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PassREg

proKlima-fund Hanover: Promoting and supporting efficiency in buildings

Zagreb Energy Week 2014

Int. Conference

16 May 2014

Matthias Wohlfahrt

proKlima

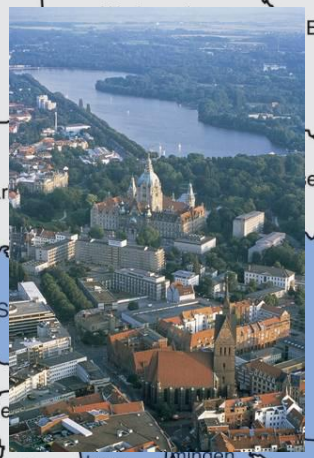
Der enercity-Fonds

- **About proKlima**
- **Best practice step-by-step**
- **Success-story**

Region and City of Hanover

proKlima
Der enercity-Fonds

Fig.: www.bmvi.de/ BMVBS, 2011



Covenant of Mayors
Committed to local sustainable energy

HANNOVER MESSE

CeBIT

Continental
The Future in Motion

Nutzfahrzeuge

TUI

HDI

21 municipalities
157.500 family houses
48.000 apartment buildings
49.800 companies
1.2 million inhabitants (ca. 514.000 City of Hanover)

proKlima – funding partners

proKlima
Der enercity-Fonds

proKlima area = net grid area
of energy supplier "enercity Stadtwerke Hannover AG"

proKlima – advisory partners

proKlima
Der enercity-Fonds

Thüga AG (energy holding company, enercity is involved)

Handwerkskammer Hannover (chamber of handicrafts)

Bundesverband der Energieabnehmer (energy consumer org.)

Verbraucherzentrale Niedersachsen (consumer protection org.)

Bürgerinitiative Umweltschutz (local environment initiative)

proKlima – foundation

Foto: proKlima Partners - extension of the contract, 2004

- **proKlima was founded in 1998 mainly by the Capital City Hanover & enercity Stadtwerke Hannover AG (local energy supplier) and other partners**
- **voluntary cooperative fund model**
- **based on a partnership contract [1]**
- **unique in Europe**

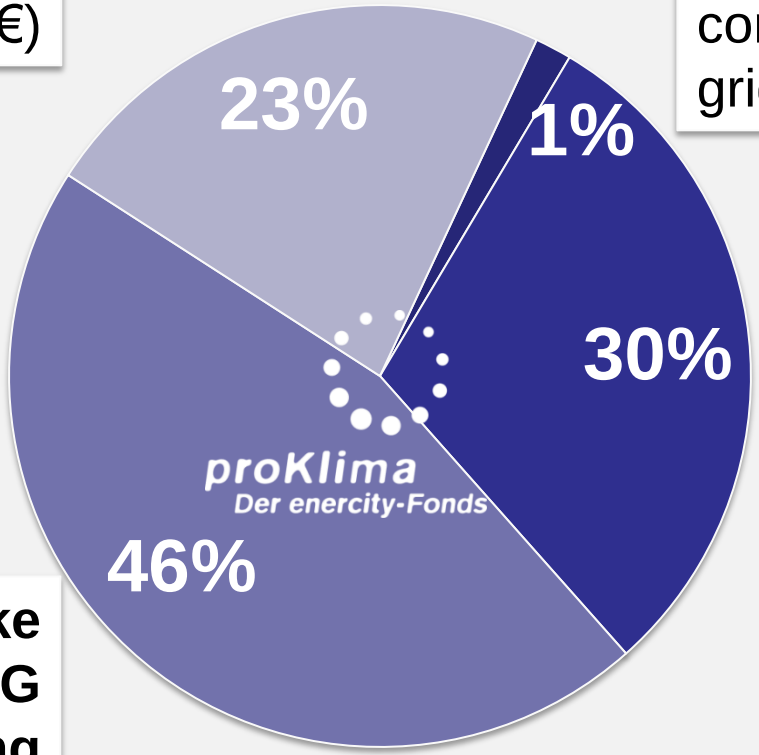
[1] http://www.proklima-hannover.de/downloads/proKlima/partnership_contract_proKlima_as_a_model.pdf

proKlima – financing model

City of Hanover
(3.25 %, max.1 M €)

4.4 M €/year*

Suburb-cities:
concession levy for grid usage (2.5%)



enercity Stadtwerke Hannover AG profit sharing
(3.25 %, max. 2 M €)

enercity Stadtwerke Hannover AG gas price component
(0.05 ct/kWh)

*** in 2013**

proKlima – main activities

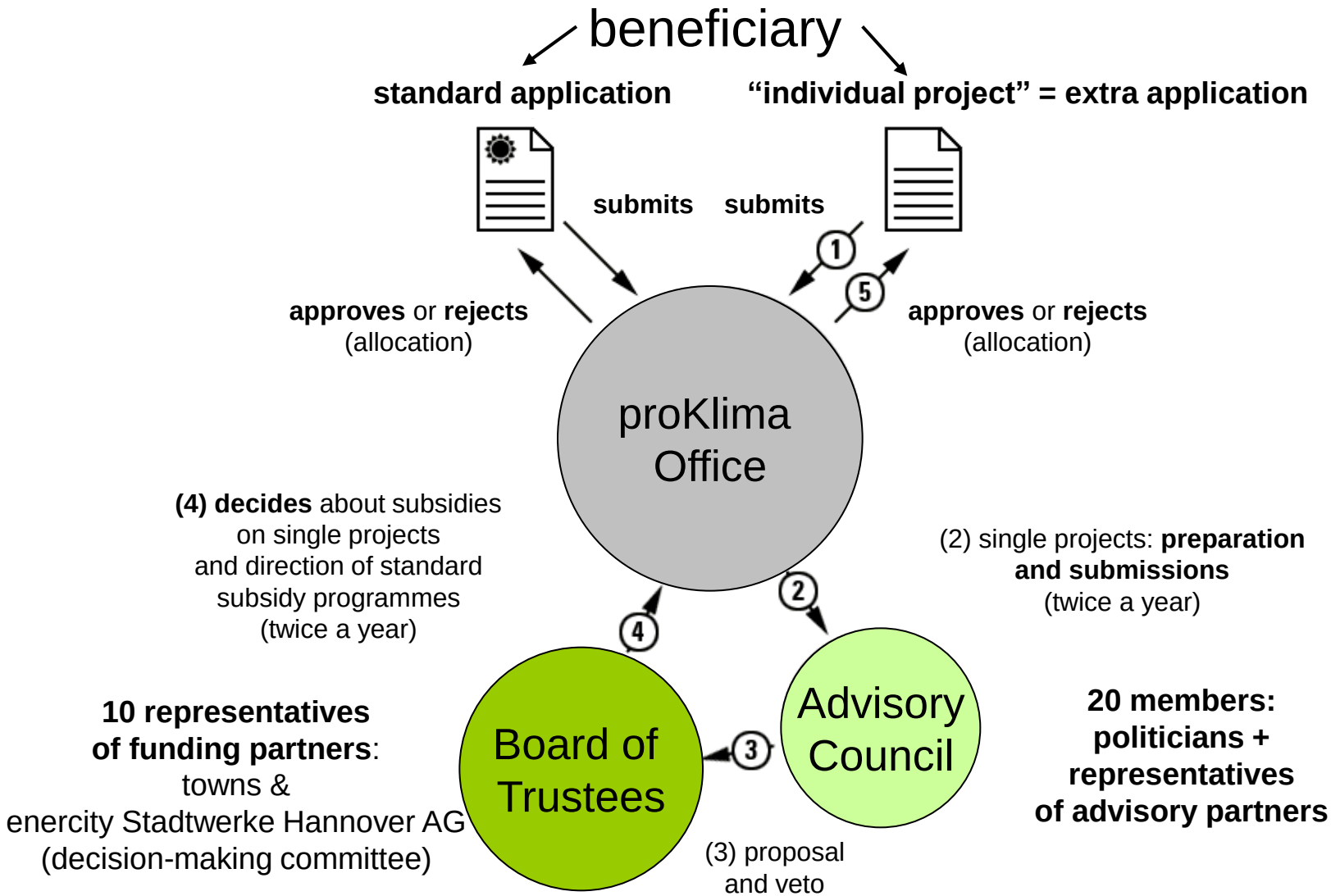
proKlima
Der enercity-Fonds

subsidies

training

information

proKlima – subsidies



proKlima – subsidy guidelines

Step-by-step modernization

Passive house residential

Combined heat and power

Renewables

Passive house non-residential

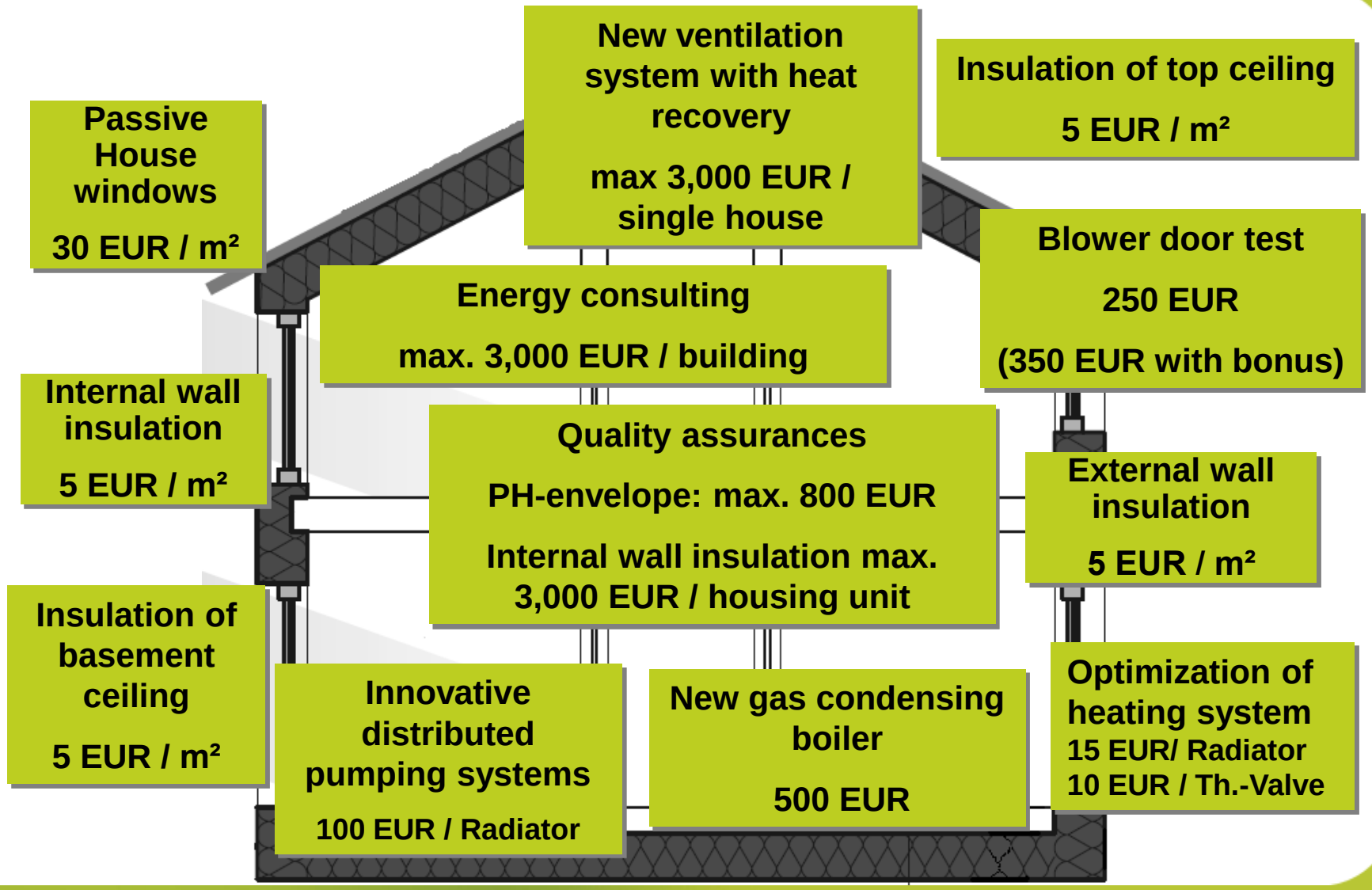
Schools and training

proKlima – subsidies on modernization

proKlima supports step by step modernization of residential buildings

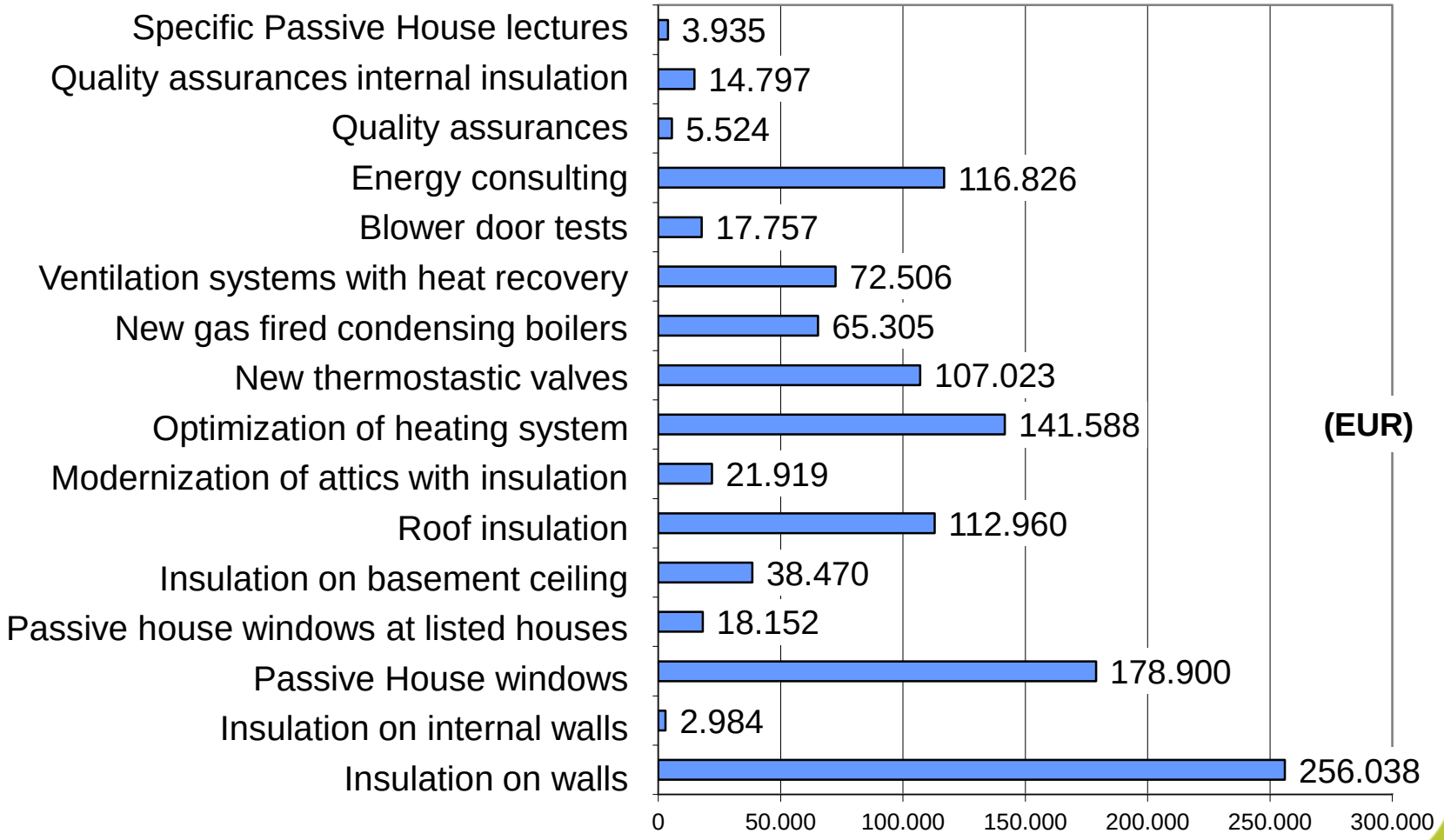
proKlima – subsidies on modernization

proKlima
Der enercity-Fonds



proKlima – subsidies on modernization

Subsidies on step-by-step modernization (year 2013)



proKlima – subsidies

proKlima supports new Passive House residential buildings

single house **semi-detached house** **row house**	**5,000 EUR/ house**
apartment house	**3,000 EUR/ dwelling**

conditions:
Passive House Standard + Quality Assurance
maximal support: 50,000 EUR per house

proKlima – subsidies

proKlima
Der enercity-Fonds

proKlima supports PH non-residential buildings

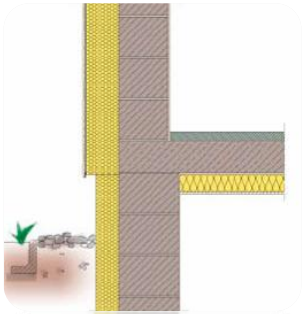
newly-built at Passive House Standard:	**50 EUR/ m²**
incl. quality assurance	max. 50,000 EUR

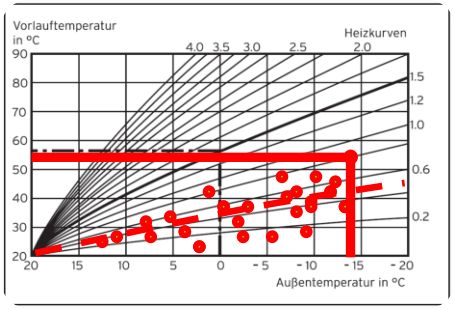
Modernisation with Passive House Components :	**50 EUR/ m²**
incl. quality assurance	max. 50,000 EUR

Subsidy-bonus "Monitoring"- Evaluation of energy consumption	**5 EUR/ m²**
	max. 5,000 EUR

proKlima – criteria for individual projects

- CO_2-efficiency (Euros / metric tons of avoided CO_2)
- absolute amount of avoided CO_2
- multiplier effect
- level of innovation





proKlima – training

Fotos: proKlima

Int. PH Days Region of Hanover

Fig.: Int. Passive House days 2013 (CPAH)

proKlima – information

Various information – print material (booklets and brochures)

www.proklima-hannover.de

proklima – annual report

More information:

- Subsidy statistics
- Activities
- Best practices

proKlima – efforts and statistics

proKlima
Der enercity-Fonds

Since 1998 more than…

24,000 projects for the “mass-market” (standard applications)

750 individual projects

53 m € allocated

avoided CO2: 118,000 t/year

proKlima – efforts and statistics

1 EUR support generates 13 EUR local investments.

Quelle: Pestel-Institut Hannover, 2011

- About proKlima
- **Best practice step-by-step**
- Success-story

Milestones over the past 15 years

proKlima
Der enercity-Fonds

1998 — proKlima GbR with partnership contract *proKlima* established

1999 — Initial project: First passive houses Hanover-Kronsberg (EXPO 2000)

2001 — Climate Protection Agency Region Hanover established

2007 — Passive House Resolution of the City Council to buildings in municipal influence

2008 — Climate-Alliance 2020 Hanover: 40 % CO2-reduction until 2020 on level 1990

2010 — Start neighbourhood zero:e-park Hanover

2011 — Region of Hanover: 40 % CO2-reduction until 2020 on level 1990

2012 — Masterplan 100%: Region and City of Hanover 95 % CO2-reduction, 50 % energy consumption until 2050 on level 1990

Initial project

Architects: Rasch & Partner/ Petra Grenz

Foto: proKlima/PHI

First Passive Houses 32 row houses

Hanover-Kronsberg 1999 (EXPO 2000)

Follower

proKlima
Der enercity-Fonds

zero:e-park
PH neighbourhood with renewables
in Hanover-Wettbergen

more than 300 housing units & 1 supermarket

Start / end of sale

1. section: 2010/2012 (Plan End 2013)
2. section: 2012/2013 (Plan End 2017)
3. section: 2013/ …? (Plan End 2021)

Foto: proKlima/M. Wohlfahrt

Initial project

proKlima
Der enercity-Fonds

First PH day care center

(Kita „Große Pranke“)

Hanover 2006

Foto: despang Architekten

Architects: despang, Hannover

Follower

proKlima
Der enercity-Fonds

PPP-Project

8 new PH day care centers

Hanover (2011-2013)

Fotos: Olaf Mahlstedt

Architects:
Ahrens Grabenhorst/Mosaik Architekten

Initial project

REWE **supermarket**, zero:e-park, Hanover (2012)

→ Developing the Standard and monitoring by PHI

Fotos: proKlima/Olaf Mahlstedt

Architects: Spengler-Wiescholek, Hamburg

Follower

Netto **supermarket**, Hanover (2014-2015)

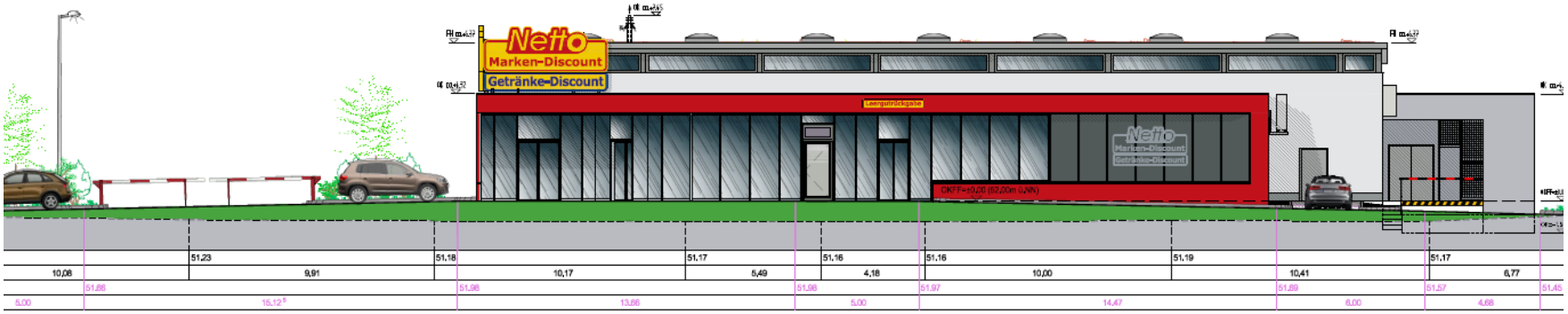


Fig.: Netto

Lost of work to do…

proKlima
Der enercity-Fonds

with renovation of urban quarters

retrofit townhouse, Hanover (2009)

More projects

www.passivhaus-plattform.de

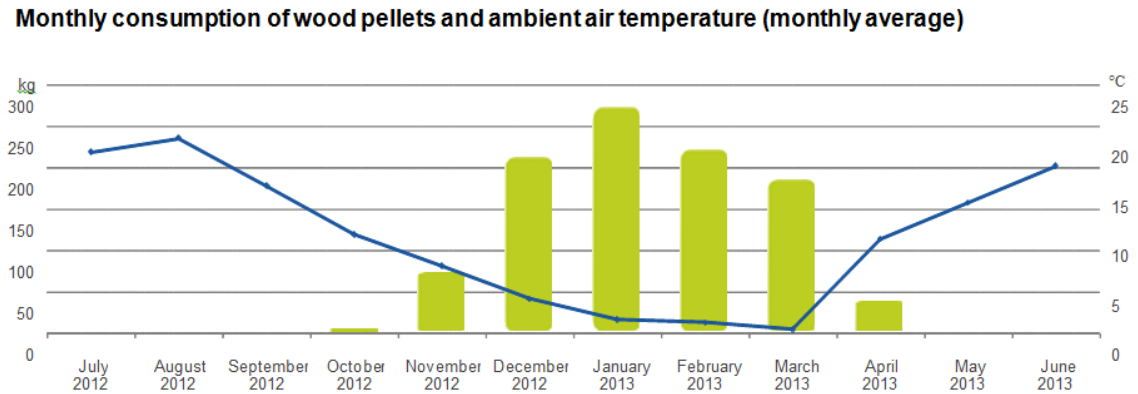
- About proKlima
- Best practice step-by-step
- **Success-story**

Be aware of:

proKlima
Der enercity-Fonds

Quality assurance and monitoring

Foto by Climate Protection Agency Region of Hanover (CPAH)



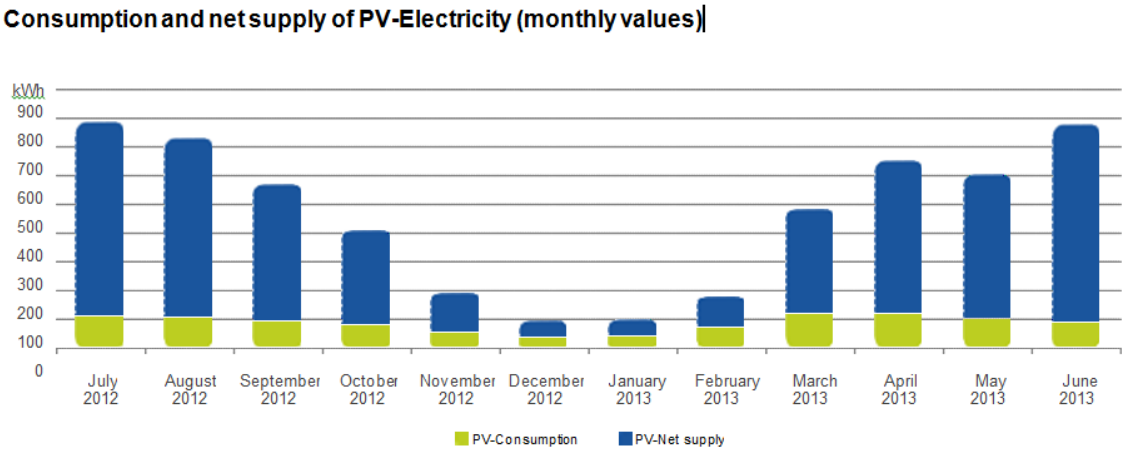


Fig.: voluntary monitoring programme for zero:e park- housing owners (source proKlima)

3 Steps to start and proceed the process

1. **Establish regional beacon projects to convince stakeholders (perhaps with non-regional experts)**

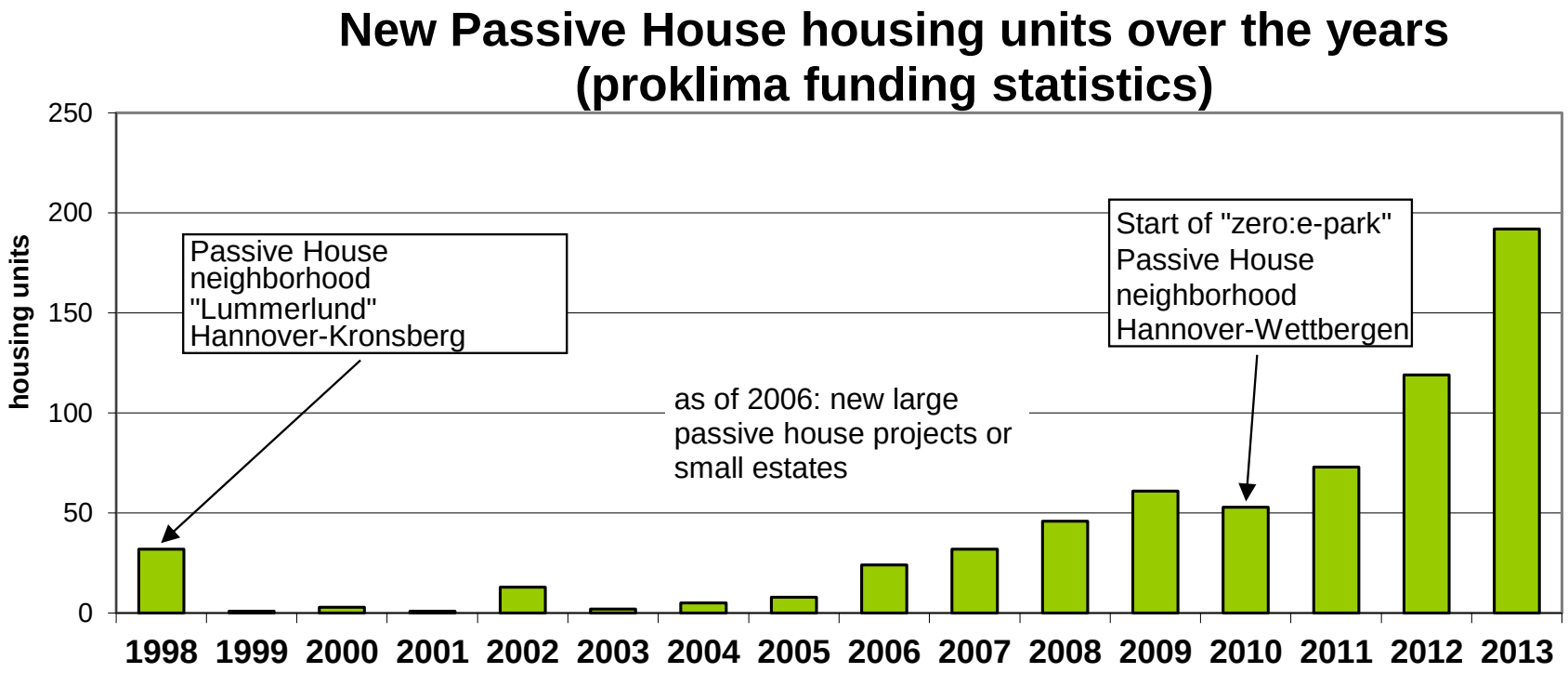
2. **Install the framework (PR, campaigns, training, expert knowledge, quality assurance, monitoring)**

1. **Initiate a broad regional efficiency process by spending subsidies. With subsidies ecological and economical targets could be connected. (Win-Win-Situation)**

then you will succeed,

but nevertheless be patient…

proKlima – efforts and statistics



Source : proKlima, 2014

Thank you for your attention!

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Energy Efficiency for companies

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Foto: proKlima team at Int. Passive House Conf. Hannover 2012