



How Municipalities, Joint ownerships, Gas distribution companies and Banks should cooperate to promote energy efficiency rehabilitation of existing buildings?

**“Mevcut Binaların Enerji Verimliliğinin İyileştirilmesinde Belediyeler, Konut Sahipleri, Gaz Dağıtım Şirketleri ve Bankaların İşbirliği”**

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**2<sup>nd</sup> MMO Congress on Energy Efficiency – KOCAELI 9-11 April  
2009**

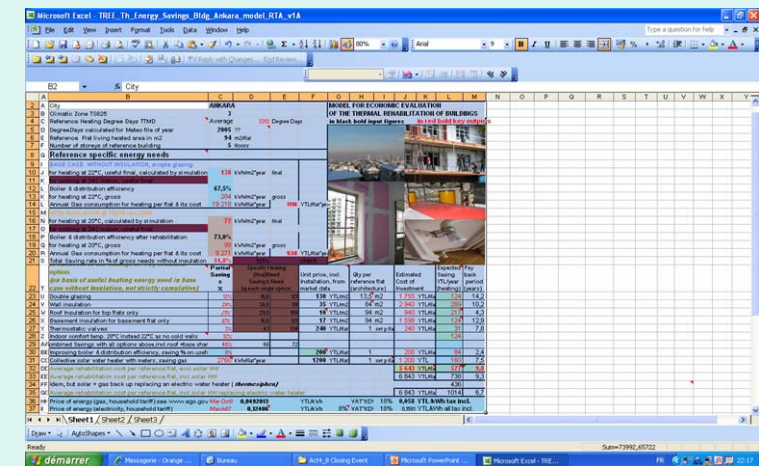
# Situation: old buildings & new costs

- Increasing energy prices (gas & electricity)
- Need for activities & jobs
- New TS825 not affecting existing buildings stock
- Adapting double glazing windows not enough!
- Complex decision, little awareness, few public efforts yet!



# From idea to works: required steps

- Surveys: monitoring gas consumption, kWh/year per m2 (Sivas, Istanbul, Paris project)
- Classification of Buildings & Blocks
- Cost evaluation, tools, & feasibility studies
- Awareness, assistance to audit & decision making
- Quality chart, ToR, performance contracting
- **Financing** for a whole building, not only few flats!



# The end or the start? Financing!

- **Rehabilitation** of joint ownership buildings: a complex issue among many stakeholders!
- Many owners, few renters, one *manager yönetici*
- Benefits for households living in: less heating cost, more comfort, for all flats.
- Benefits for owners: added value at sale; easier to rent, higher rent?
- Many banks among owners for loans if needed.
- Legal aspects: Joint ownership Law, mortgage Law, collateral guaranty.
- A specific regulation is needed!

# Financing joint ownership investment for rehabilitation: **what about the refuznik & poor ?**

- If a decision is taken by 51% majority according to joint ownership law...
- What will do the 49%: pay cash ? sell? borrow under mortgage? No way!
- At least 60-70% should vote “yes” to start
- Probably 10-20% more owners will join after internal negotiations..
- What to do with 10 to 30% of refusing owners or owners unable to pay?

# Critical issue: substitute financing

- If 30% or even 20% of owners are not contributing: too difficult, unfair and risky!
- If up to 15 or 20% are not contributing, a third party should finance instead of them, get the money back later, be guaranteed!
- Owners renting & contributing should be authorized to increase the rent by “heating cost savings”
- Renter who agrees to pay investment, instead of his owner, should be compensated by a decrease of rent and/or heating cost.

# Local Revolving Fund for Building Rehabilitation: proposed rules

- Municipal or local public-private partnership: because market, works, jobs are local.
- For less than 10, 15 or 20% of total cost, & above a minimum value, for reducing risks and transaction cost.
- Reimbursement will be at sale (*notarial hand-on*) and/or by recovery of the heating savings, within general & financial conditions to be set by Law and/or municipal Decree.
- The Fund could get initial capital from local contractors & banks, and soft loans under « climate change and energy efficiency » terms. Loan & grants by FFEM, AFD, EIB, EU
- **Association of banks should prepare a formula for joint ownership loans, involving a leading bank and all banks of the various owners, plus the Local Revolving Fund.**

# Let us start somewhere in Turkey!





# Monitoring Gas Consumption Data for Thermal-Rehabilitation of Residential Buildings

- Project for CIVIL SOCIETY DIALOGUE, mid 2008-2009
- Cofinanced by EU mainly, + by **partners & associates.**
- **SIVAS** Municipality – CFCU contract. 171 000 € grant.
- Municipalities of Istanbul BB & Paris (Apur) are **partners**



# Monitoring Gas Consumption Data for Thermal-Rehabilitation of Residential Buildings

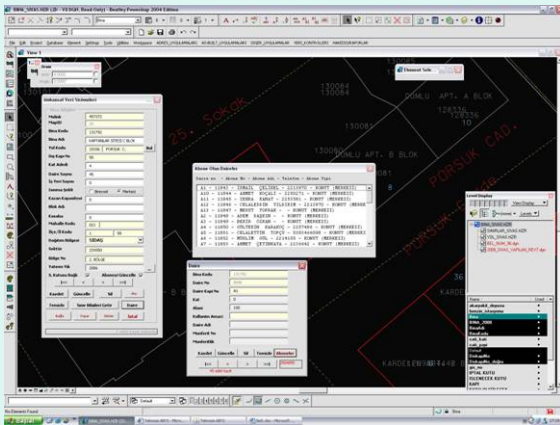
## ...the associates:

- EIE in charge of energy efficiency in Turkey
- ADEME French public Agency for Environment & Energy management
- TBB Union of Turkish Municipalities, for 4 workshops
- SIDAS-gas, private distribution Company at SIVAS
- IGDAS Istanbul BB Gas Company, so far municipal...



# SIVAS project: innovative concept

- Promoting **cooperation** among several municipal services (Urban planning, GIS..) & the local gas distribution Company
- **Connecting databanks:** built areas, gas consumption per building or dwelling, meteorological data
- Computing **indicators:** ratios kWh/m<sup>2</sup>, kWh/m<sup>2</sup> per degree\*day
- **GIS Mapping** of physical & economic values, and as % of city average



# SIVAS project, a vision for joint efforts in local sustainable development

- Cooperation, mix of technical, environmental, economical and social approaches.
- With simple maps, info & awareness to the households; participation in decision after public interactive meetings
- Modernizing municipal management & tools
- Sharing experience among European & Turkish cities



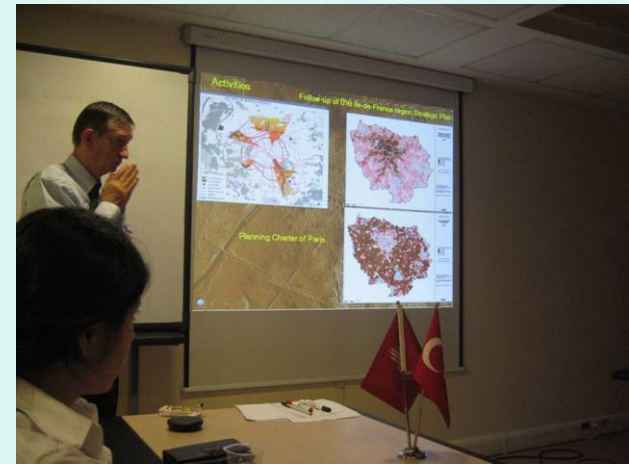
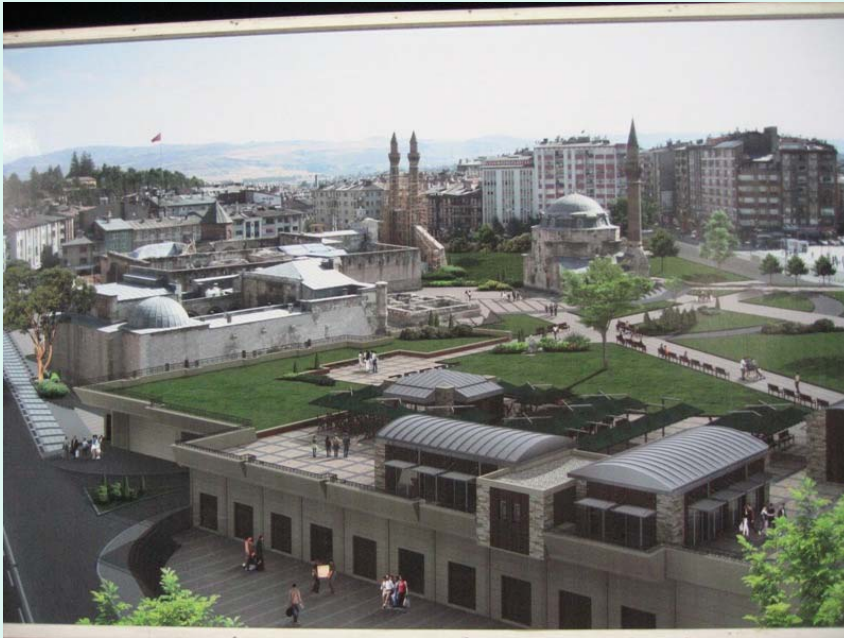
# SIVAS project, a vision for local sustainable development, replicable



# SIVAS Project : the steps ahead...

- Simple surveys toward households
- Simple maps produced by GIS in % & TL/m<sup>2</sup>, at quarter level (*zemt, mahalle*)
- Simple studies (cost & benefit, financing) ordered by the most concerned ownerships.
- Short negotiation with a local bank with a specific & standard loan formula
- Quality standards for thermal rehabilitation
- To get parameters (hot water & kitchen by gas?), info+OK from households
- Municipality will organise public debates by quarter
- Using simple tools provided by EIE, TMMOB, with local parameters (meteo data, unit costs).
- Loan formula to be prepared by a bank, or their association..
- Controls to ensure quality

# From SIVAS to ANKARA & TURKEY... via Istanbul & Paris & Civil Society Dialogue



# Not only mechanical engineering!

- The issues are not only technical, but social, economic & in financing scheme
- Decision making process within an ownership is complex & slow.
- Financing scheme must adapted but simple to implement, as the cost per flat is less then a car!
- Operators must get a view over a large market over several years.
- If a scheme works for 1 building, it might work for 8 millions buildings





# Teşekkürler... to all the team.... in Sivas, Istanbul, Paris, Ankara

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