

50000and1SEAPs – centralised training
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PadovaFIT!

**A Financing Investment Tool for the retrofitting of housing
and service facility buildings in the PADOVA area**

Marco Devetta – SOGESCA

Daniela Luise, Michele Zuin - Comune di Padova



Padova FIT! - Key Figures (1/2)

- **Bundle** a critical mass of small and differentiated investment projects in **building blocks**, making them bankable
- City Council to act as a **facilitator** and **institutional guarantor** for the bundlings
- Selection of a **Delivery Partner** (Energy Service Company) with a Public Tender
- **Repayment model** based on a pay as you save scheme



Padova FIT! - Key Figures (2/2)

- ca. 16 mil€ of **expected investments** launched in the **private housing building sector**
- ca. 4500 people involved by the investments and 150 buildings
- Type of investments:
 - Structural Refurbishment (shell of buildings)
 - Heating plants renewal
 - Renewables
 - Average savings targeted: 25%



Padova FIT! - The Context

When? Where? What? (1/2)

- start / finish date: *June 2013-May 2016*
- The action takes place in the **City of Padova** (North-Eastern Italy) and the municipalities that with it form the Metropolitan area (approx.. **400.000 inh.**)
- The action addresses **private households**, specifically **building blocks**
 - At least 150 Energy audits and technical and economic proposals prepared.
 - ca. 2000 dwellings signing a contract
 - % of property: 75%



Padova FIT! - The Context

When? Where? What? (2/2)

- Energy condition of Padova Buildings:
 - Average Class G
 - 180 kWh/m²/year
 - following the economic boom of 1960s-1970s and consequent housing need
- Barriers to overcome
 - Income - energy poverty
 - Ageing population with specific life perspective
 - Lack of competences on energy issues
 - Mistrust to EPC schemes
 - Hostility to debts



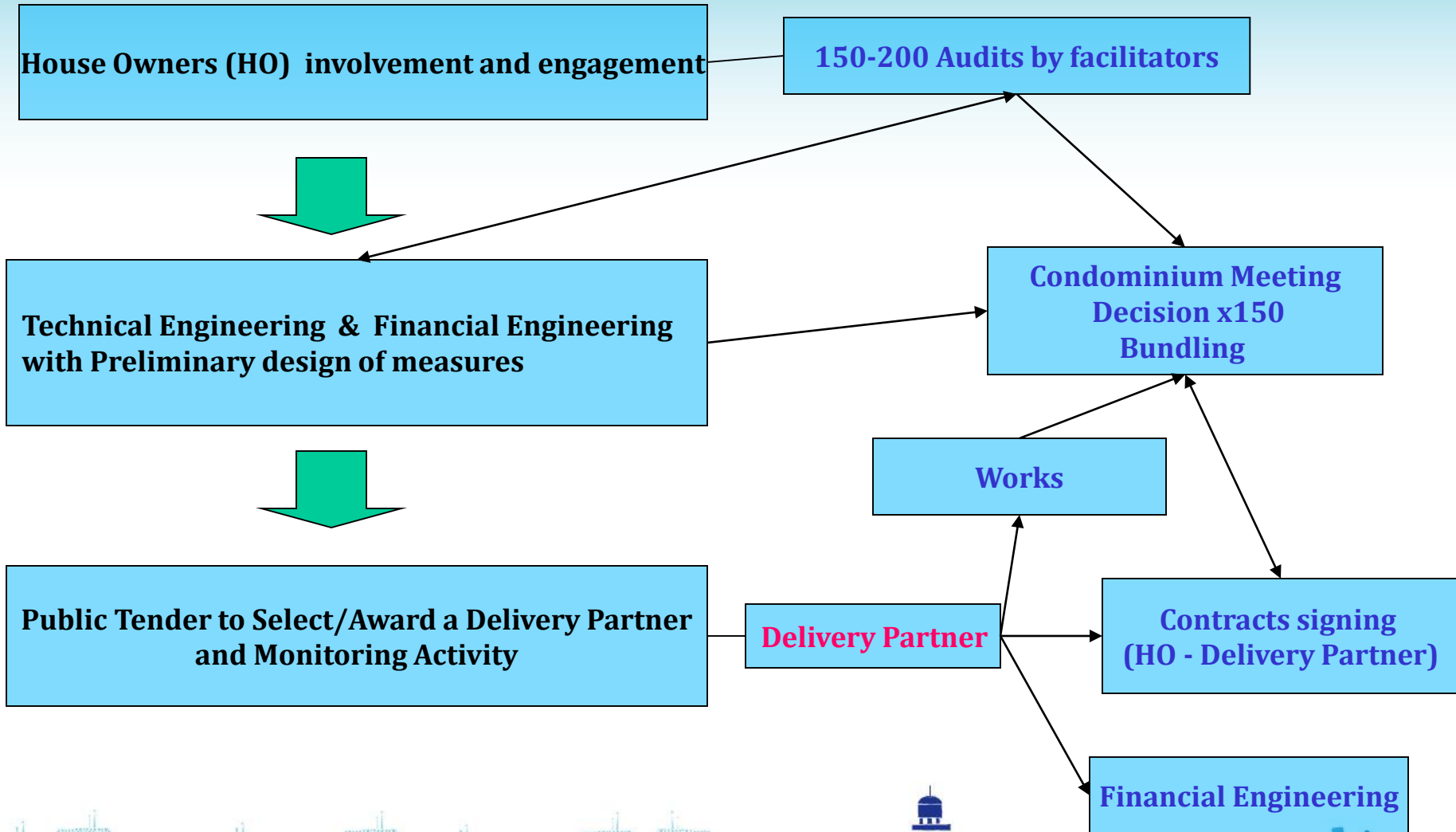
PadovaFIT! -

Previous planning-mobilisation on which the project has been built

- Padova SEAP – including support the the private housing sector
- Italy feed-in tariffs (mainly FV)
- Public District Heating Company Contract to provide heating to City's buildings (giving the sparkle of the concept of bundling for privates)
 - Giving the technical and contract know-how to the Procurement Office



Padova FIT! - Structure of the Project



Padova FIT! - Key elements and critical factors (1/9)

0) Preliminary Planning

1-1,5 years in advance

a) Stakeholder involvement and engagement

- Training of Facilitators: a TECHNICAL and PSYCHOLOGICAL work
- Target groups addressed: Building managers associations, small owners associations, House Owners/Tenants Unions, Builders associations
- Some target groups resistance and some target group exceeding expectations
- Facilitators in Condominium Meetings need to be backed up by a Municipal Officer



Padova FIT! - Key elements and critical factors (2/9)

b) Technical Engineering & Preliminary design of interventions

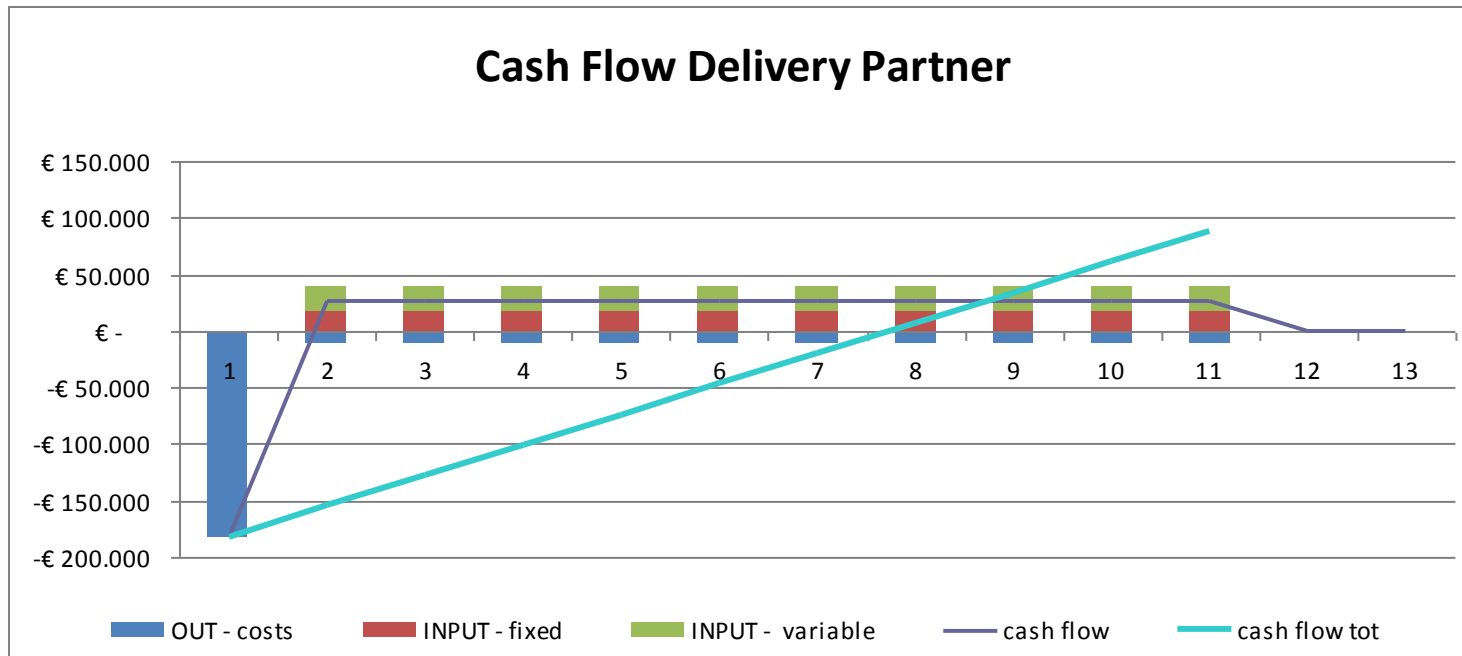
- Carefulness to provide precise figures...which is the possible % error to be presented in Condominium Meetings?
- Minimum size buildings to be economically viable/interesting for Energy Service Companies?



Padova FIT! - Key elements and critical factors (3/9)

b) Technical Engineering & Preliminary design of interventions

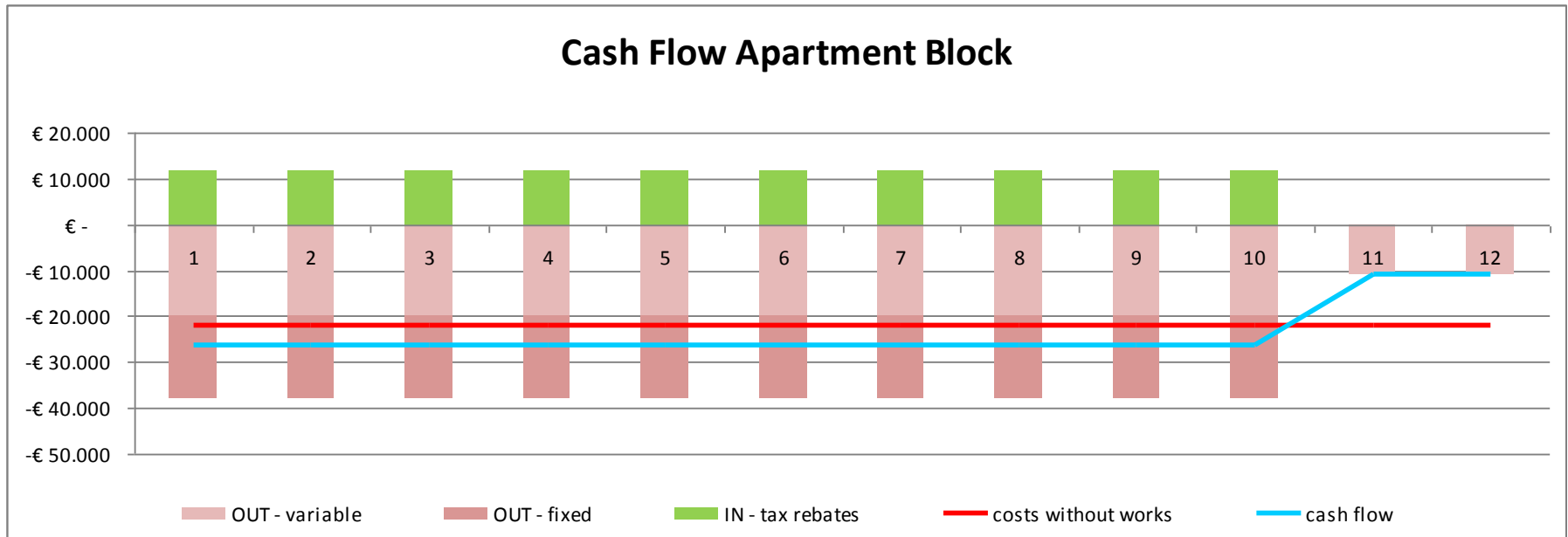
- Repayment scheme example



Padova FIT! - Key elements and critical factors (4/9)

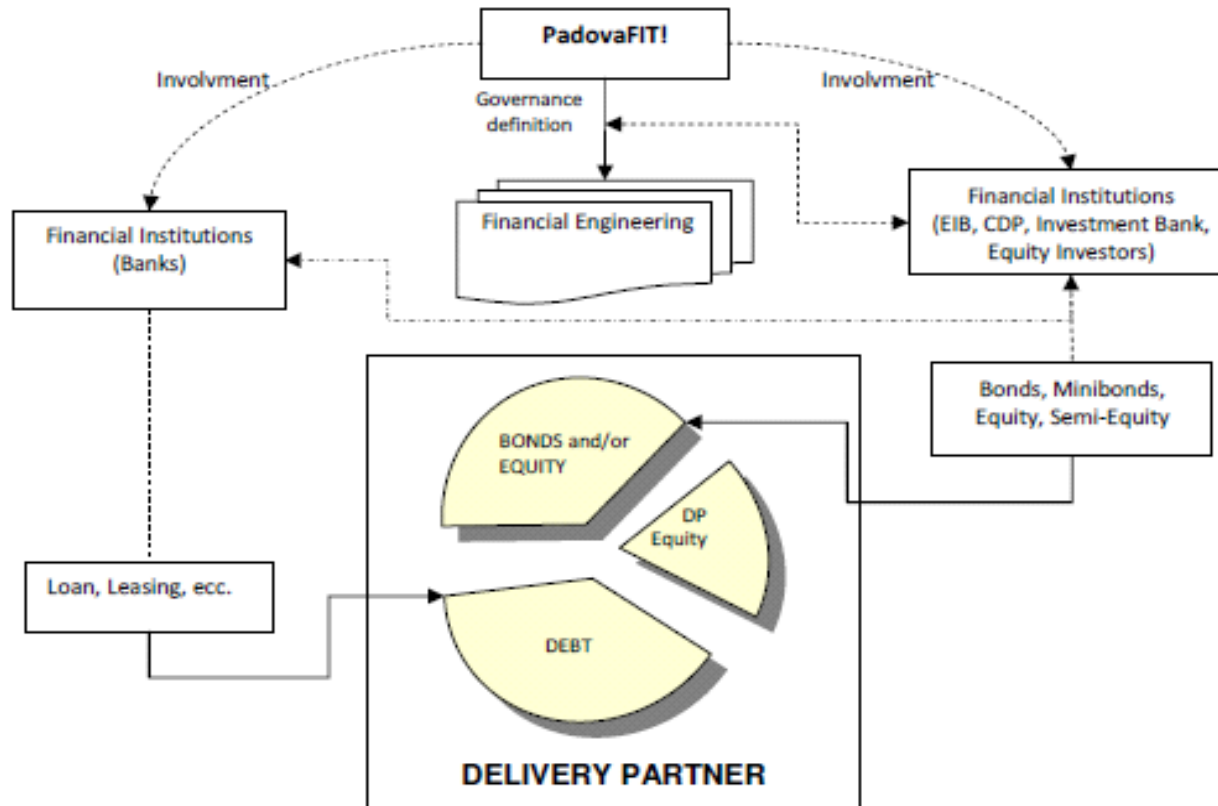
b) Technical Engineering & Preliminary design of interventions

- Repayment scheme example



Padova FIT! - Financial Engineering Scheme (2/2)

c) Fund Scheme



Padova FIT! - Key elements and critical factors (5/9)

c) Financial Engineering

Fund for the awarded Delivery Partner to make the works bankable - ISSUES

- **SCALE:** the project's limited dimensions
- **IS THE MARKET READY:** the Italian market of Private Equity or Venture not ready to finance EE projects (more prepared with Renewables);
- **TIMING** and **COSTS** to create a Capital Fund
- **WHICH INVESTORS?**
- Need to involve professionals to structure complex financial operations (more viable for investments > 50/60 mln €)



Padova FIT! - Key elements and critical factors (7/9)

FEASIBILITY OF THE FINANCIAL SCHEME

- Delivery Partner own capital → min 20% → remuneration 7%;
- Equity or Bond from third parties → 25-30% → remuneration 12%;
- Bank debit → 50- 55% → cost 8%;
- Contracts duration → 10 years;
- Discount for homeowners on previous billing → 5%;
- Choice tax credits/white certificates.



Padova FIT! - Key elements and critical factors (8/9)

d) Procurement and Works

- Writing and issuing the Tender – No initial idea of a Competitive Dialogue
- Templates of different Contracts:
 - Municipality - Delivery Partner
 - Delivery Partner - Building/Owners
 - Auditing the Delivery Partner and advise Owners



Padova FIT! – From finance to Contract

d) Procurement and Works

Which documents to be annexed to the Tender

- Financial schemes
- Required Refurbishment Plans for three differentiated standard buildings (for assessment)
- Technical and financial qualification
- 3 years of experience in the field
- 2 years of active balance sheet
- 20% investment with own capital

Rewarding Elements

- Discounts on previous billing >5% and/or % of guaranteed efficiency > 15%
- Involvement of local workers/firms
- Bringing in “extra” buildings



Padova FIT! - Key elements and critical factors (9/9)

z) Works and after project scenarios

- Managing the relationships AFTER the end of the project by the Comune di Padova
- Operational, Technical and Financial Monitoring of the Contracts



Padova FIT! - Key Problems (1/2)

Human Factor

- Need to improve general knowledge on energy issues
- Facilitation in Condominiums not always accepted and meetings often influenced by other factors
- Condominium Managers not always collaborative

Buildings

- Survey to target correct buildings / areas of the City
- Scouting for buildings not necessarily brings the correct ones



Padova FIT! - Key Problems (2/2)

Financial

- The financial scheme difficult to digest to House Owners
- The financial scheme for the Delivery Partner is complex

Tendering

- The tender procedure is simple *per se* but doesn't offer sure works
- Need to pay attention on communicating the positive market aspects and outcomes to the applicants

Timing

- Crucial for citizens that apply to a project whose works are envisaged within 1 to 2 years
- Crucial for the Delivery Partner to build business



Padova FIT! ...If we could start anew.....

- Implementation needs AT LEAST 1 year of beforehand Planning
- Possible Delivery Partners “SWOT” to be performed in advance
- Training of Facilitators to be performed just before active work
- Building Managers to be merged with facilitators
- Contracts drafts to be developed ASAP
- Local energy providers to be incorporated in the project to manage bills
- Minimum geographical scale to be carefully chosen



CONTACTS



COMUNE di PADOVA

Settore Ambiente e Territorio - Comune di Padova

Ufficio Agenda 21

via di Salici n. 35

35124 Padova

ph. +39 049 820502

padovafit@comune.padova.it

www.padovafit.it



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