



**International
Finance Corporation**
World Bank Group



**Fourth Annual Conference on Energy:
Prospects for Energy Business in the Balkan Region
IFC in Energy Sector**

Belgrade, May 2010

IFC - An Overview

IFC is a Member of the World Bank Group

IBRD
International Bank
for Reconstruction
and Development

Est. 1945

Role: To promote institutional, legal and regulatory reform

Clients: Governments of member countries with per capita income between \$1,025 and \$6,055.

Products:

- Technical assistance
- Loans
- Policy Advice

IDA
International
Development
Association

Est. 1960

To promote institutional, legal and regulatory reform

Governments of poorest countries with per capita income of less than \$1,025

- Technical assistance
- Interest Free Loans
- Policy Advice

IFC
International
Finance Corporation

Est. 1956

To promote private sector development

Private companies in 182 member countries

- Equity/Quasi-Equity
- Long-term Loans
- Risk Management
- Advisory Services

MIGA
Multilateral
Investment and
Guarantee Agency

Est. 1988

To reduce political investment risk

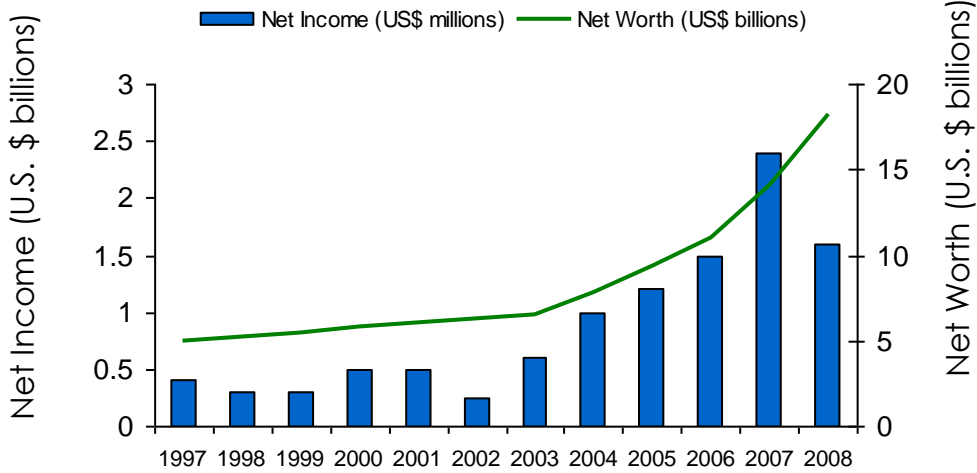
Foreign investors in member countries

- Political Risk Insurance

← Shared Mission: To Promote Economic Development and Reduce Poverty →

IFC - over \$80 billion Invested in Emerging Markets since 1956

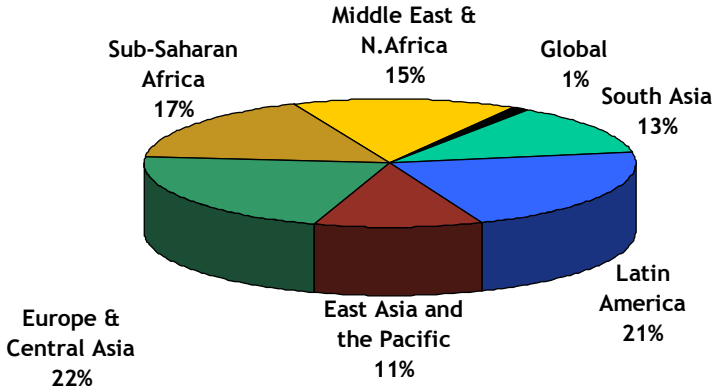
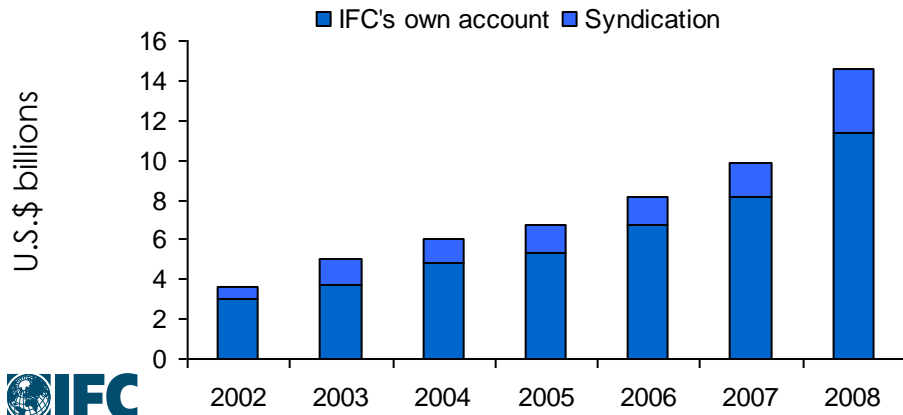
IFC's Net Income and Net Worth



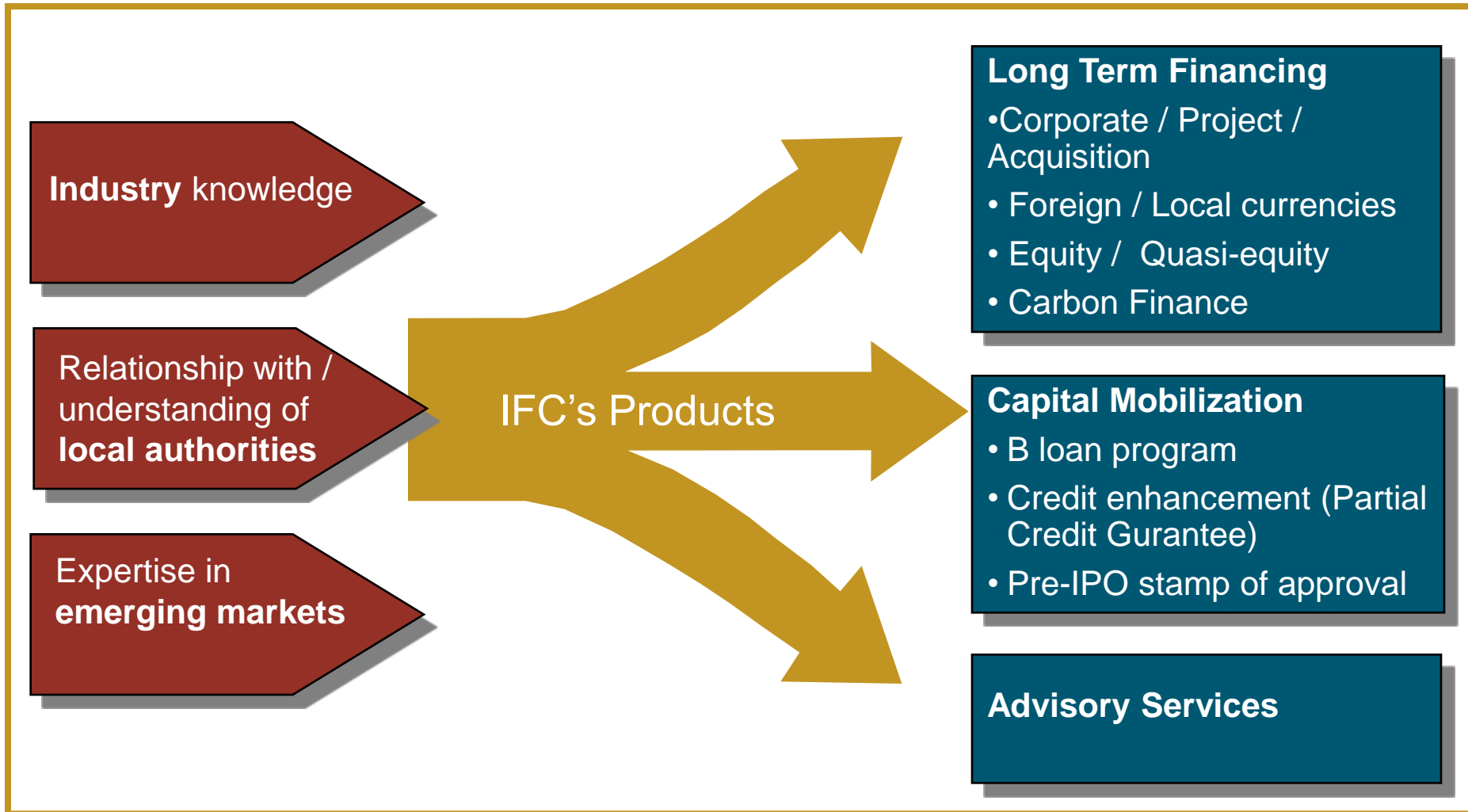
IFC FY08 Highlights

S&P, Moody's	AAA
Portfolio	\$32.4 billion
Committed	\$11.4 billion
Syndicated	\$3.3 billion
# of companies	1,450+
# of countries	85+
# of companies with equity	800+

Total committed IFC financing: US\$14.7 billion



IFC Value Added



IFC in Europe & Central Asia




IFC's Europe & Central Asia (ECA) Region

- **Albania**
- Armenia
- Azerbaijan
- Belarus
- **Bosnia and Herzegovina**
- Bulgaria
- Croatia
- Estonia
- Georgia
- Kazakhstan
- Kyrgyz Republic
- **Macedonia**
- Moldova
- **Montenegro**
- Romania
- Russian Federation
- **Serbia**
- Slovak Republic
- Tajikistan
- Turkey
- Turkmenistan
- Ukraine
- Uzbekistan

- IFC's regional head offices are located in Istanbul and Moscow, with representative offices in other countries
- In FY09, IFC invested \$ 2.99 billion in Europe and Central Asia, including \$ 841 million of syndications.

IFC Approach to Financing

How We Finance Projects

Project Type		IFC Investment
Greenfield, total cost less than \$50 million		Up to 35% of project cost for IFC's account
Greenfield, total cost more than \$50 million		Up to 25% of project cost for IFC's account
Expansion or rehabilitation		Up to 50% of project cost

- Umbrella for participants in IFC's syndication program: IFC lender of record, immunity from taxation and provisioning requirements.
- IFC's total financing (for its own account) must be less than 25% of total company capitalization, and IFC does not manage or have largest stake.

Financial Products - From Equity to Debt

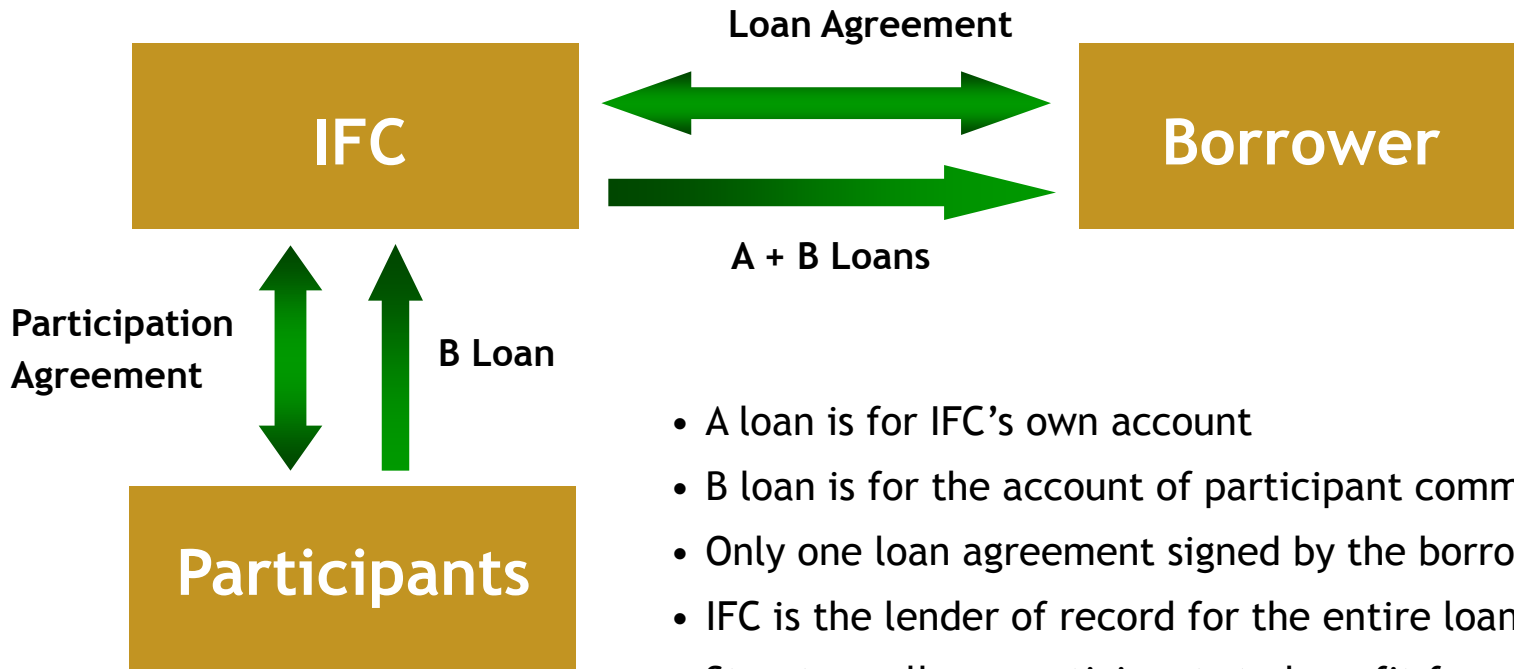


- Corporate and JV
- Typically 5-15% shareholding (not to exceed 20% of total equity)
- Long-term investor, typically 6-8 year holding period
- Not just financial investor, adding to shareholder value
- Usually no seat on board
- Infraventures (early equity investments)

- Subordinated loans
- Income participating loans
- Convertibles
- Other hybrid instruments

- Senior Debt (corporate finance, project finance)
- Fixed/floating rates, US\$, Euro and local currencies available
- Commercial rates, repayment tailored to project/company needs
- Long maturities: 8-20 years, appropriate grace periods
- Range of security packages suited to project/country
- Mobilization of funds from other lenders and investors, through cofinancings, syndications, underwritings and guarantees

Mobilizing Financing - Syndication “B-Loan” Structure



- A loan is for IFC’s own account
- B loan is for the account of participant commercial banks
- Only one loan agreement signed by the borrower and IFC
- IFC is the lender of record for the entire loan (A+B)
- Structure allows participants to benefit from IFC privileges and immunities
- Better pricing/tenors than otherwise available; preferred creditor access to foreign exchange
- IFC Loans exempt from withholding taxes

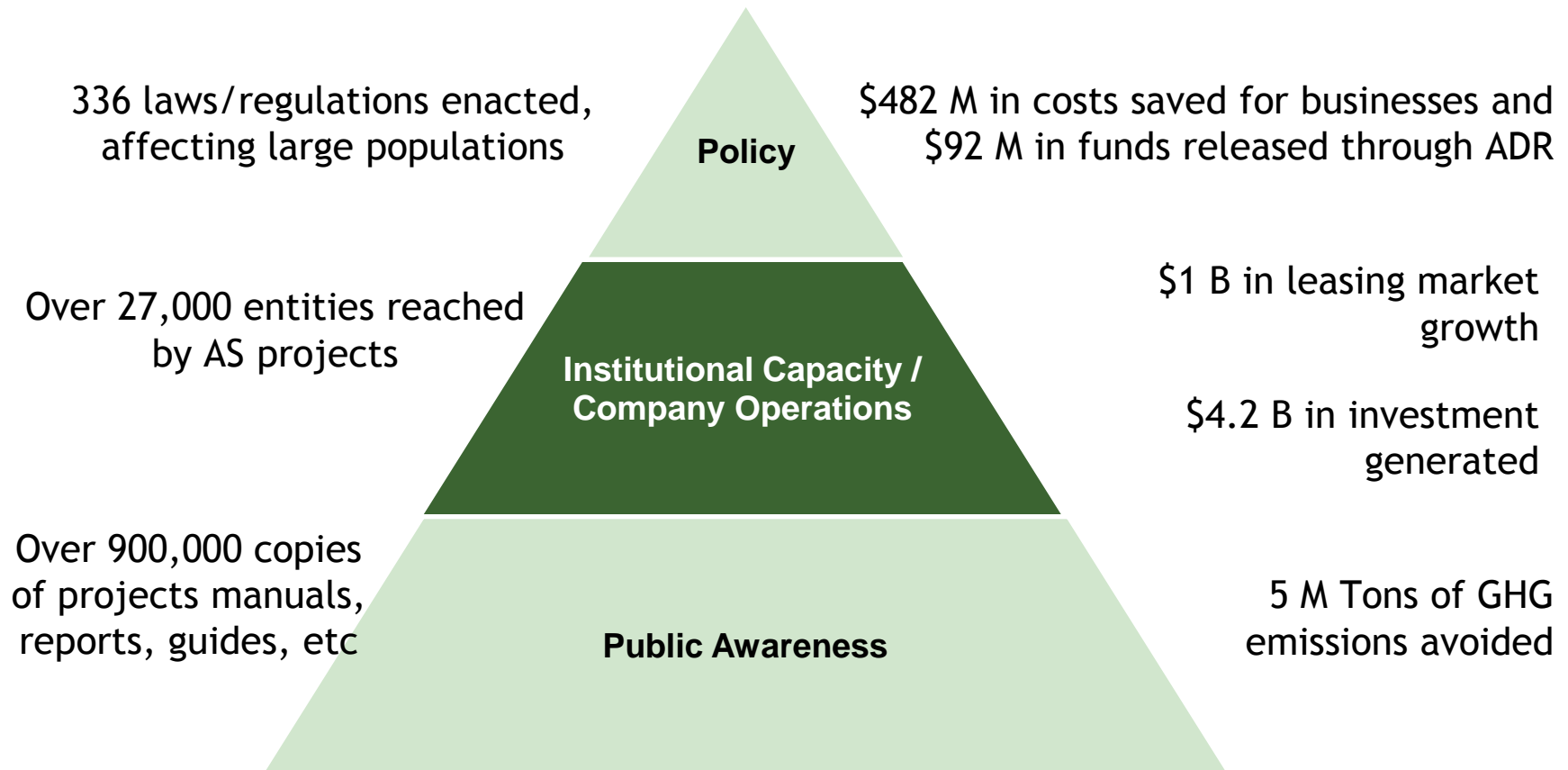
IFC Advisory Services

IFC Advisory Services in Europe & Central Asia

Broad reach ←



Significant Impact



Cross-cutting approach to Climate Change in FY11-15

Access to Finance

- Energy Efficiency Finance
 - Residential EE
 - Small Hydro



Infrastructure

- Energy Sector
- Waste Sector
- Water Sector



Corporate Advice

- Water Footprinting



Sustainability

- Cleaner Production
- Renewable Energy
 - Utility efficiency



FY11-15 Targets

- Avoid at least 15 million tons of lifetime GHG emissions
- Generate \$1 billion in climate change related investments, including from IFC
- Unlock at least \$20 billion in private sector participation in areas such as renewable energy, cleaner production, residential energy efficiency, water and waste management



IFC in the Energy Sector

IFC's Track Record in Power

Projects:

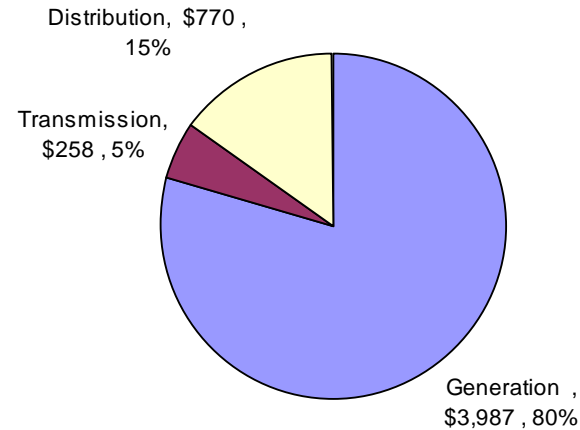
- 120 projects in 40 emerging markets countries
- 21,733 MW private generating capacity
- 94 generation projects
- 7 transmission projects
- 19 distribution companies

Financing:

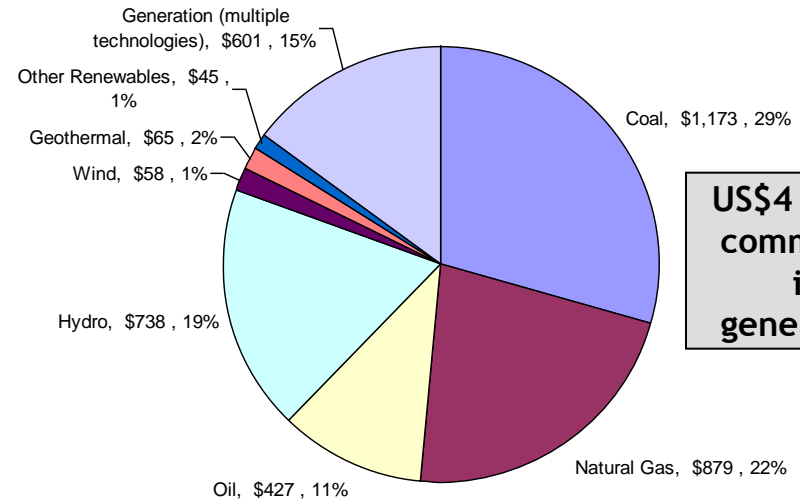
- \$ 5 billion committed in generation, T & D
- \$ 2.5 billion raised through syndication
- \$ 22 billion aggregate project values

Renewables:

- 19% of generation investments in hydropower
- \$0.9bn in 30 renewable energy projects (20 hydro, 2 wind, 2 geothermal & 6 other)



US\$5 billion committed in power



US\$4 billion committed in generation

Addressing Climate Change is one of IFC's 5 Strategic Priorities

- IFC has committed to expand Renewable Energy and Energy Efficiency investments threefold (3x) to over US\$3bn in FY09-11
- IFC is piloting shadow pricing analysis to incorporate climate change considerations into all investments
- IFC is developing its response to support its clients in their efforts at adapting to climate change

And IFC has strong and differing role in supporting each renewable technology

Hydro

Wind

Biomass

Solar

Geo

EE

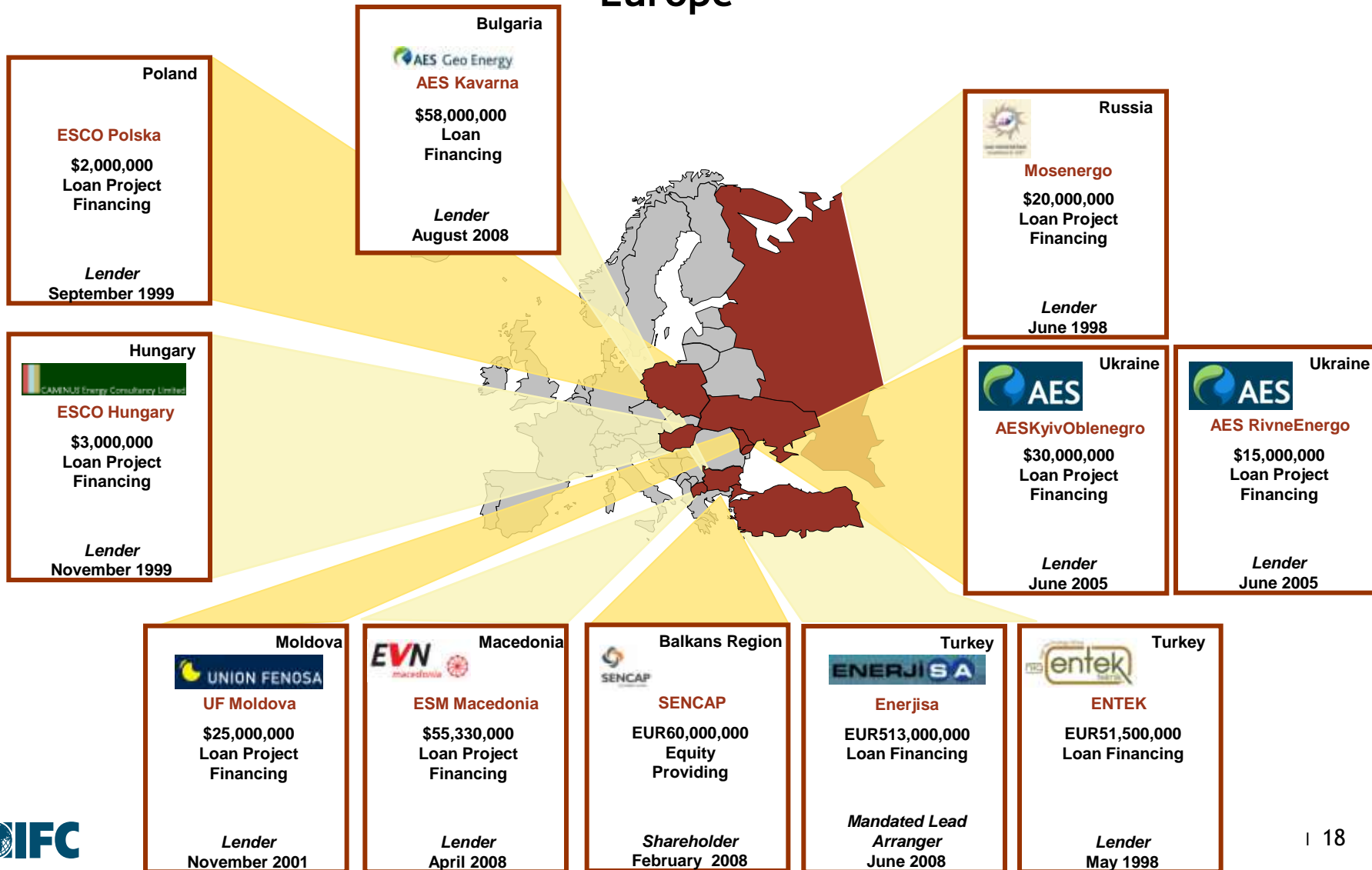
Characteristics

- | | | | | | |
|---|---|---|--|--|--|
| <ul style="list-style-type: none"> • Established and cost competitive technology • Large hydros have long development time • Dams offer baseload • Potential for local E&S issues | <ul style="list-style-type: none"> • Established technology • Economics very site specific • Variable generation • Dependent on suitable regulatory support | <ul style="list-style-type: none"> • Technology risk varies with fuel type • Long-term access to low cost fuel essential • Opportunities for co-firing and co-generation | <ul style="list-style-type: none"> • PV still expensive but costs declining quickly • CSP w/ storage offers potential for low cost baseload • Potential for grid and distributed generation | <ul style="list-style-type: none"> • Established and cost competitive baseload technology • High exploration risks and long lead times to develop steam fields | <ul style="list-style-type: none"> • Profitable opportunities exist in generation, T&D and end use • Opportunities can be diffuse and require identification and aggregation |
|---|---|---|--|--|--|

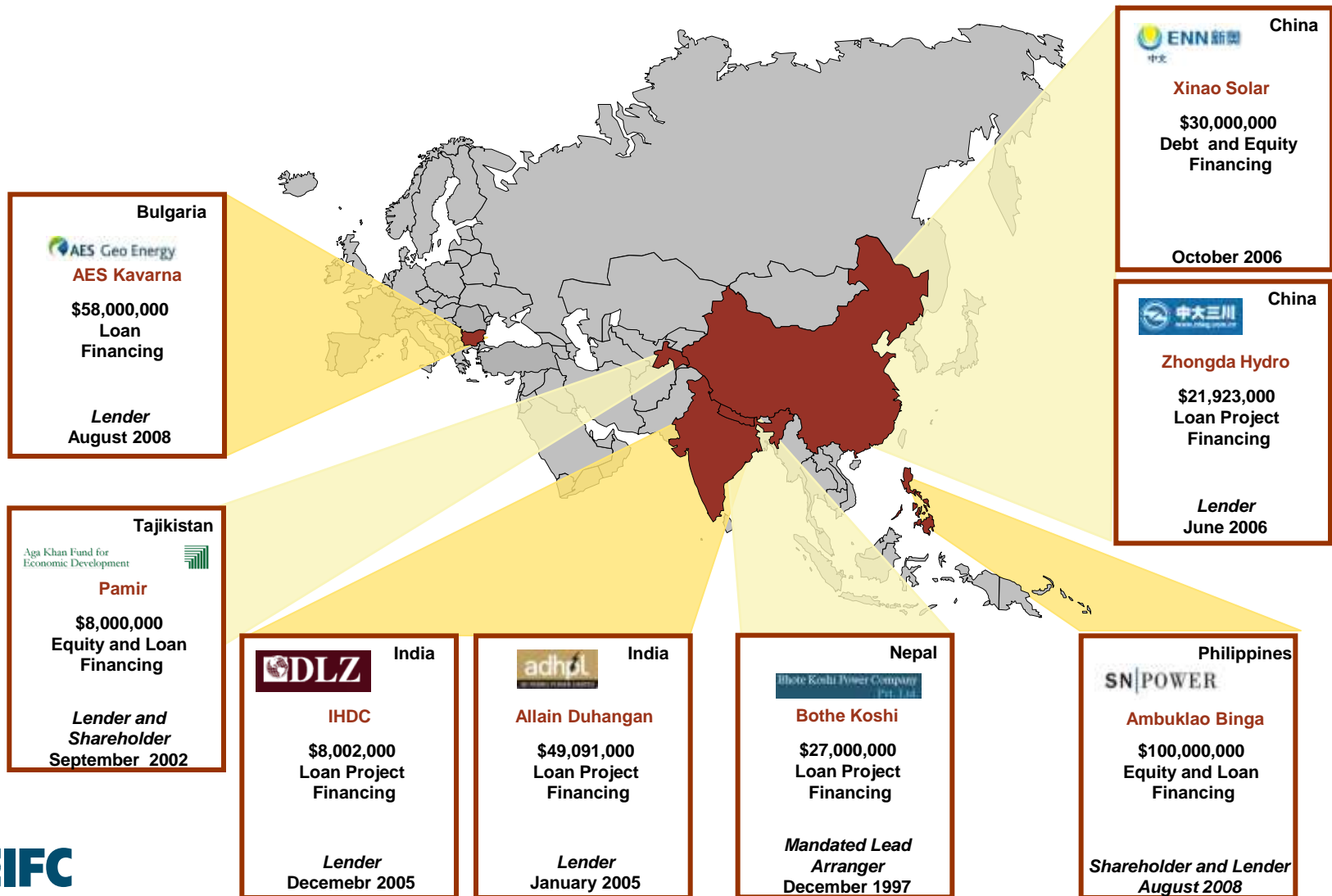
IFC Role & Comp. Adv

- | | | | | | |
|---|---|---|--|---|--|
| <ul style="list-style-type: none"> • Taking construction risk • Providing long-tenors to match asset life • Innovative bundling for small hydros • Ensuring best practice E&S | <ul style="list-style-type: none"> • Supporting projects in new markets & new regulations • Structuring to support intermittent generation & merchant risk • Supporting supply chain expansion to reduce costs | <ul style="list-style-type: none"> • Structuring fuel supply agreements to enable project finance • Understanding technology risk | <ul style="list-style-type: none"> • Supporting supply chain expansion to reduce costs • Supporting projects in new markets and new regulatory regimes • Coordinating concessionary funding to buy down costs | <ul style="list-style-type: none"> • Early stage equity and concessionary funding to share exploration risk • Sector expertise and innovative structuring to enable project financing | <ul style="list-style-type: none"> • Identifying and incorporating EE opportunities in all projects • Coordinating concessionary support to identify and package opportunities for clients |
|---|---|---|--|---|--|

Investments in the power sector in Southern and Eastern Europe



Investments in the renewable energy sector in Europe and Asia





IFC AS Program

Renewable Energy in the Western Balkans with a Focus on Small Hydro Power Plants

Program Basics

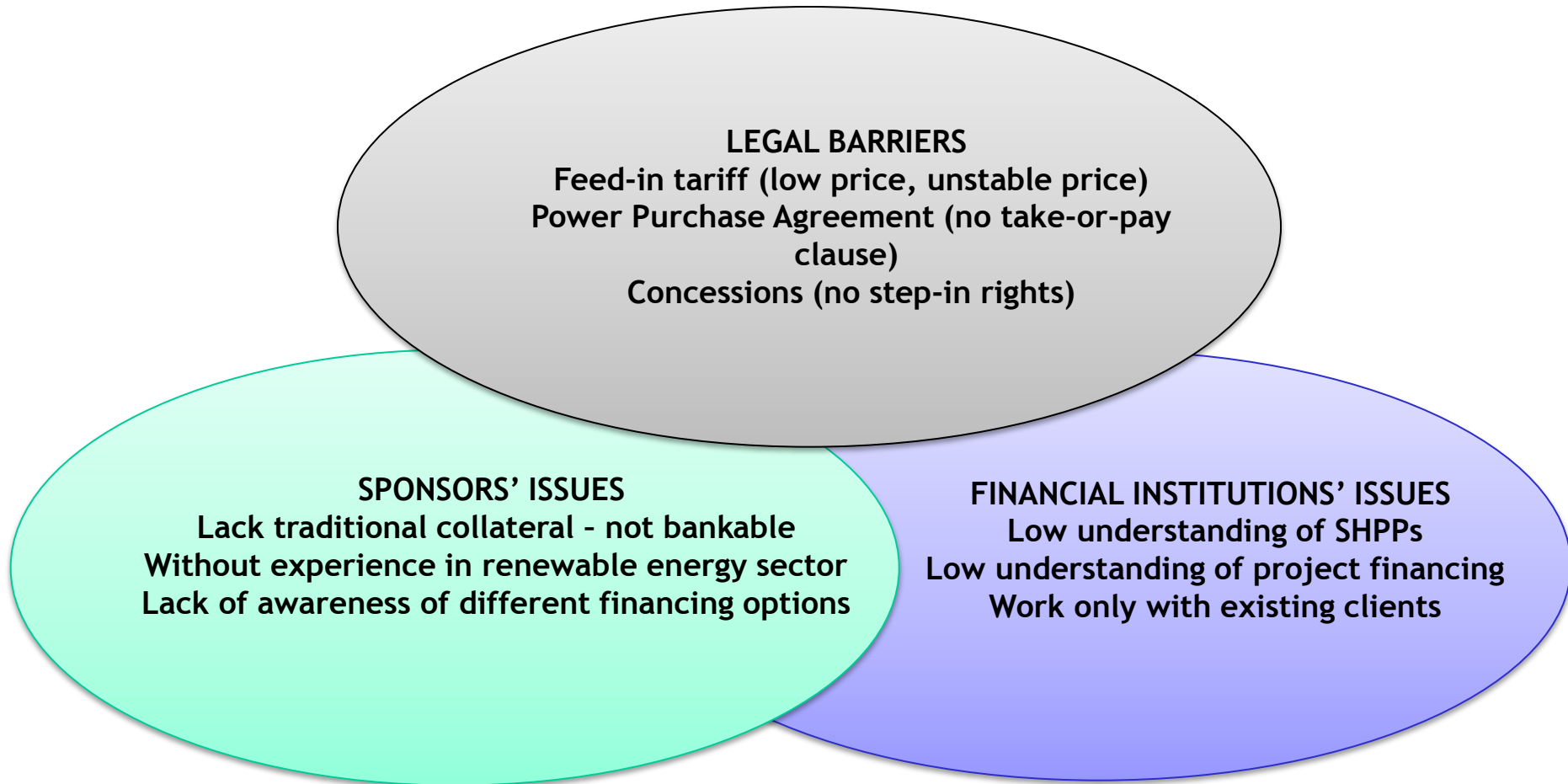
Donor	Austrian Ministry of Finance (BMF)
Length	5 years (Jan'10 - Dec'15)
Region /Countries	Western Balkans /Albania, BIH, FYR Macedonia

Key objectives:

- ✓ Improve regulatory framework to enable SHPP market
- ✓ Capacity building with developers to improve SHPP designs and business plans
- ✓ Increase access to finance - Improve the FI capacities on SHPP and project financing; Provide IFC financing to FIs for SHPP projects lending



Identified Barriers to SHPP Development



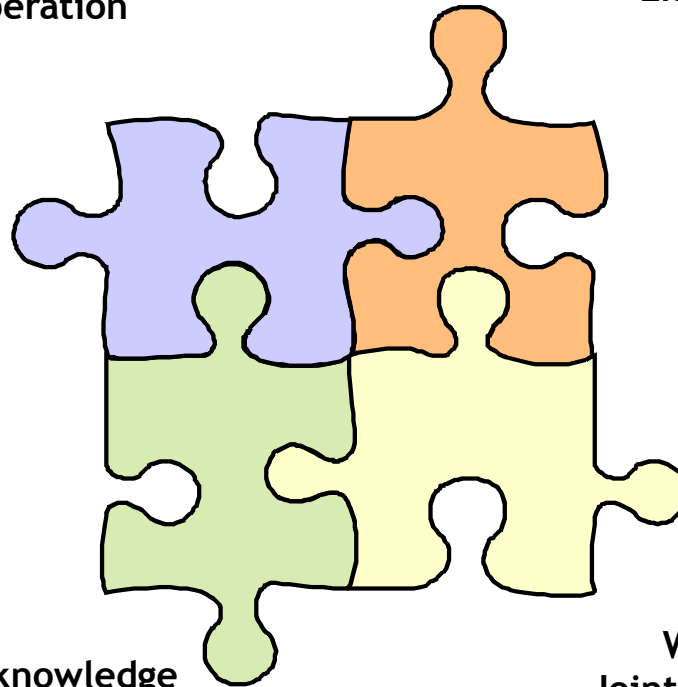
How to Unlock SHPP Market

SUPPORT GOVERNMENTS

- Drafting/improving RE regulation
- Assisting in dissemination
- Encouraging regional cooperation

SUPPORT SHPP SPONSORS

- Offering SHPP design cross checking
- Promoting new technologies
- Encouraging SHPP associations



SUPPORT FIs

- Improving their SHPP knowledge
- Providing tools and manuals
- Offering different investment packages

WORKING WITH OTHER IFIs

- Jointly solve some regulatory issues
- Regularly exchange information
- Ensure no overlapping

IFC AS Program Residential Energy Efficiency

Residential EE - Basics

- Project will be initiated in Albania
- Trainings with 3 selected banks - June 2010
- PBGI (Performance Based Grant Investment) implemented
- Tool available in Serbian / Bosnian / Macedonia / Albanian
- Soon will be translated in Russian and Ukrainian

Email: iagur@bancredline.com

Energy Efficiency Project

Project status			Project data		
Project Idea	Date	Loan Officer	Name	Michael Jordan	
Loan Requested	12.5.2010	Webolza Arsenovic	Address	Test street 1, Tirana	
Loan status			Phone / Mobile	123456 / 654321	
Implementation verification	project implementation not verified yet		Email	michael@testline1	
			Project type	Family house	Heated area (m2)
			Ownership	Private owner	# of apartments
			Heat day/week (h/day)	7 / 12	# of tenants
			Cool day/week (h/day)	7 / 5	Construction yr
					1990

m2)	Baseline		EE Improvement	
	Out / Quality	Baseline construction	EE product	Invest (ALL)
Floor	100 ground	Floor - Test floor 1	30 mm, Poly styrene 20kg/m3	17,000
Wall	110 air	Wall 300 mm - Brick (250) + plaster (50)	50 mm, Poly styrene 30kg/m3	20,900
Floor/Ceiling	100 unheated attic	Floor - Test floor 1	30 mm, Poly styrene 25kg/m3	17,000
Windows/Doors	10 bad	Wood, 1.1m, 2 pan	PVC, 1.1m, 2 pan	210,000
Total	320			254,900

Baseline	Space heating	Space cooling	Domestic hot water	Indoor lighting
Technology	TA losses	Local split system	Electric heater	incand. 5 x 100 W
Fuel/Energy source	Electricity	Electricity	Electricity	Electricity
Fuel price	10,00 ALL/kWh	13,80 ALL/kWh	13,80 ALL/kWh	13,80 / 8,00 ALL/kWh
Annual consumption	7,832,31 kWh	2,316,75 kWh	2,661,44 kWh	730,00 kWh
Annual fuel cost	78,323 ALL	31,276 ALL	36,930 ALL	8,851 ALL
Annual maintenance cost	0 ALL	0 ALL	0 ALL	438 ALL
Total annual cost	78,323 ALL	31,276 ALL	36,930 ALL	9,289 ALL

EE Improvement	Space heating	Space cooling	Domestic hot water	Indoor lighting
Technology	Heater no accum.	(no change)	1 x 1.0m2 Test collector 1	CFL 5 x 20 W
Fuel/Energy source	Propane / Butane	(no change)	Solar / Electricity	Electricity
Fuel price	60,00 ALL/kg	(no change)	0,00 / 13,80 ALL/kWh	13,80 / 8,00 ALL/kWh
Annual consumption	233,33 kg	732,08 kWh	1,649,39 kWh	148,00 kWh
Annual fuel cost	14,000 ALL	9,883 ALL	22,267 ALL	1,770 ALL
Annual maintenance cost	0 ALL	(no change)	0 ALL	748 ALL
Total annual cost	14,000 ALL	9,883 ALL	22,267 ALL	2,519 ALL

Investment (system)	180,000 ALL		150,000 ALL	4,100 ALL
Total inv. (with envelope)	444,900 ALL			
Annual savings	64,323 ALL	21,393 ALL	13,663 ALL	6,771 ALL
Pay back		5,19 yrs	8,78 yrs	0,61 yrs
GHG emission reduction	3,199 kg CO2e	792 kg CO2e	906 kg CO2e	292 kg CO2e

Project financing	EE investment	ALL
Annual savings	106,190	ALL
Pay back	5,36	yr
GHG emission reduction	4,790	kg CO2e
EE investment	669,000	ALL
Other investment no. EE	131,000	ALL
Total investment	700,000	ALL
Share of EE component	81,29	%
Loan	480,000	ALL
Down payment	280,000	ALL
Share of down payment	25,71	%
Interest rate	8,00	%

Monthly timeline: Savings vs. Investment