

Transformative RBCF programs in the energy sector

Barcelona, 22 May 2017

The logo for DIFFER, featuring the word "DIFFER" in a bold, black, sans-serif font. The letter "I" is stylized with a green vertical bar on its left side. The logo is set against a white rectangular background.

DIFFER

Tom Erichsen

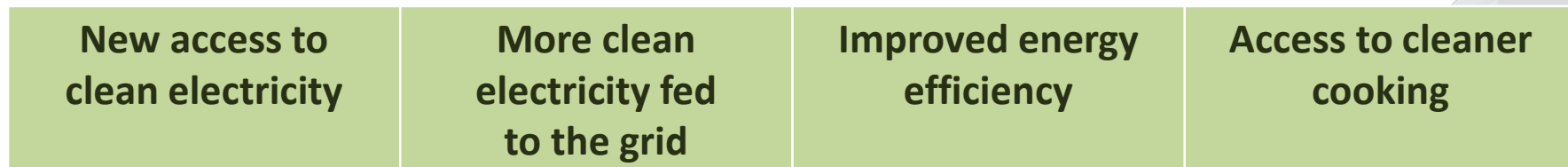
What is a transformative effort and impact?

- > Incentivize/stimulate a significant change of direction, mode of operation or conditions for decisions
- > Establishing a new natural state of balance/development path
- > New way to be self-sustained/self-propelled after some time

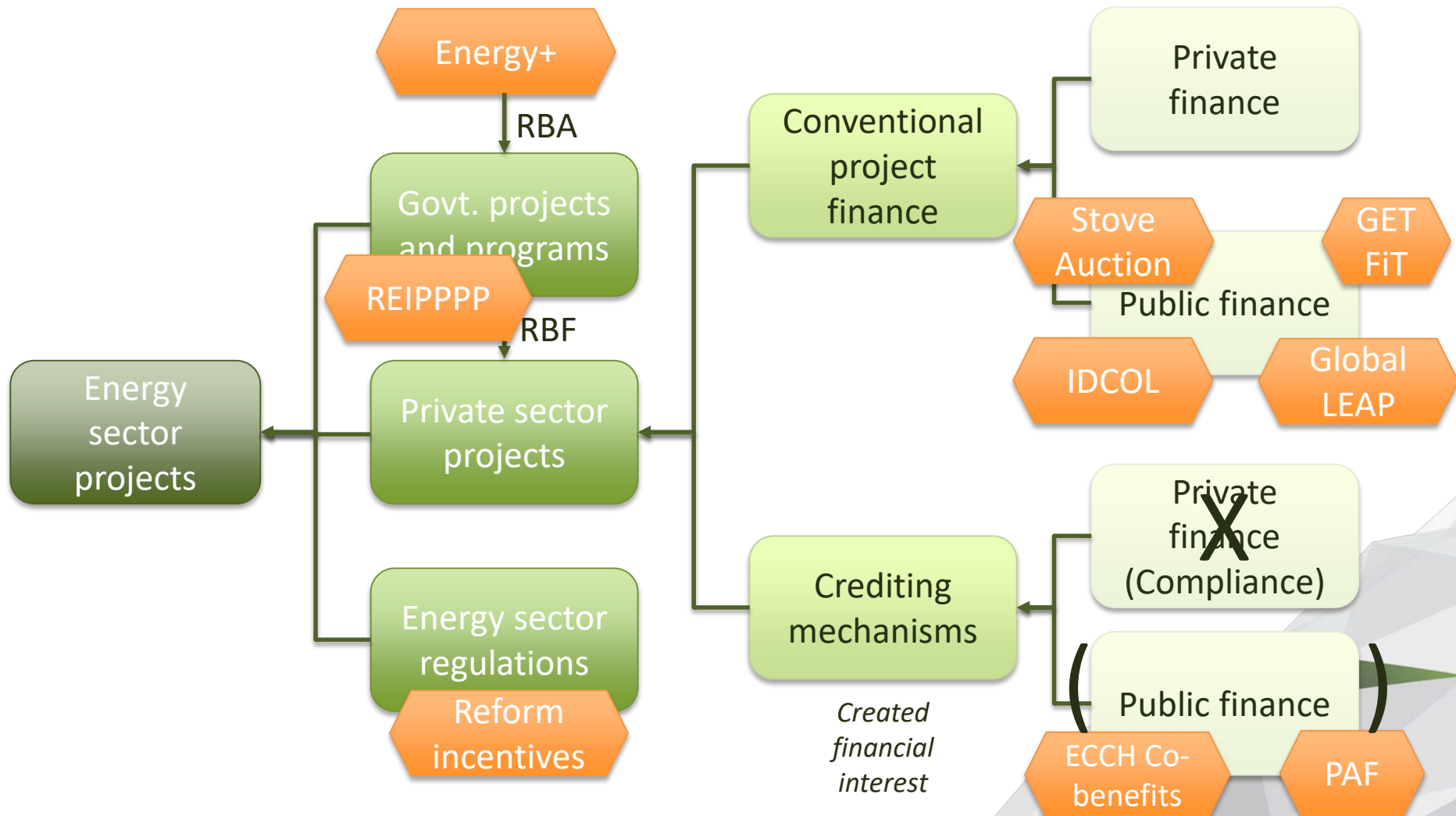
> *Perspective: Country determined and country driven efforts (NDCs)*

- The status of the CDM market indicates **limited demand** from public sector and **'no' interest** from private sector
- New global market mechanisms not expected to be substantial in the short/medium term
 - Common reporting framework and financial mechanisms
- **Limited funds available** – fair allocation of funds (i.e. competition for funds)
 - How to increase the sum?
 - More fair to allocate the price money based on achievements, than before the start?

> **Four market segments considered:**



Using RBF to finance emission reductions in the energy sector



Brief description of selected RBF programs - I



Program (Market segment)	Program description	Transformative ambition	Governance and MRV
GET FiT (More clean electricity fed to the grid)	Front-loaded top-up feed-in-tariff per kWh for RES based on PPAs + Partial Risk Guarantee Facility.	De-risk commercial RE projects, reducing the need for tariff top-ups in the future.	In Uganda: PAAs managed by Electricity Regulatory Authority; RBF and PRG by KfW. Donor funded. Project level MRV; MWh.
REIPPPP (More clean electricity fed to the grid)	Competitive non-negotiable PPA tariff tenders (reverse auctions) replacing FiTs.	Bring cost of RE down and eliminate the need for above grid cost coverage tariffs.	Managed by the IPPPP Unit Dept. of Energy, National Treasury and DBSA. Guarantees from NT. State funds. Project level MRV; MWh.
IDCOL SHS Program (New access to clean electricity)	Fixed sum RBF incentives for eligible SHS sold + access to financing at favorable rates.	Bring SHS distributors to effective scale, facilitate financing and make SHS a natural choice for households.	IDCOL, Govt. managed “non-bank financial institution”. Donor funded. Project level MRV; units sold.

Brief description of selected RBF programs - II



Program (Market segment)	Program description	Transformative ambition	MRV and governance
Global LEAP (Improved energy efficiency)	Award and RBF incentives for super efficient appliances, to substitute inefficient technologies.	A SHS with super efficient appliances is cheaper than a SHS with currently available appliances - at scale.	Managed by CLASP. Donor funded. Project level MRV; units sold.
The Stove Auction (Access to cleaner cooking)	Auction of eligible stoves to local distributors, with an incentive covering the gap up to the wholesale prices.	Aggregate demand from distributors and support producers into a new market; aim to arrive at a clearing price without subsidy.	Originally managed by SNV, now by a commercial entity. Donor funded. Project level MRV; units sold.
Energy+ (all segments)	RBA offered for HHs with verified new or improved access; payment related to both climate and development impact.	Stimulate increased country ownership and drive for results; offer autonomy in terms of how. Focus on value of SE4All service levels.	Managed the Norway MFA; Donor funded. Discontinued. National/sector level MRV; units sold.

Value-based RBF: Payment amount relative to the value/expected impact per tier in the GTF



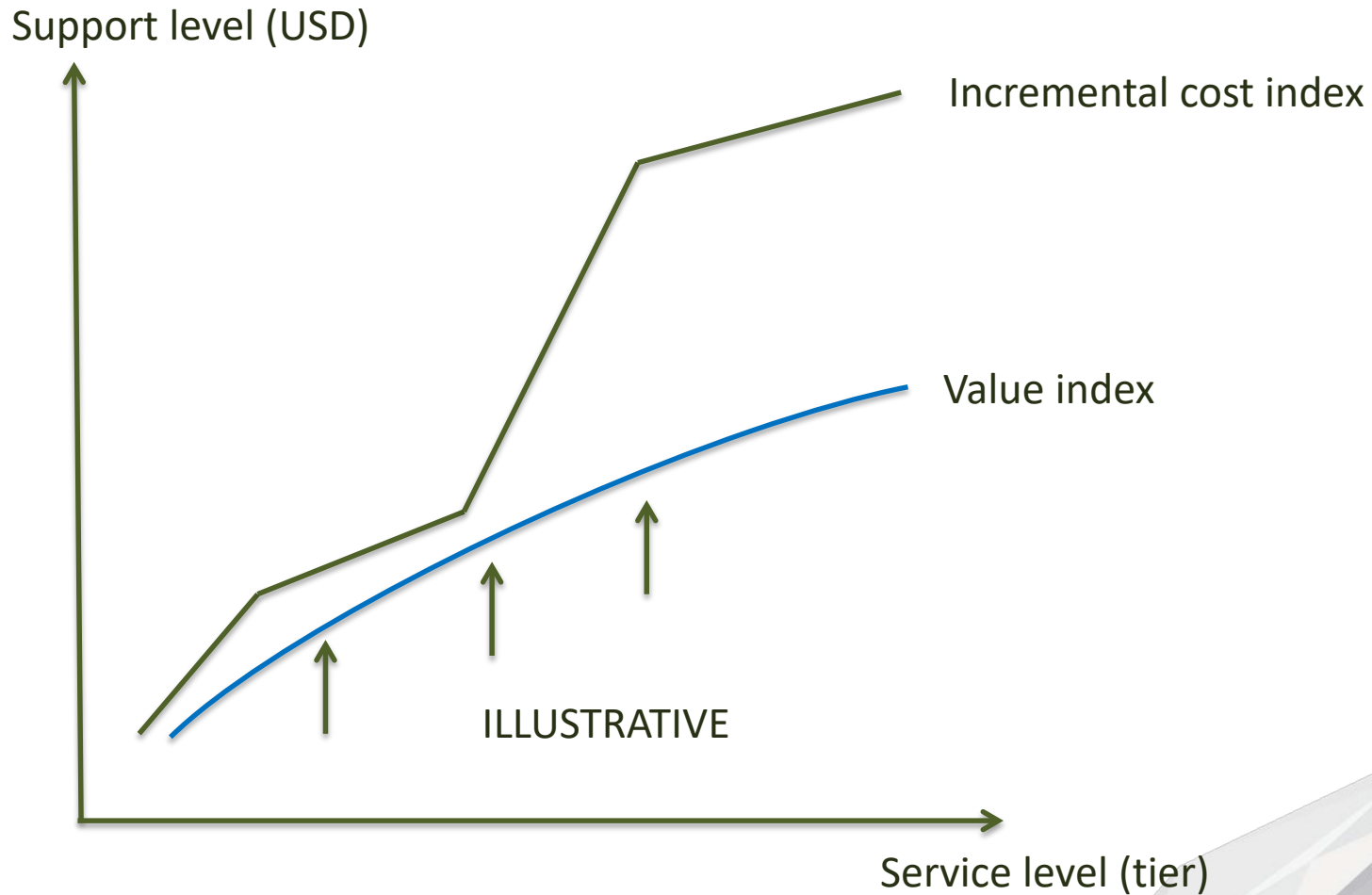
	TIER 1	TIER 2	TIER 3	TIER 4	TIER 5
	Task lighting AND phone charging (OR radio)	General lighting AND television AND fan (if needed)	Tier 2 AND any low-power appliances	Tier 3 AND any medium- power appliances	Tier 4 AND any high-power appliances
GTF Service level					
Cost index*	1	5	8.5	125	137.5
GTF index	1	2	3	4	5
E+ Develop index	1	1.7	2.1	2.5	3.0
E+ Climate index**	1	2.4	5.0	8.8	10.5

*Most cost efficient solution per tier, based on IEA cost estimates and Differ calculations

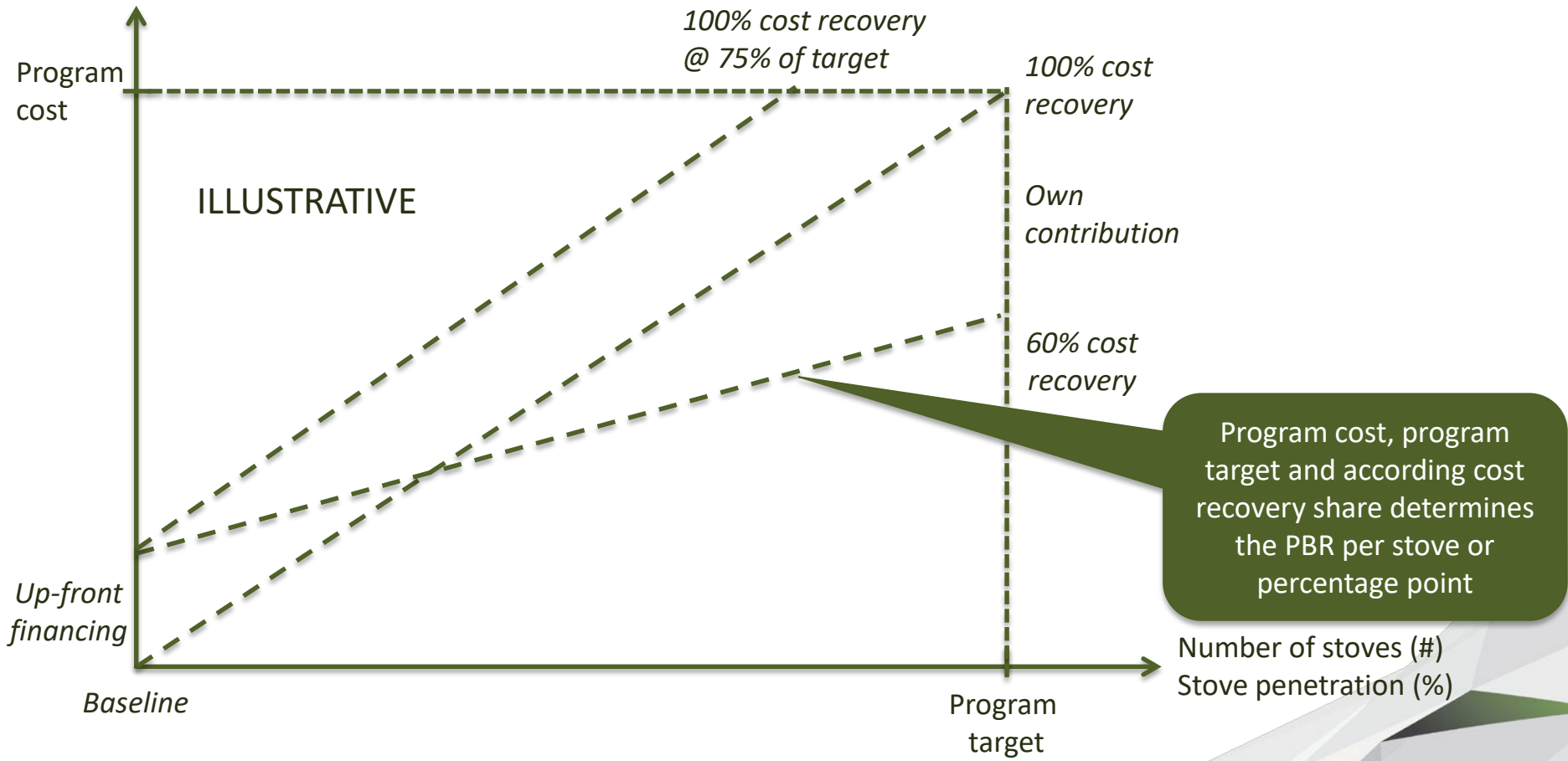
**Based on CDM methodology guideline for off-grid electrification (100% RE)

The GCF can establish general, rights-based RBF programs

- Value of impact is more universal than cost and requires less calculations
- Metrics aligned with GTF reduces MRV burden for recipient
- RBF offers high degree of autonomy and can ensure equitable distribution
- Can also facilitate debt and TA funding

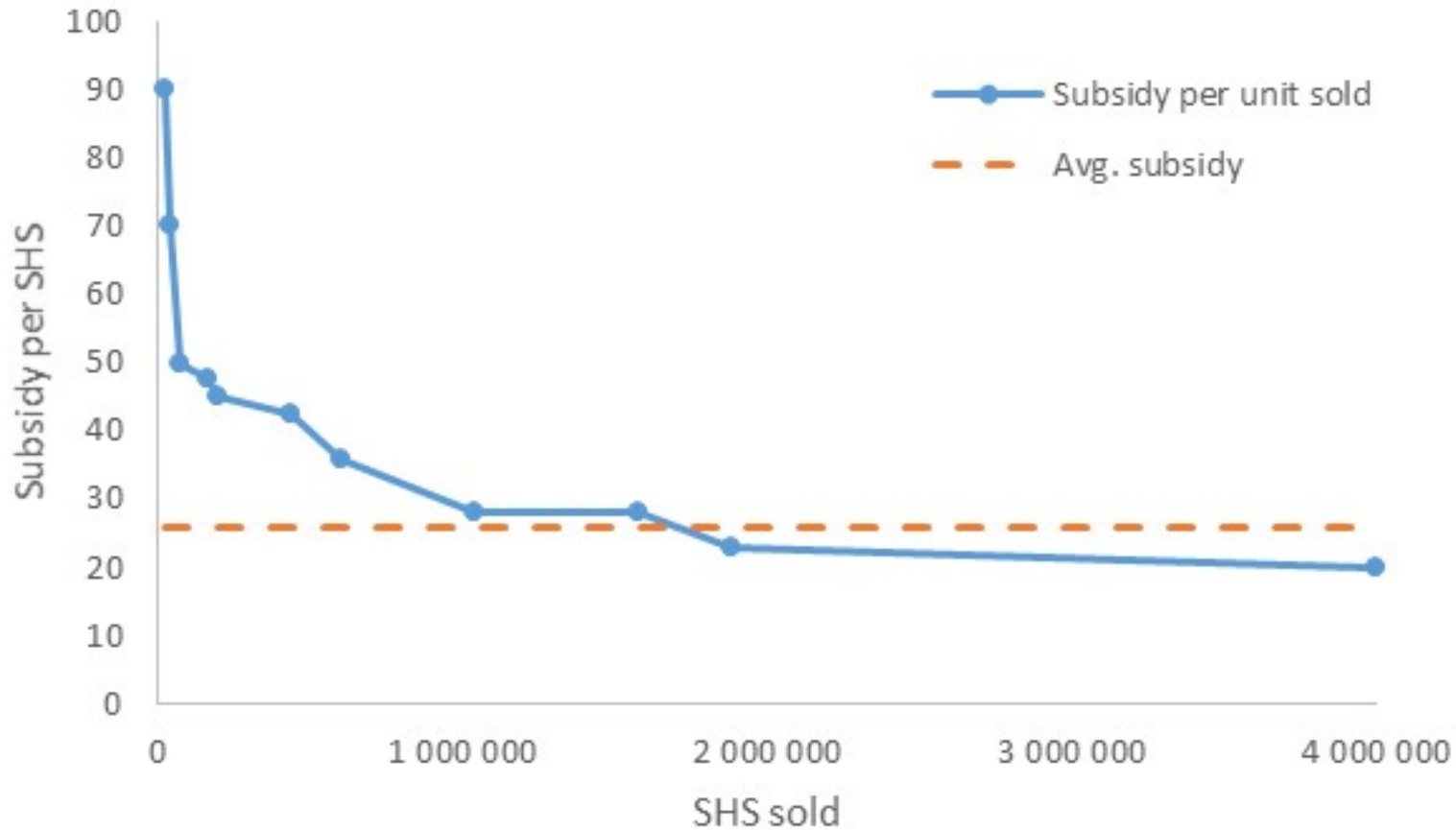


“The RBF design box”



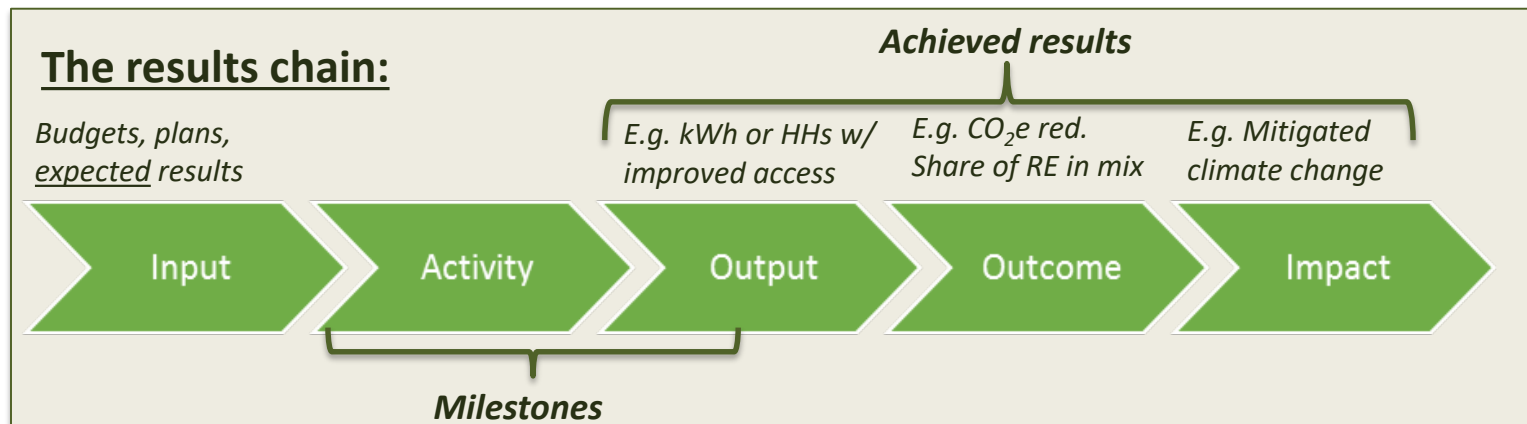
Costs can be high initially,
but the learning curve can be steep

Subsidies per unit under the IDCOL SHS program



RBF can be used to support both Government programs and projects directly – what is optimal?

- > Which stage in the results chain to measure?
 - > Technical capacity and ability to manage MRV?
 - > Sector-wide or targeted?
 - > Access to relevant financing sources?
 - > Product subsidies or general interventions?
 - RBF per unit sold vs. RBF for awareness raising campaigns or implementation of standards
 - > Credibility of principal among agents?
- ➔ What way has the strongest transformational impact?



Contact info



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Relevant papers:

<http://www.differgroup.com/advisory/track-record/p/results-based-financing-in-the-gcf?ctl=Details&neID=6146&mid=9898>

<http://www.differgroup.com/analysis/p/The-way-towards-universal-access---Putting-value-on-electricity-services?ctl=Details&did=8&mid=6116>

<http://www.differgroup.com/analysis/p/Introducing-Access-Merit-Order-to-reach-Sustainable-Development-Goal-no-7?ctl=Details&did=11&mid=6116>

How to assess the attractiveness of RBCF programs vs. alternatives

