



Mission oriented Programs for Smart Cities and Regions

Activities of the Austrian
Climate and Energy Fund CEF

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Los Angeles, Oct 11th 2013



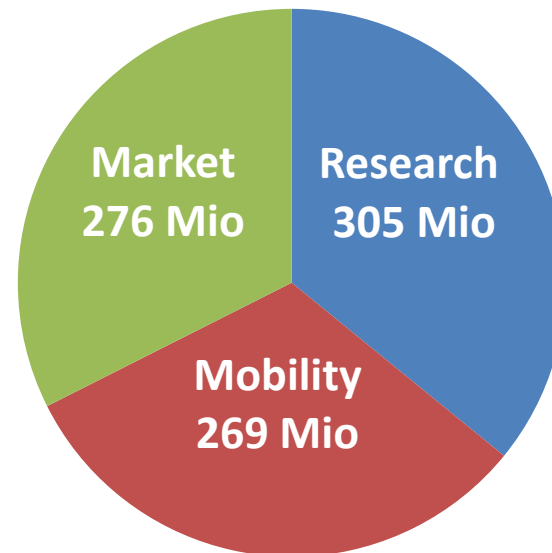
A fund of the Austrian Federal Government

- Established by the **Climate and Energy Fund Act** in 2007
- **Supporting** the government by
 - achieving the national **climate and energy targets**
 - developing and implementing **national adaption strategies (climate change, energy transition)**
 - **reducing carbon** emissions, **increasing** energy **efficiency** and **boosting energy related innovation**
- Has a focus on innovation and a **long-term perspective**

The Power of Facts – a Retrospective

2007-2012 | 57,370 projects | €725m funding |
€ 1.8bn investment | 5.8 €/tCO₂ red. potential

Balanced
Push-Pull-Mix
22 programs
R&D&D



The Smart City Topic ...

is part of a national action plan and relies on

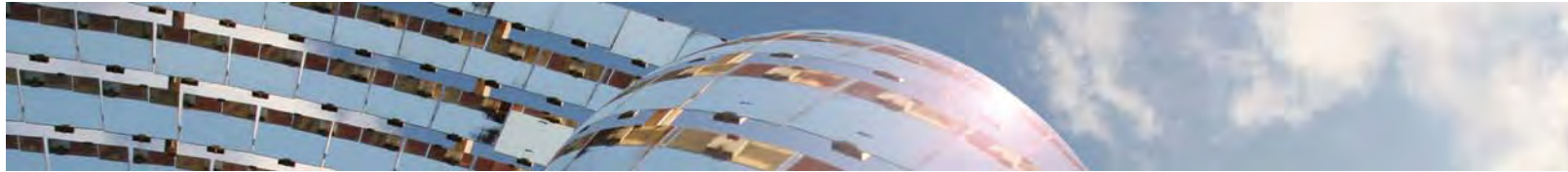
- **Smart Cities Demo Program**
 - 4 Calls since Dec 2010
 - 4th Call started Sept 2013: € 8,5m demonstration
- ***City of the Future* Program of BMVIT**
 - 1st Call started Sept 2013
- **Urban Europe activities**
- Website, TP, JPI, events, etc.

Smart Cities RTD program strategy: considering national challenges...

- **AT = small cities** (5 > 100.000, 1 > 1,000.000)
- **urbanisation, demography**
- **limited domestic energy resources (35%)**
- **different starting positions**
in matters of urban vision – legal binding and budgetary boundaries
- **system integration** as value added
- (long-term) **financing instruments**

...and the national strategy in general

- Focus on national **strengthes: scientific & industrial competences**
- Integration of all **stakeholder**
- Generation of **lighthouse projects**
- **high visibility** for urban issues
- **large investments** in close-to-market RDI



Smart Cities Demo Program in action since 2010

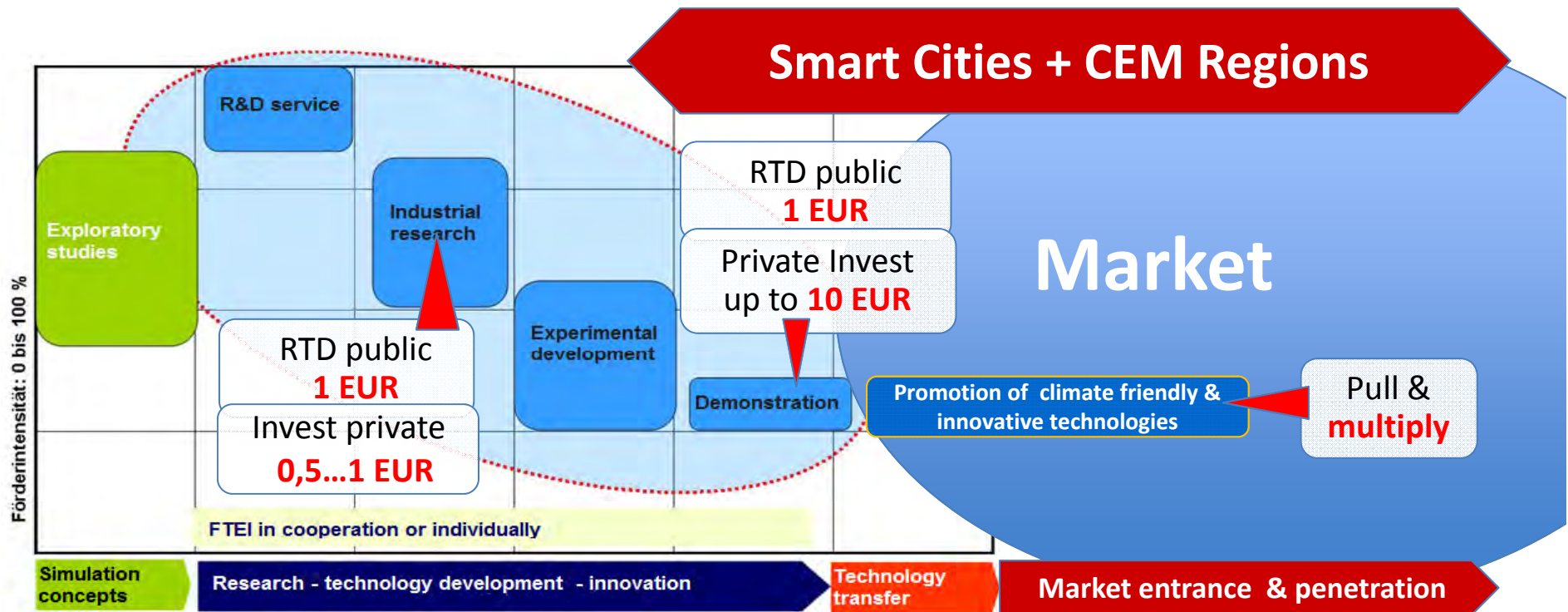
The program proposes a **two-stage procedure**:

1. Formation of consortia with transnational integration, development of vision, roadmap and action plan

2. Implementation of "Smart Energy" -pilot and demonstration projects

to achieve the best starting position possible for the **participation of Austrian consortia in the SET Plan**

Giving Impetus to Urban Development



Smart Cities Demo - A program to reach people ...

- + **3m inhabitants** in Smart Cities
- + **322,000 inhabitants** of Smart Urban Regions
 - + 18 cities < 100,000 inhabitants
 - + 3 cities 100,000 to 200,000 inhabitants
 - + 2 cities > 200,000 inhabitants
- + See more: <http://www.smartcities.at>

... and enterprises

RTD institutions

Consumers

- Households
- SME

Enterprises

- Energy
- Building
- Infrastructure
- Regional planning
- etc

Project Management

Regions, cities, communities

Financing

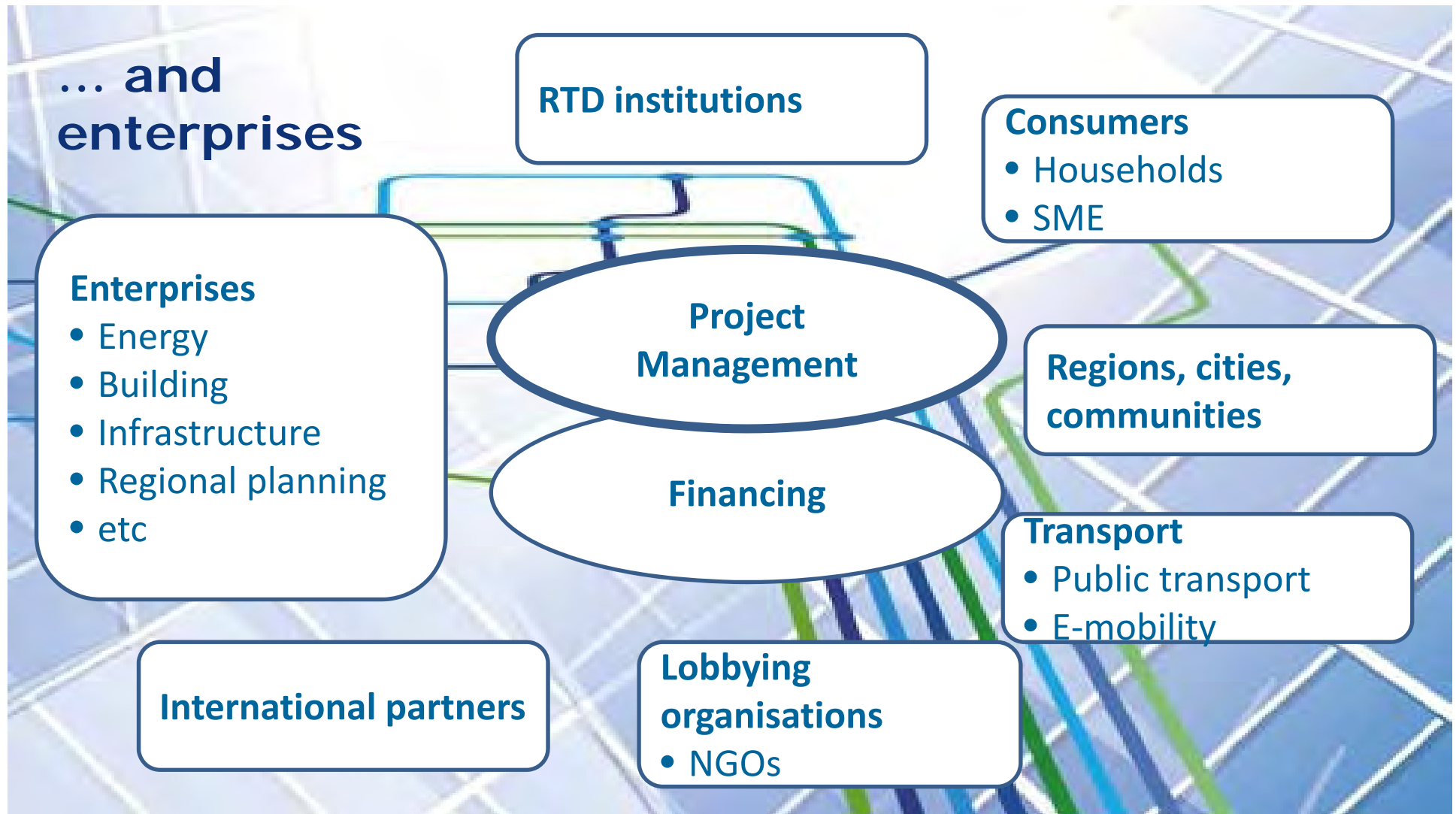
Transport

- Public transport
- E-mobility

International partners

Lobbying organisations

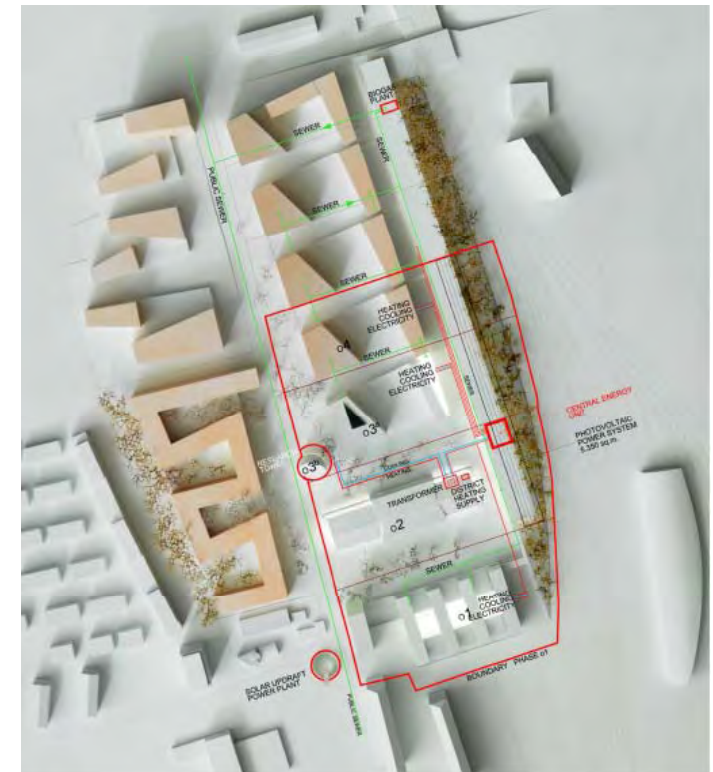
- NGOs



Example Smart Future Graz...

100% renewables in the city

- **Demonstration** and testing of urban technologies for using renewable energy sources
- **Implementation** of an **integrative planning process**
- City of Graz & **interdisciplinary consortia** of **13 partners**
- Funding: €4.2m (of appr. € 100m)
- Duration: 05/2012–04/2016

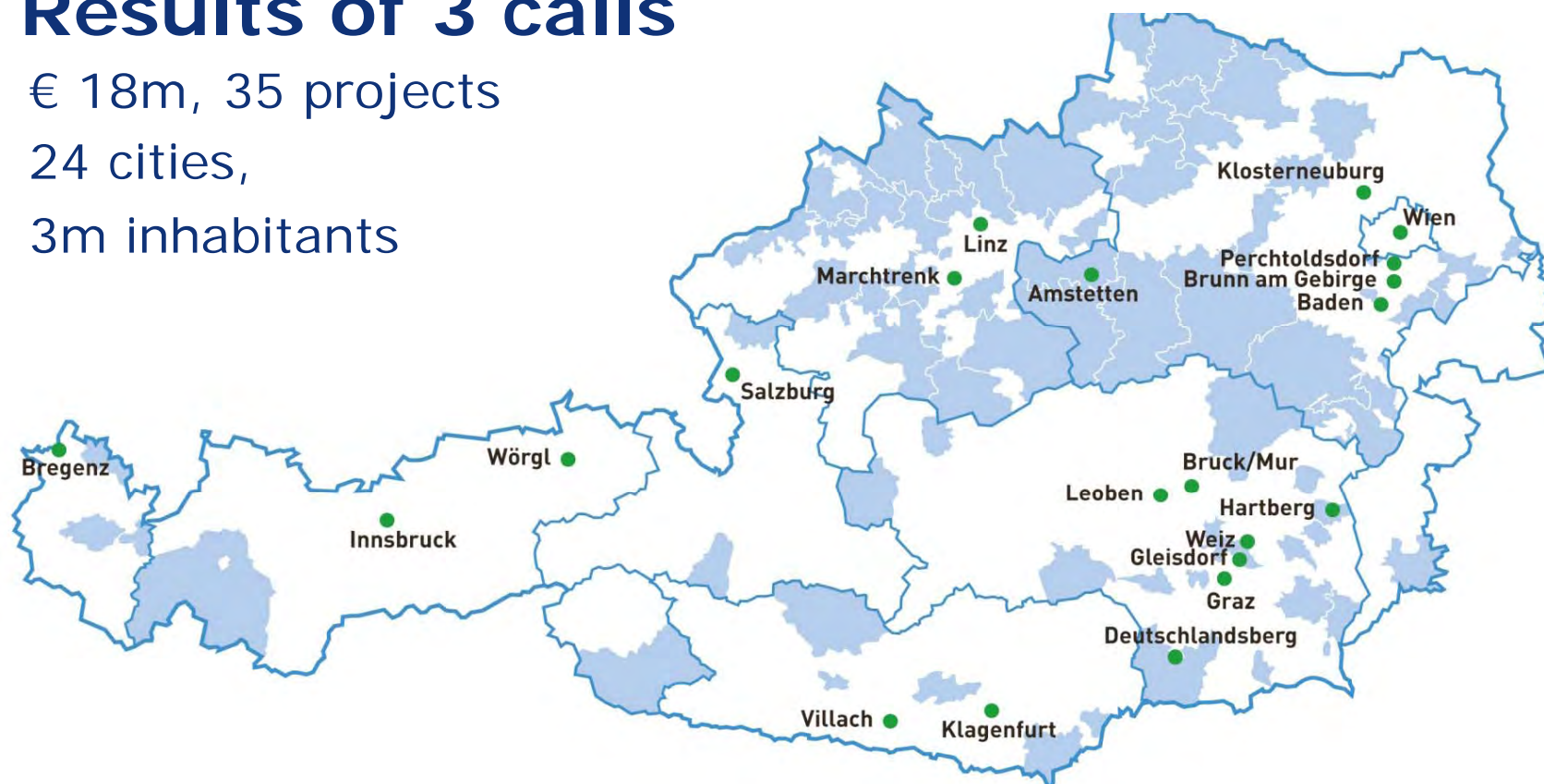


Smart Cities Demo Results of 3 calls

€ 18m, 35 projects

24 cities,

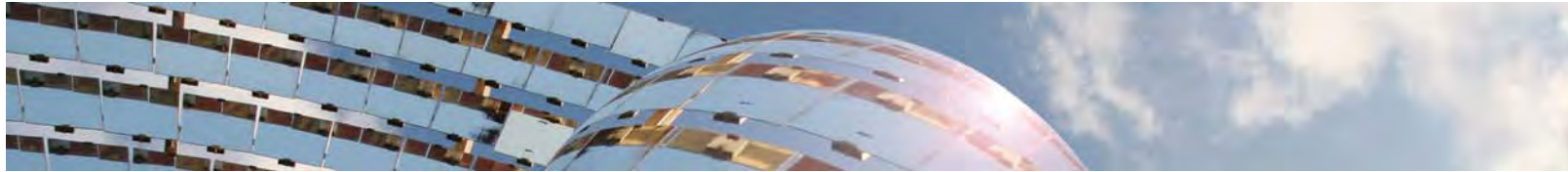
3m inhabitants



Results: Urban Actionplans

24 different Cities – similar focus

- 1. Lowering Energy Demand** → heating, refurbishment, solarthermal
- 2. Keep Electricity Demand stable** → increase efficiency, Smart Grids, B2G, V2G
- 3. Integration of Renewables** → limited potential
- 4. Services and mobility** → first steps



Results: Lessons learned

Projects

„lack“ on **urban mobility** aspects

involvement of **inhabitants** is crucial

Very „optimistic“ approaches – time, effects

Self **evaluation**, **monitoring** – indicators

Scope of RTD-demonstration < > rest of project

Financing of the whole project – **long time** perspective

USP: **Co-ordination of different funding sources**

RTD funding is not enough

Therefore 106 Climate and Energy Model Regions were established by the CEF (2009-2012)

- Funding of **regional management**
- **energy autonomy** and **fossil free energy supply**
- CEF provides **temporary impulse** for **market entrance of innovative technologies** → **market pull**
- Aspiring **high density** of renewables in **regional testbeds** → monitoring the effects on existing infrastructure
- **International co-operation** – eg. **R20**

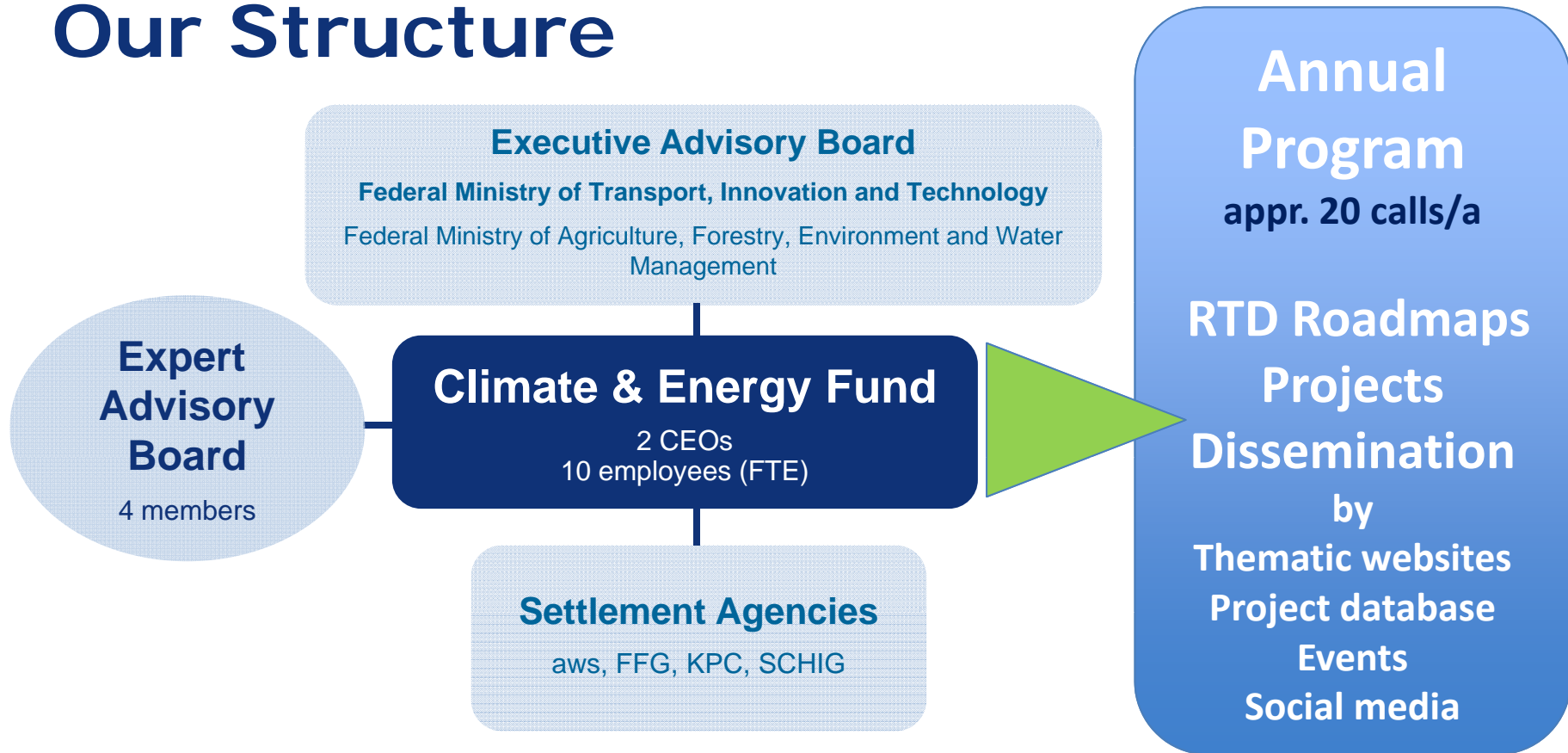
The Climate- and Energy Fund operates

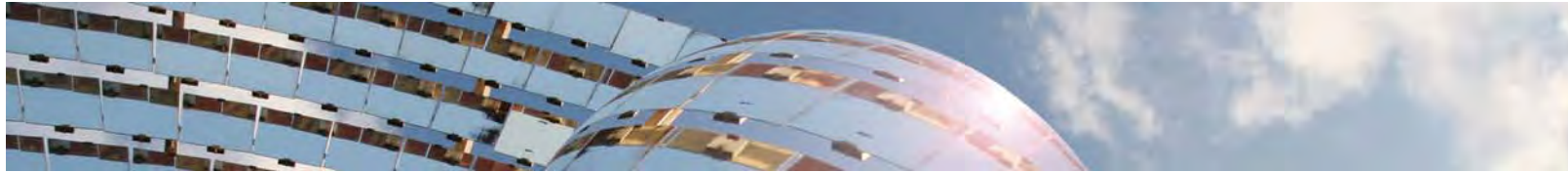
Instantly.
Medium term.
Long term.



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Our Structure





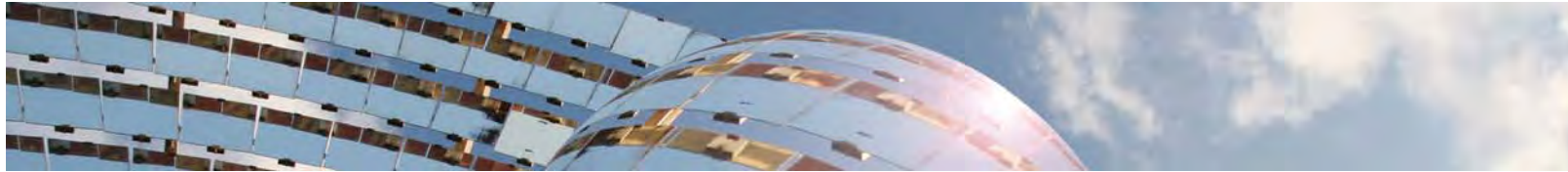
Results of the 1st Call

30 proposals

21 projects funded

**18 cities in 8 Austrian regions with
3 Mio. inhabitants**

2,1 Mio. EUR funding



Results of the 2nd Call

18 proposals

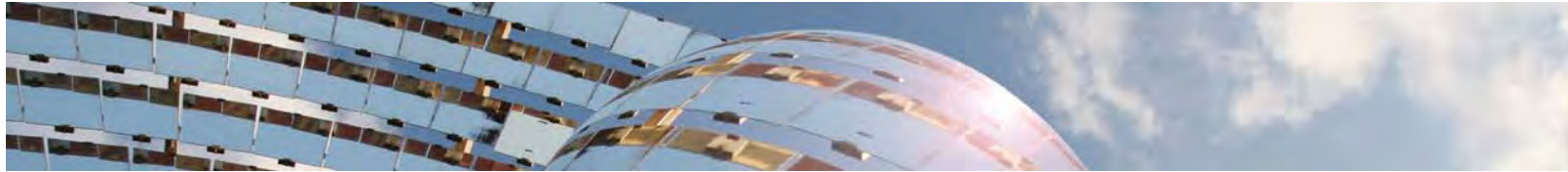
9 projects funded

3 cities (Graz, Villach, Salzburg)

3 urban regions (Hartberg, Rheintal, Weiz-Gleisdorf)

3 R&D studies

10,6 Mio. EUR funding



Results of the 3rd Call

14 proposals

7 projects funded

2 cities (Leoben, Oberwart)

5 1st stage projects

(Asparn, Bruck, Gmunden, Güssing, Salzburg)

1 FP 7 Additional Project (Vienna)

5,4 Mio EUR funding