADB pipeline Private sector: external through VC/PE funds and Assisted TT Broker model
Thematic Focus	Mitigation: showcase high impact technologies to catalyze further adoption (EE, industrial, RE, other) Adaptation: Water	Mitigation: forestry, transport, renewable energy and energy efficiency Adaptation: agriculture	Mitigation: energy access/ implementation of SEforALL Adaptation: mainstreaming adaptation in water projects	Mitigation: range of T Adaptation: range of T
Support/delivery	Incentive/Capital grant of 5 to 25% TA: technical and policy support; FAO and IEA execute technical cooperation	TA delivered through Partnerships with regional institutions that are leaders in specific themes and act as PEAs: identify projects & respond to country requests	Technical Assistance executed by AfDB: first mile actions to prepare projects for SEFA flowing from AAs and IPs Adaptation: assistance nature unclear	TA (policy & technical) executed by UNEP TA (technical) executed by ADB TT deal support through commercial broker
Components	<ol style="list-style-type: none"> 1. Regional technology transfer networks 2. Technology transfer TA 3. Financing pilots 	<ol style="list-style-type: none"> 1. Institutional capacities and analytical tools 2. Networks and Centres 3. Piloting EST transfer cases 4. Promoting/mobilizing public and private investment 	<ol style="list-style-type: none"> 1. Networks (cancelled) and knowledge (research projects) 2. Policy/ institutional reforms: country and regional enabling environments 3. Integrating climate T in investment prog/projects 	<ol style="list-style-type: none"> 1. Networks & Centers EST transfer pol/prog/proj: enabling environment 2. Integrating CTs into COBPs 3. Catalyzing investment in EST deployment (A: through ADB pipeline; B: through PE/VC funds) 4. Assisted TT broker model

Pilot Centres lessons

- **Project origination:** implications/requirements of external and internal (pipeline) modality? Too soon to draw definite conclusions.
 - Observations: **EBRD:** no info on challenges. **IADB:** too soon to assess IADB, number of projects identified/developed on target. **AfDB:** no info on challenges of internal origination for adaptation. For external: challenging because national entities have difficulties in conceptualizing/formulating project requests and require intense support from the ACTFCN team. Plus: a more active acquisition of new projects is necessary, as well as organizing capacity building and/or outreach. **ADB:** doubtful effectiveness through TA within existing pipeline → new more strategic approach, actively identify project ideas and enter into pipeline by working closely with RDs
- **Investment:** EBRD: ?; IADB: not yet/too soon?; AfDB: not yet at time of MTR; ADB: need ex-post evaluation to ascertain; unclear but probable for PE/VC; one TT deal by TT broker.
- **Finance:** external: implementation of project proposals requires access to financing, dedicated/suitable funding sources; internal: EBRD incentive grants model. Need better understanding of financing needs/availability.
- **TA support:** main instrument, both technical and policy related TA. Pre-feasibility very useful (ADB) Need more analysis of/demand for and feedback on types of TA.
- **Network models:** little analysis available: need better understanding of resources/partners (national/regional and international) needed, type of capacity building/support that can be delivered through networks.
- **Scaling:** “key challenge inhibiting the scaling up of the successful FINTECC programme is the lack of dedicated funding to support technology transfer approaches. The existing Poznan Program funding will not be sufficient to catalyze systemic changes that are needed. To continue to address barriers to technology transfer beyond 2019, a dedicated financing for technology transfer on a regional scale is recommended” (EBRD).

PSP: effect model of change?

- **Pilot projects:** value and need of T demonstration projects but show challenges and complexity of supporting technology development and transfer
- **Pilot centres:**
 - Climate technology project accelerators
 - Climate innovation system builders (networks, capacity building)
 - Benefits of regional approach: not fragmented, greater coherence, learning and catalyzing
- PSP created a global climate technology institutional architecture that is enhancing support for climate technologies and bringing greater attention to climate technology issues
- **Collaboration between pilot Centres and CTCN**
 - Some practical and concrete cases of collaboration with regional banks (providing TA for financial proposal)
 - Sharing of information between pilot Centres and CTCN
 - Organization of meetings/dialogues by GEF
 - Synergies were not more systematically explored → potential for closer and deeper collaboration