INTERNATIONAL EVALUATION CONFERENCE

WHAT'S NEW AND WHAT WORKS IN THE EU COHESION POLICY 2007-2013: DISCOVERIES AND LESSONS FOR 2014-2020

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Financial engineering and energy efficiency

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Why is Energy Efficiency important?

- For companies, eliminating waste always reduces costs so makes them more profitable, improves quality of product, can also increase output
- For households, it also reduces costs, but more importantly, it increases comfort
- For municipalities, it reduces costs in municipal infrastructure and public buildings
- For local communities, it reduces air pollution and can create jobs
- For governments, it reduces imports of energy, CO2 emissions, helps the balance of payments, makes energy supply more secure

So why the difficulty?

- Low energy prices
- Lack of awareness among decision-makers from household to companies to governments
- Lack of technical advice to implement
- Perception of extra expense so to be avoided
- Lack of access to finance
- Engineers don’t understand finance
- Financial people don’t understand technology
- So nobody knows that the energy savings could pay back a loan or how to prove it
- Hence the need for financial engineering

EE can seem “anti-development”

The poor want to be like the rich:

They also would like:

- To heat or cool their home properly
- To have more or newer household appliances
- To own a car.

But new modern appliances use less energy than old ones.

So governments should promote EE together with development

What does financial engineering have to do?

- Correct market failure: the biggest problem is low energy prices which are subsidised for political reasons
- Improve information exchange between banks, customers, equipment suppliers and engineering professionals
- When the benefits accrue at government level, the government must make laws or provide incentives for companies and households to make the right decisions
- Create easier access to loans
- Create loans on easy terms

Financial engineering solutions in EE

Mainly aimed at the private sector

- Creation of special EE Funds managed by IFIs and on lent to local banks
- Incentives in the form of grants (15-20%)
- TA to find and develop projects for banks, train banks to manage loans, market loan products
- IFI/bank agreements include admin fees for banks as incentive
- Some funds are now including provision for guarantees to banks to cover their first loss

Need to be combined with appropriate national legal and fiscal framework which creates incentives to invest

Public sector also needs to be covered, incentives are not so easy to manage

EE Funds in the Balkans

	No.	EUR mil.	% of total
Regional Total	**10**	**526.05**	**31.17%**
Regional Mixed/EE Funds	0	0.00	0.00%
Regional Loan Funds	4	470.80	27.89%
Regional TA Funds*	5	20.55	1.22%
Regional Grant Funds	1	34.70	2.06%
Regional Guarantee Funds	0	0.00	0.00%
Country Loan Funds	**13**	**1116.46**	**66.15%**
Albania	1	20.00	1.18%
Bosnia and Herzegovina	1	140.00	8.29%
Croatia	1	340.00	20.14%
Macedonia	1	100.00	5.92%
Montenegro	3	125.21	7.42%
Serbia	6	391.25	23.18%
Country TA Funds	**2**	**3.00**	**0.18%**
Montenegro	1	1.50	0.09%
Kosovo	1	1.50	0.09%
Country Grant Funds	**3**	**12.30**	**0.73%**
Macedonia	2	12.10	0.72%
Serbia	1	0.20	0.01%
Country Guarantee Funds	**2**	**30.00**	**1.78%**
Bosnia and Herzegovina	1	15.00	0.89%
Macedonia	1	15.00	0.89%
TOTAL:	30	1687.81	100.00%

* two are paired with loan funds and not counted

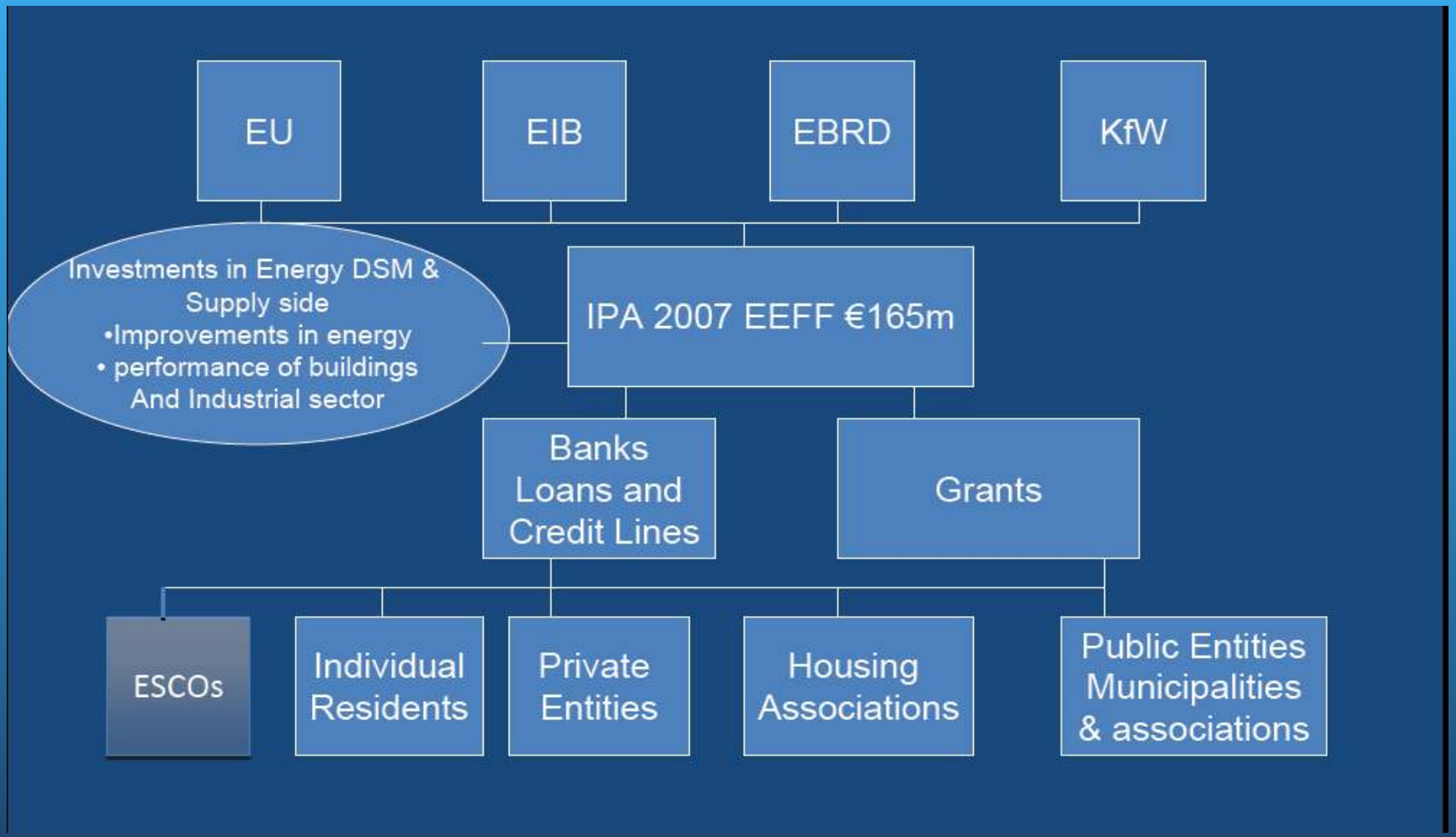
Regional EE funds in the Balkans

IFI/DONOR	NAME OF FUND	STRUCTURE					COUNTRIES							Amount M€				
		Mixed/EE Loan	Loan	TA	Grant	Guarantee	Albania	Bosnia and Herzegovina	Croatia	Macedonia	Montenegro	Serbia	UNMIK-Kosovo	Mixed/EE Loan	Loan	TA	Grant	Guarantee
EBRD	WeBSECLF		Y	Y	Y*			Y		Y	Y	Y			60.00			
EBRD	WeBSEDFF		Y	Y**			Y	Y	Y	Y	Y	Y(incl Kosovo)			64.00			
EBRD	WBPSSF - SEEF		Y				Y	Y	Y	Y	Y	Y(incl Kosovo)			50.00			
EBRD	Institutional capacity building			Y**			Y	Y	Y	Y	Y	Y(incl Kosovo)				2.00		
UNECE	Eastern Europe Energy Efficiency Fund/ EE21		Y	Y			Y	Y	Y	Y		Y			30.00	6.15		
USAID/ Hellenic AID	SYNERGY			Y			Y	Y	Y	Y	Y	Y				8.00		
GTZ	Open Regional Fund			Y			Y	Y	Y	Y	Y	Y	Y			3.00		
CEI Trust Fund	Italian government at EBRD			Y			Western Balkan States									1.40		
Credit lines with EIB, EBRD, KfW/CEB matched by TA and Incentives from IPA 2007/EEFF (EC)	Energy Efficiency Finance Facility (EEFF)		Y	Y	Y*		Y	Y	Y	Y	Y	Y(incl Kosovo)			138.80		34.70	
EIB/KfW/EBRD IFC soon	Green for Growth Fund (GGF) previously SE4F		Y				Y	Y	Y	Y	Y	Y	Y		128.00			
Y* means grant comes from IPA 2007/EEFF Y** means these two funds are linked.																		
Subtotal funds	10	0	6	8	2	0	8	9	8	9	8	5	2	0.00	470.80	30.55	34.70	0.00

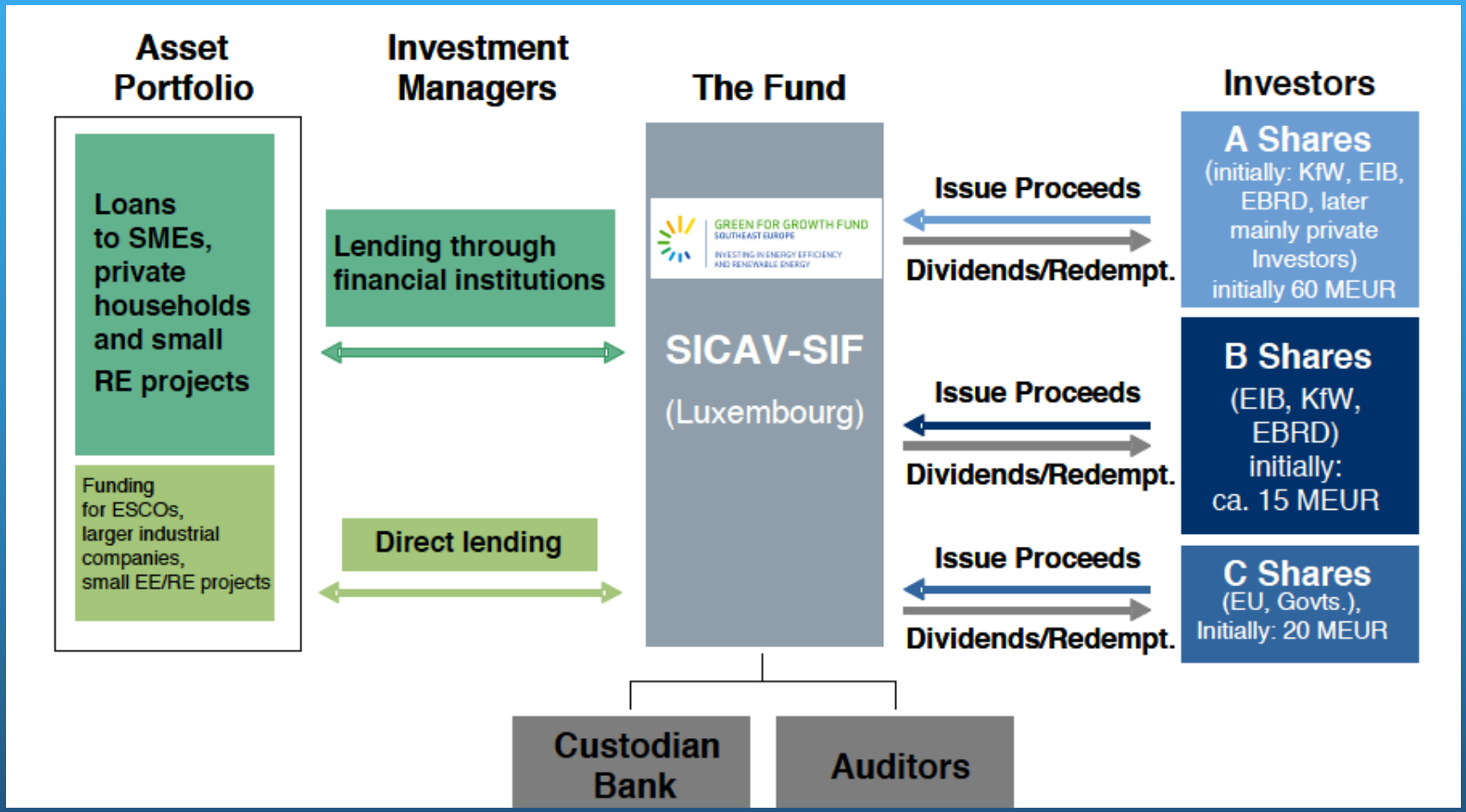
Country EE funds in the Balkans

IFI/DONOR	NAME OF FUND	STRUCTURE					COUNTRIES							Amount M€				
		Mixed /EE Loan	Loan	TA	Grant	Guarantee	Albania	Bosnia and Herzegovina	Croatia	Macedonia	Montenegro	Serbia	UNMIK-Kosovo	Mixed /EE Loan	Loan	TA	Grant	Guarantee
USAID + SIDA	Development Credit Authority facility for EE to BiH					Y		Y										15
USAID	Development Credit Authority facility for EE to Macedonia					Y				Y								15
GTZ	Modernising municipal services			Y									Y			1.5		
GTZ	Advisory services on energy efficiency			Y							Y					1.5		
EIB	SME Loan in Albania	Y					Y							20				
EIB	SME Loan in Bosnia and Herzegovina	Y												140				
EIB	SME Loan in Croatia	Y							Y					340				
EIB	SME Loan in Montenegro	Y									Y			100				
EIB	SME Loan in Macedonia	Y								Y				100				
EIB	EIB Apex II Credit Facility Serbia	Y										Y		250				
KFW	Municipal infrastructure credit line project (MICLP) Serbia	Y										Y		60				
KFW	Renewable Energies and Energy Efficiency Facility (REEEF) Montenegro		Y	Y							Y				17.50			
World Bank	Energy Efficiency Project in Montenegro		Y	Y							Y				7.71			
World Bank	GEF Sustainable Energy Project Macedonia				Y					Y							4.5	
IFC	EE Loan Serbia		Y									Y			10			
IBRD	Energy efficiency project Serbia Additional Financing		Y									Y			22.5			
IDA + Government of Serbia	Energy efficiency project Serbia		Y									Y			18.75			
Italian Government	Italian credit line in Serbia	Y										Y		30				
Croatian Government	Environmental protection and energy efficiency Fund to Croatia		Y	Y	Y				Y					?				
Swiss cooperation office	Efficient Energy Distribution				Y					Y							7.6	
Government of Spain	Grant of Kingdom of Spain to Serbia				Y							Y					0.2	
Total country funds	21	8	8	9	4	2	5	5	6	8	8	10	3	1040.00	76.46	3.00	12.30	30.00

IPA 2007 Energy Efficiency Financing Facility



Green for Growth



Why is it still so difficult?

- Expectations are high at government level, but many transactions on the way to the borrower
- Big time lag: before the funds reach the banks and projects can begin preparation 2006-2009 before funds reach banks to lend so too early to know if these complex arrangements work
- Financial crisis means people are still risk averse
- Interest rates are still quite high (10-20%)
- The rich don’t need loans; the poor aren’t bankable
- Banks have different ways to assess creditworthiness in their customers, not always based on the quality of the investment project
- The banks themselves need to understand longer term loans for investment, as well as making short-term loans for working capital, and quick consumer loans
- The best energy efficiency projects are found in the SME firms that still have old equipment and need a loan to modernise. But are they bankable?
- How many times do you buy new windows for your home?

Time scale to real lending is long

- IFI agreements may not be flexible enough to react to global financial crises, oil price changes, or local conditions
- Evaluation comes much too late to change

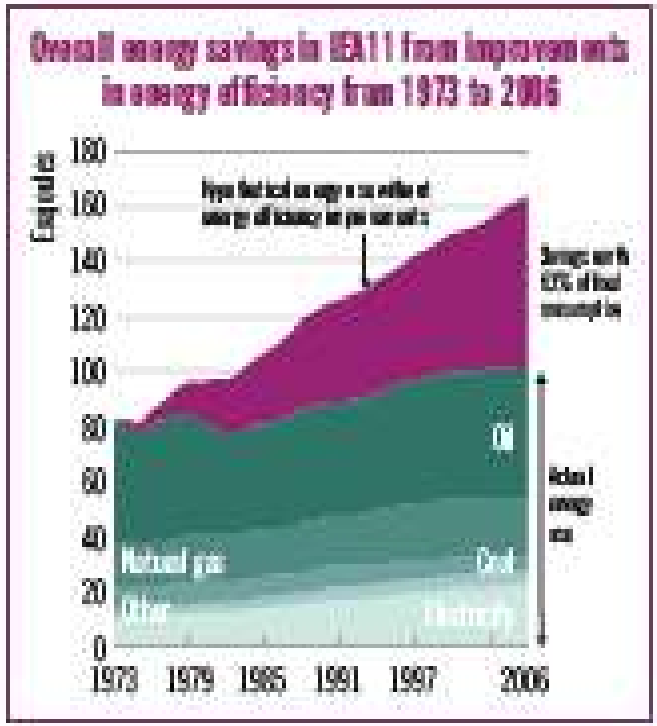
What can be done now?

- IFIs could make funds more visible and maintain visibility, not just one off events to launch a product. They need to combine with banks to spend money on professional marketing
- As more banks get experience, interest rates could become more competitive
- Incentives are quite important to borrowers
- Tax incentives to invest are not always provided for industry

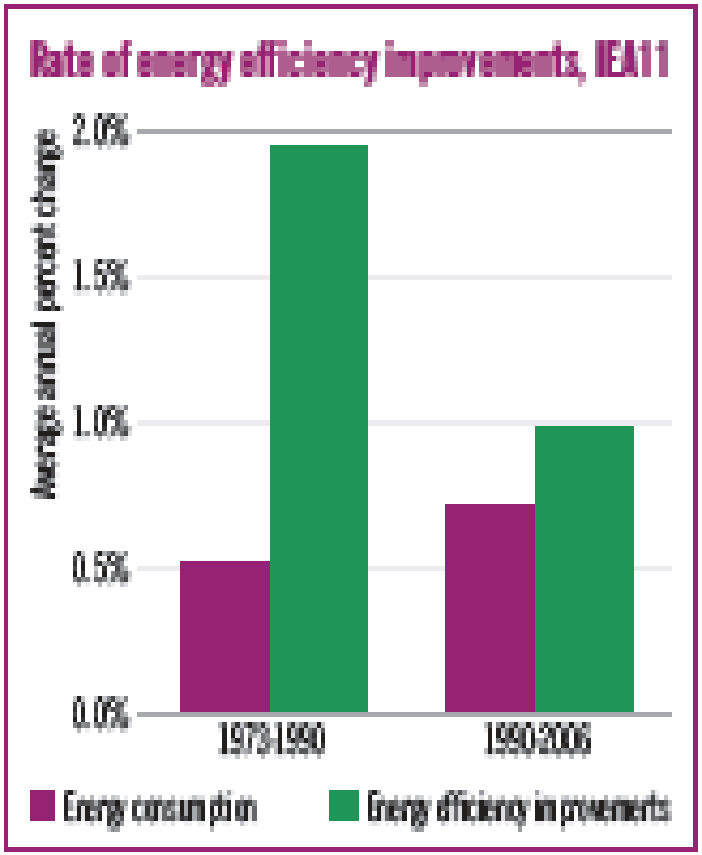
Wrong message?

- Households care about comfort; about using more of their home, instead of shivering in one room; about increasing the property value of their home
- Companies care about profits, getting new equipment, producing new products, improving quality for export
- Occupants of public buildings don’t care about saving energy if the savings don’t benefit them directly
- Only governments really care about energy efficiency

So has anything changed?



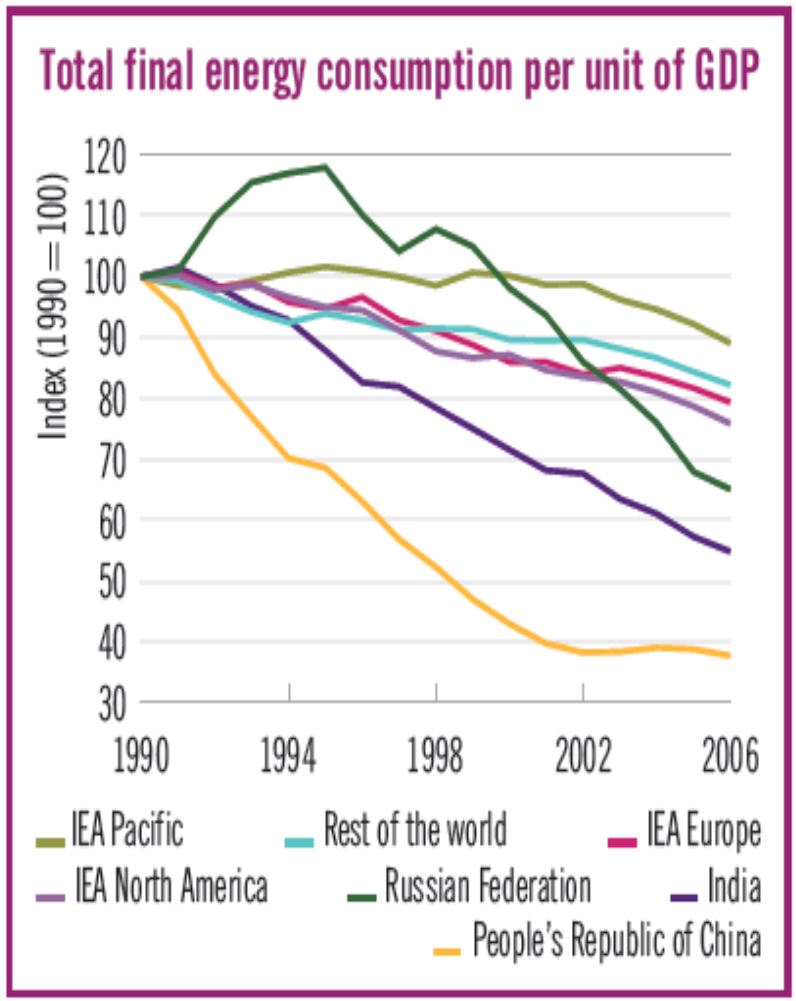
Notes: Other includes district heat and renewables.
Fuel use in electricity and heat production is excluded.
Source: IEA indicators database.

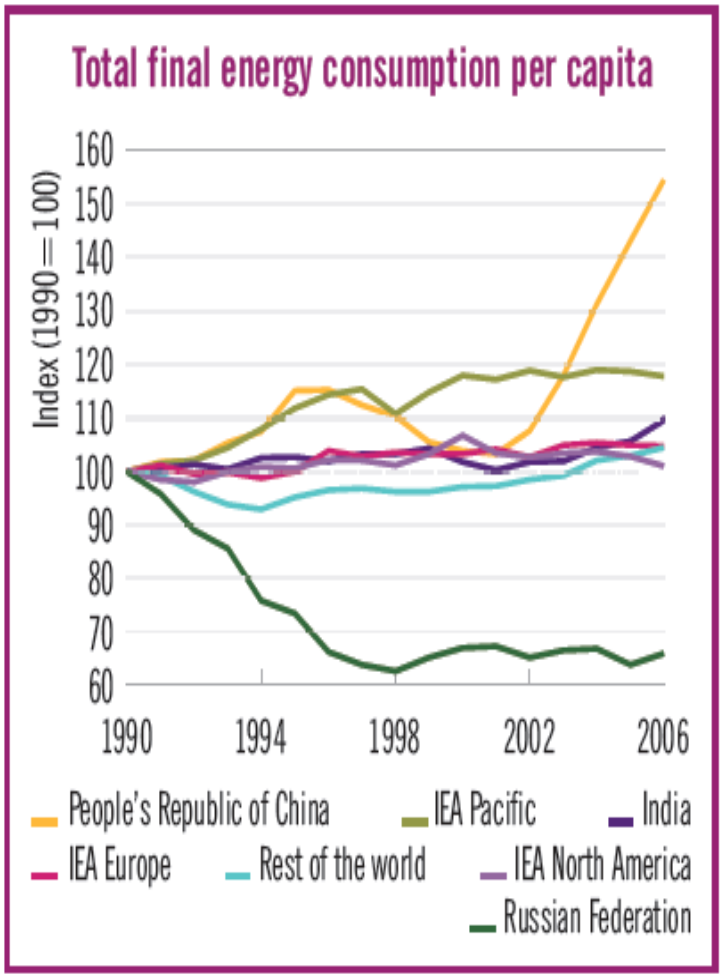


Source: IEA indicators database.

Indicators brochure IEA 2009

Some stats on energy consumption



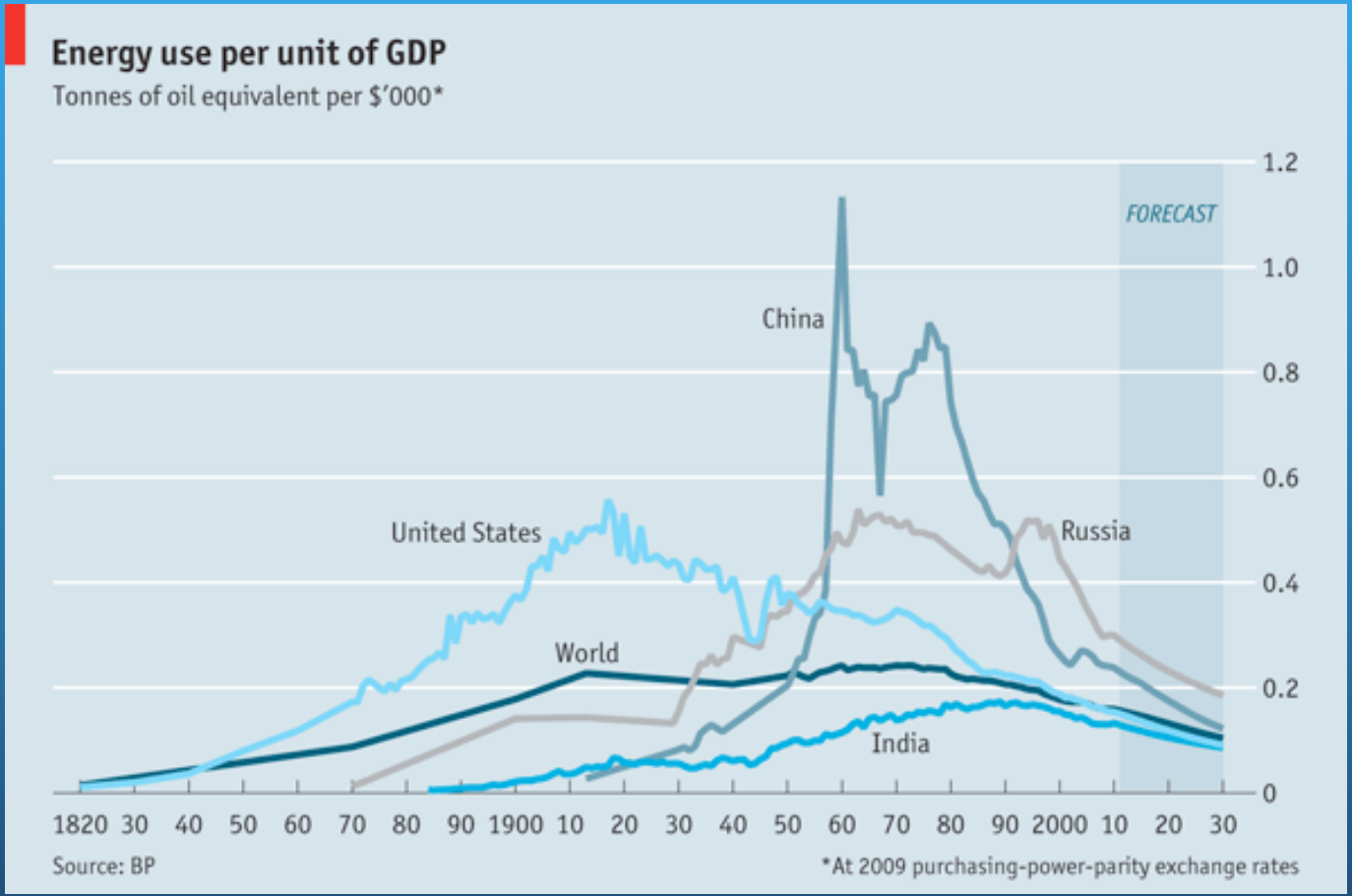


Sources: IEA, 2009a; IEA, 2009b; IEA estimates.

So energy intensity is falling

- But in more developed countries, the opportunities to save energy are less and probably more expensive
- The big inefficiencies are already taken out in very energy intensive industry
- What is left is in SMEs for which energy costs are in the range of 5-10% of operating costs
- Or buildings where energy costs are 2-5% of operating costs.
- Not so much incentive to invest at these levels

Another long wave?
Are energy intensities converging anyway?



http://www.economist.com/blogs/dailychart/2011/01/energy_use