

# proKlima-fund Hanover: Promoting and supporting efficiency in buildings

Zagreb Energy Week 2014  
Int. Conference  
16 May 2014

Matthias Wohlfahrt



**proKlima**  
Der energycity-Fonds

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



**proKlima**  
Der enercity-Fonds

# proKlima – funding partners



**proKlima area = net grid area  
of energy supplier “enercity Stadtwerke Hannover AG”**

# proKlima – advisory partners



**Thüga AG** (energy holding company, enercity is involved)



Handwerkskammer  
Hannover

**Handwerkskammer Hannover** (chamber of handicrafts)



**Bundesverband der Energieabnehmer** (energy consumer org.)



**Verbraucherzentrale Niedersachsen** (consumer protection org.)



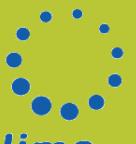
**Bürgerinitiative Umweltschutz** (local environment initiative)



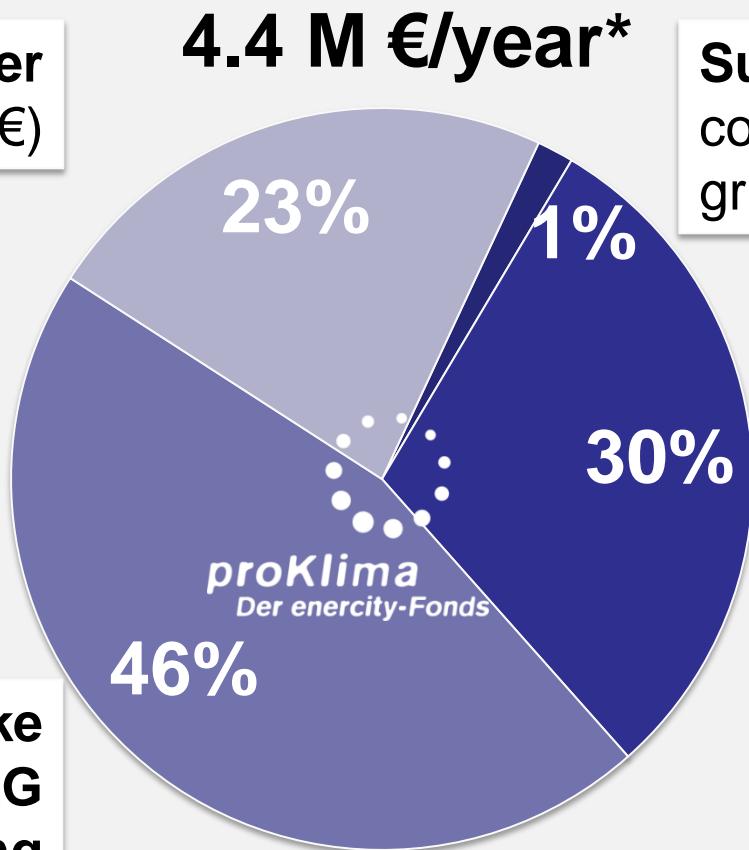
Foto: proKlima Partners -  
extension of the contract, 2004

- **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](http://www.proklima-hannover.de/downloads/proKlima/partnership_contract_proKlima_as_a_model.pdf)



# proKlima – financing model



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

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

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

\* in 2013



# proKlima – main activities



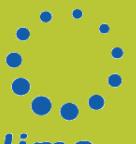
**subsidies**



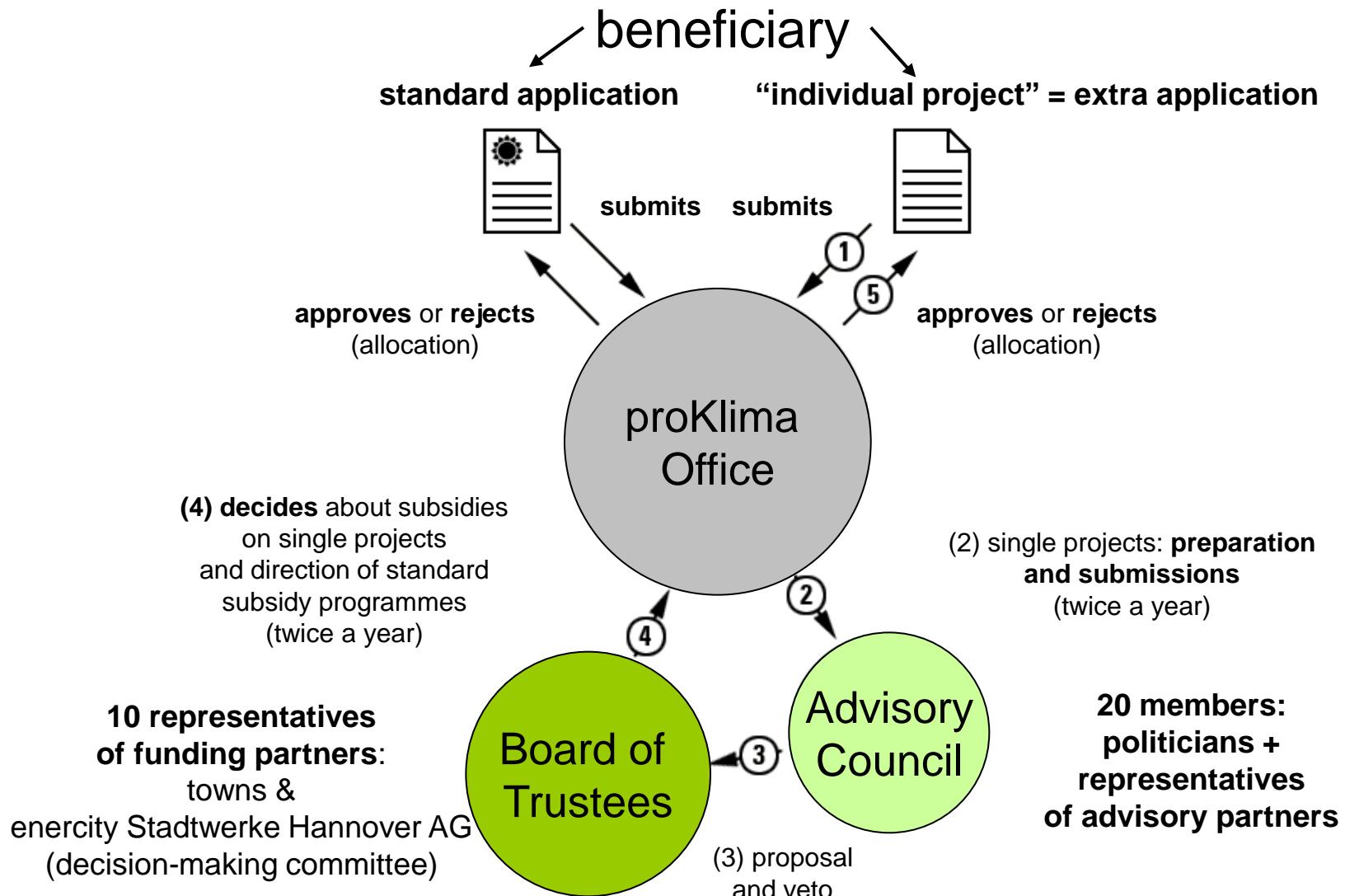
**training**



**information**



# proKlima – subsidies





# proKlima – subsidy guidelines



**Step-by-step  
modernization**



**Passive house  
residential**



**Combined  
heat and power**



**Renewables**



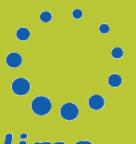
**Passive house  
non-residential**



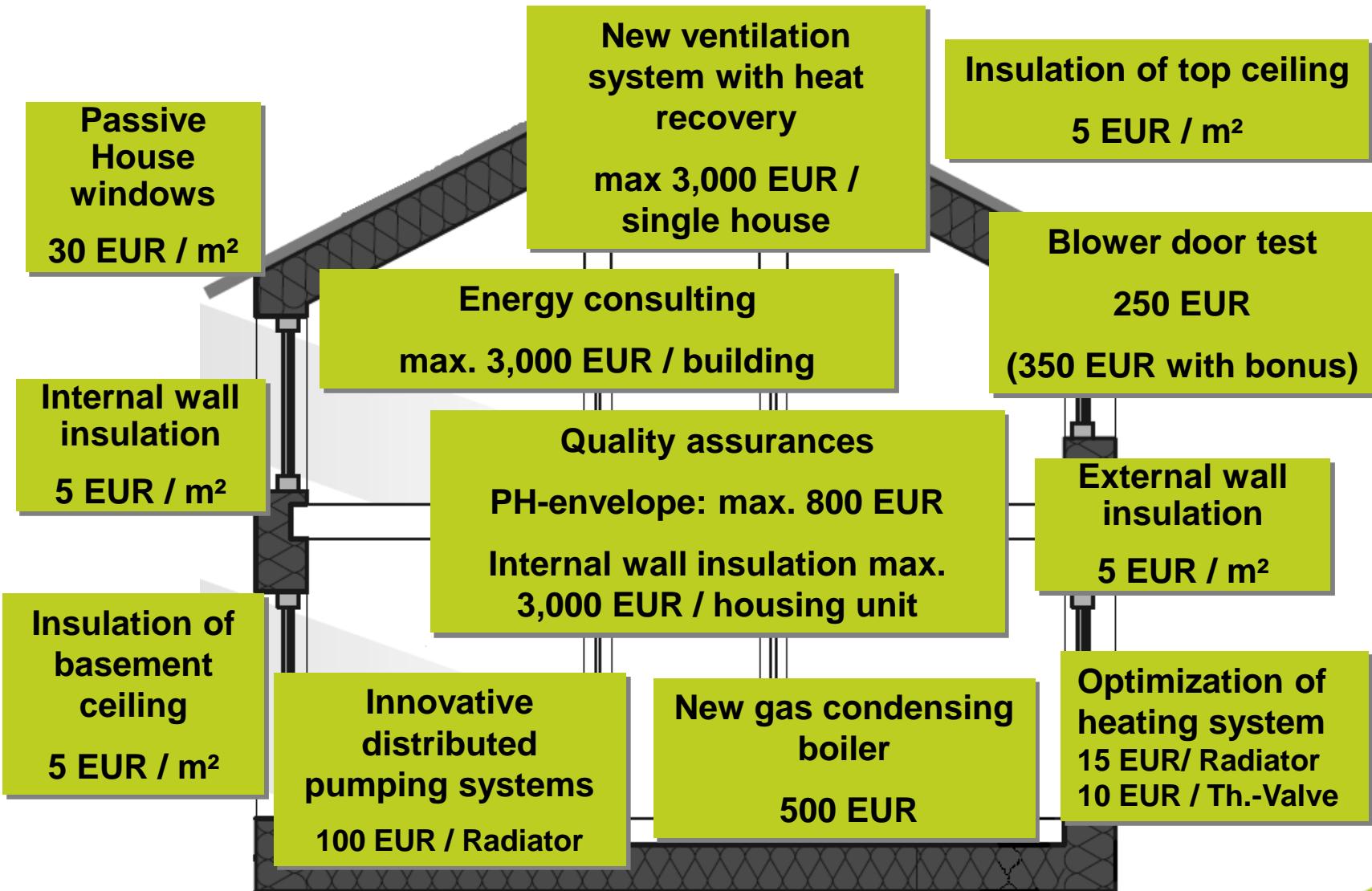
**Schools  
and training**



**proKlima  
supports  
step by step  
modernization  
of residential  
buildings**

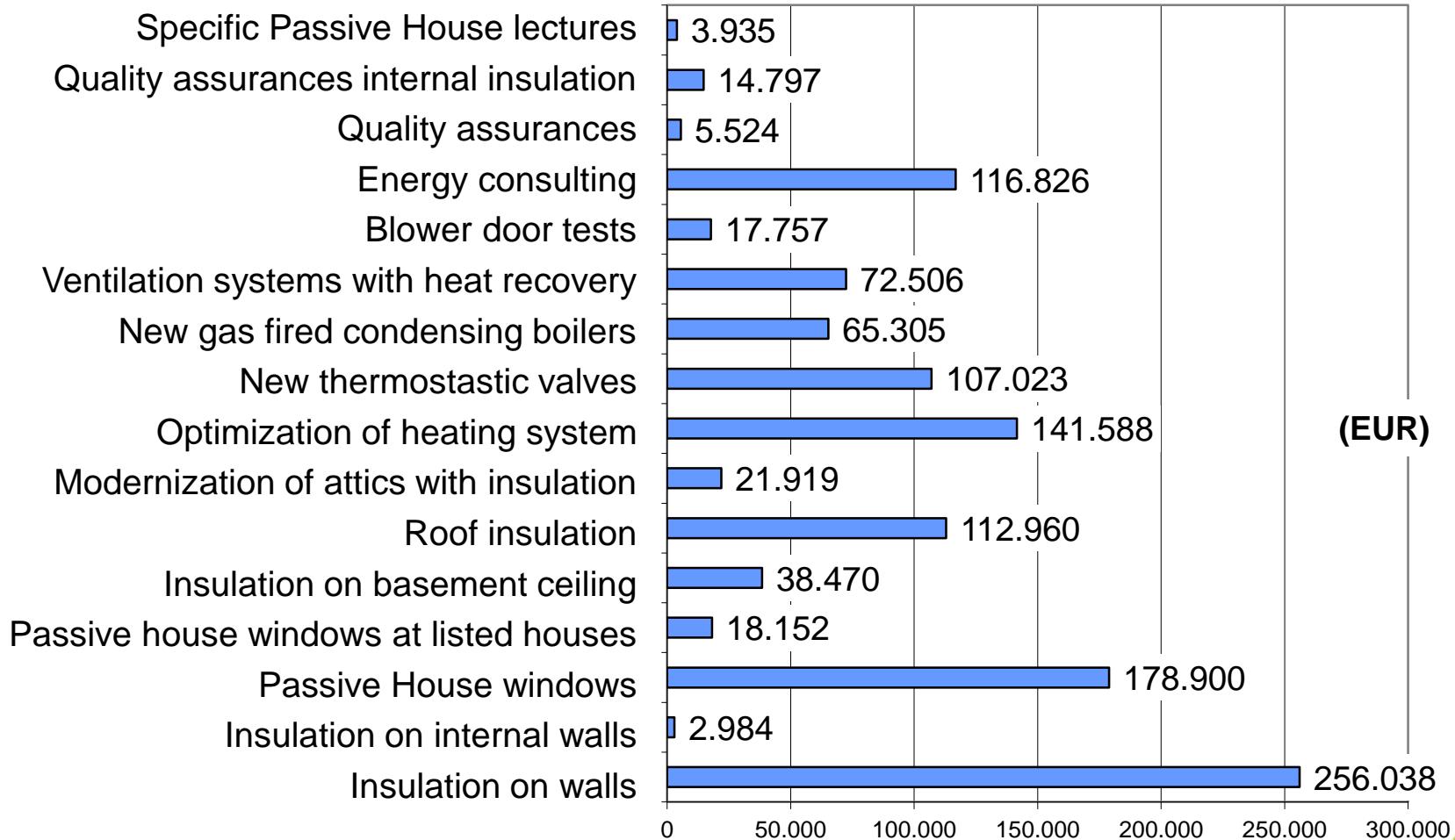


# proKlima – subsidies on modernization



# 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 supports PH non-residential buildings

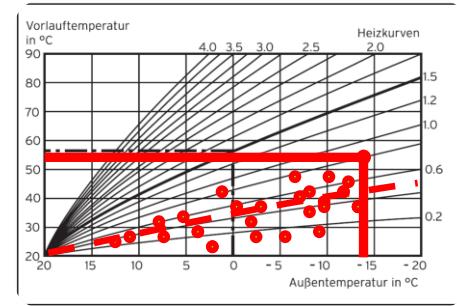
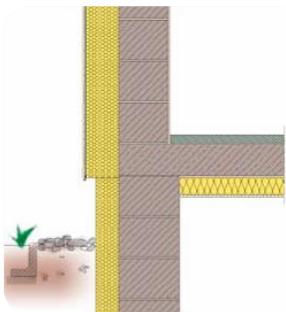
**newly-built**  
**at Passive House Standard:** **50 EUR/ m<sup>2</sup>**  
**incl. quality assurance** **max. 50,000 EUR**

**Modernisation with Passive**  
**House Components :** **50 EUR/ m<sup>2</sup>**  
**incl. quality assurance** **max. 50,000 EUR**

**Subsidy-bonus “Monitoring”-**  
**Evaluation of energy** **5 EUR/ m<sup>2</sup>**  
**consumption** **max. 5,000 EUR**

# proKlima – criteria for individual projects

- CO<sub>2</sub>-efficiency (Euros / metric tons of avoided CO<sub>2</sub>)
- absolute amount of avoided CO<sub>2</sub>
- multiplier effect
- level of innovation





# proKlima – training



Fotos: proKlima



**proKlima**  
Der energycity-Fonds

# Int. PH Days Region of Hanover



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



# proKlima – information

## Various information – print material (booklets and brochures)

The collage includes:

- A red booklet titled "Beste BEISPIELE" showing modern buildings.
- A booklet titled "Gut gelungen" showing a house.
- A booklet titled "Ihre Energie - EFFIZIENT eingesetzt" showing a meal.
- A booklet titled "ALTsanierung" showing a grid of data.
- A booklet titled "Die Sparer" showing a house icon.
- A booklet titled "proKlima Der enercity-Fonds" showing a green circle logo.
- A booklet titled "FÖRDERUNG" and "TERMINES" with descriptions and "mehr anzeigen" buttons.
- A central graphic with a laptop and the text "LIEBE DEIN BÜRO!" and a description about Passivhaus standards.
- A section titled "Aktuelles" listing events like "Mach Dein Haus fit" and "Gut beraten starten".
- A screenshot of the "proKlima Plattform" website with navigation links like "START", "UNSERE THEMEN", and "PASSIVHAUS Plattform".
- A booklet titled "Dienstag, 25.03.2014" and "Montag, 24.03.2014" with event details.
- A booklet titled "Freitag, 21.03.2014" and "Freitag, 14.03.2014" with event details.
- A booklet titled "imainfos" showing a photo of a man and a woman.

[www.proklima-hannover.de](http://www.proklima-hannover.de)

## More information:

- Subsidy statistics
- Activities
- Best practices



**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



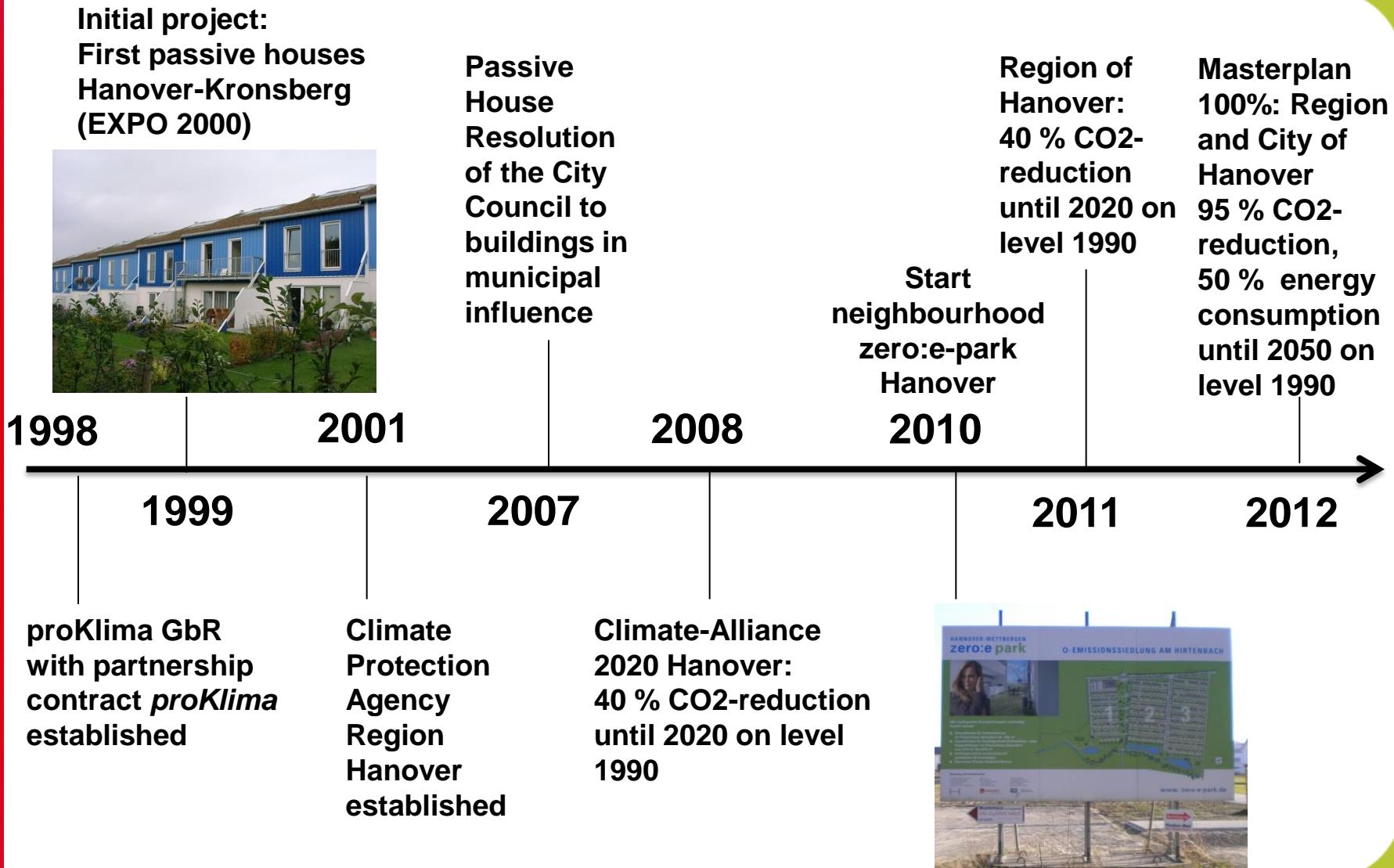
**1 EUR support  
generates  
13 EUR  
local investments.**

Quelle: Pestel-Institut Hannover, 2011

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



# Milestones over the past 15 years



# Initial project

→ Monitoring project:  
**Passive House**  
**concept works !**  
([www.cepheus.de](http://www.cepheus.de))



**First  
Passive  
Houses  
32 row  
houses  
Hanover-  
Kronsberg  
1999  
(EXPO 2000)**

Architects: Rasch & Partner/ Petra Grenz

Foto: proKlima/PHI



# Follower

**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

## First PH day care center

(Kita „Große Pranke“)  
Hanover 2006



Foto: despang Architekten



Architects: despang, Hannover



**proKlima**  
Der energycity-Fonds

# Follower

**PPP-Project**

# **8 new PH day care centers**

**Hanover (2011-2013)**



Fotos: Olaf Mahlstedt

Architects:  
Ahrens Grabenhorst/Mosaik Architekten



**proKlima**  
Der energycity-Fonds

# Initial project

## REWE supermarket, zero:e-park, Hanover (2012) → Developing the Standard and monitoring by PHI



Fotos: proKlima/Olaf Mahlstedt



Architects: Spengler-Wieschollek, Hamburg



Follower

# Netto supermarket, Hanover (2014-2015)

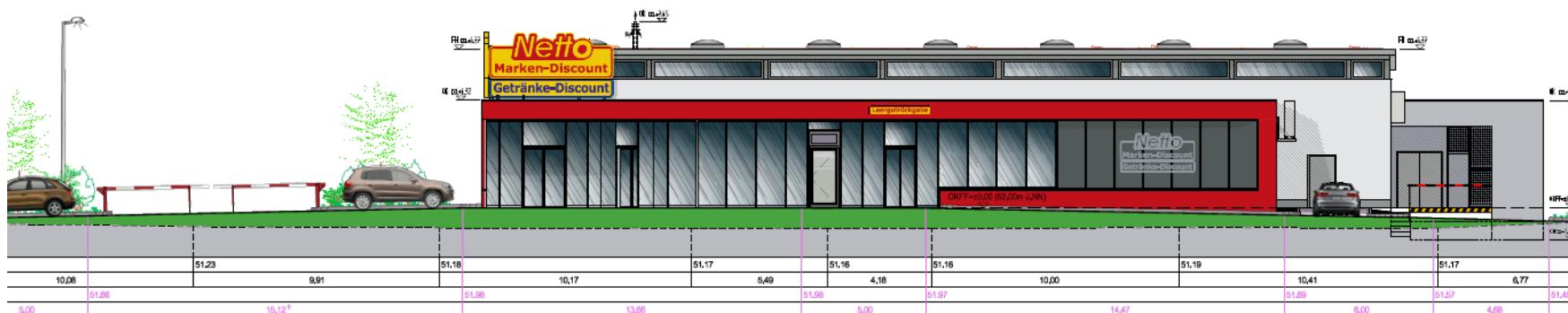


Fig.: Netto



proKlima  
Der energycity-Fonds

Lots of work to do...

## with renovation of urban quarters



Foto: Sven Reuter



Foto: Frank Aussieker

### retrofit townhouse, Hanover (2009)



# More projects

The screenshot shows the homepage of the PASSIVHAUS Plattform. At the top left is the proKlima logo. The main title "PASSIVHAUS Plattform" is in large green letters, with "Portal für Passivhaustechnologien und Baustandards der Zukunft" below it. On the right is a photo of a smiling man wearing safety goggles and a hard hat, with a woman in a hard hat in the background. A blue callout box labeled "Passipedia" contains the text "Das Nachschlagewerk zu allen Fragen rund um das Passivhaus!" and a link ">> passipedia.passiv.de". The left sidebar has links for "HOME", "Beste BEISPIELE", "Best PRACTICE", "DOWNLOADS", and "AKTUELL".

[www.passivhaus-plattform.de](http://www.passivhaus-plattform.de)

The screenshot shows the "Hanover" section of the PassReg website. It features a large image of a modern multi-story building with a grey facade and red accents. Above the image is the text "Nichtwohngebäude / : Im Wiesengrund, Hannover Bothfeld". Below the image are two social media sharing buttons: "Tweet" and "Gefällt mir". The sidebar on the left includes links for "Kontakt", "Impressum", "Datenschutz", and a search bar. The footer contains the "enercity" logo.

**Nichtwohngebäude / :**  
Im Wiesengrund, Hannover Bothfeld

01.07.2013  
[Weiterqualifizierung zum Passivhausbau](#)  
Hannover, 01. Juli 2013 - Passivhäuser liegen voll im Trend – immer mehr...  
[MEHR >](#)

22.08.2012  
[Beste Beispiele jetzt auch in englisch!](#)  
Im Zuge des EU Projektes PassReg sind viele "Beste"

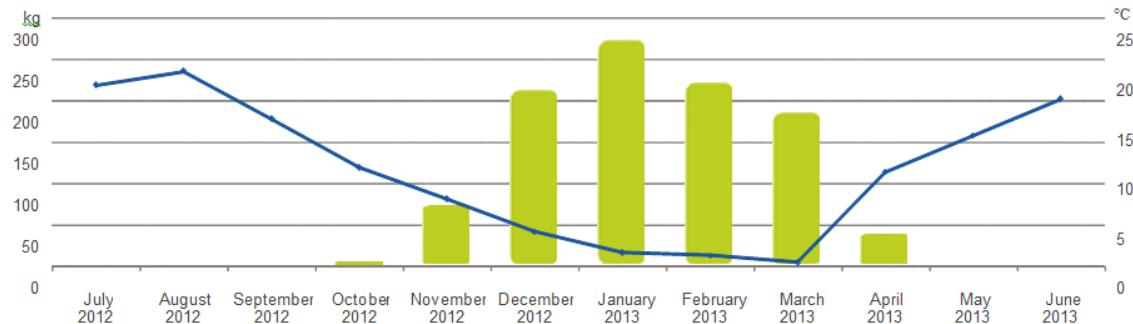
- About proKlima
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Be aware of:

# Quality assurance and monitoring



Monthly consumption of wood pellets and ambient air temperature (monthly average)



Consumption and net supply of PV-Electricity (monthly values)

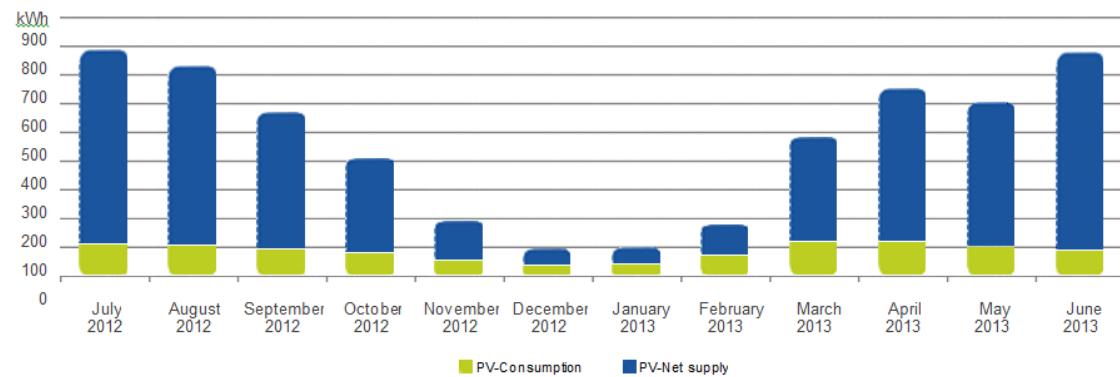


Foto by Climate Protection Agency  
Region of Hanover (CPAH)

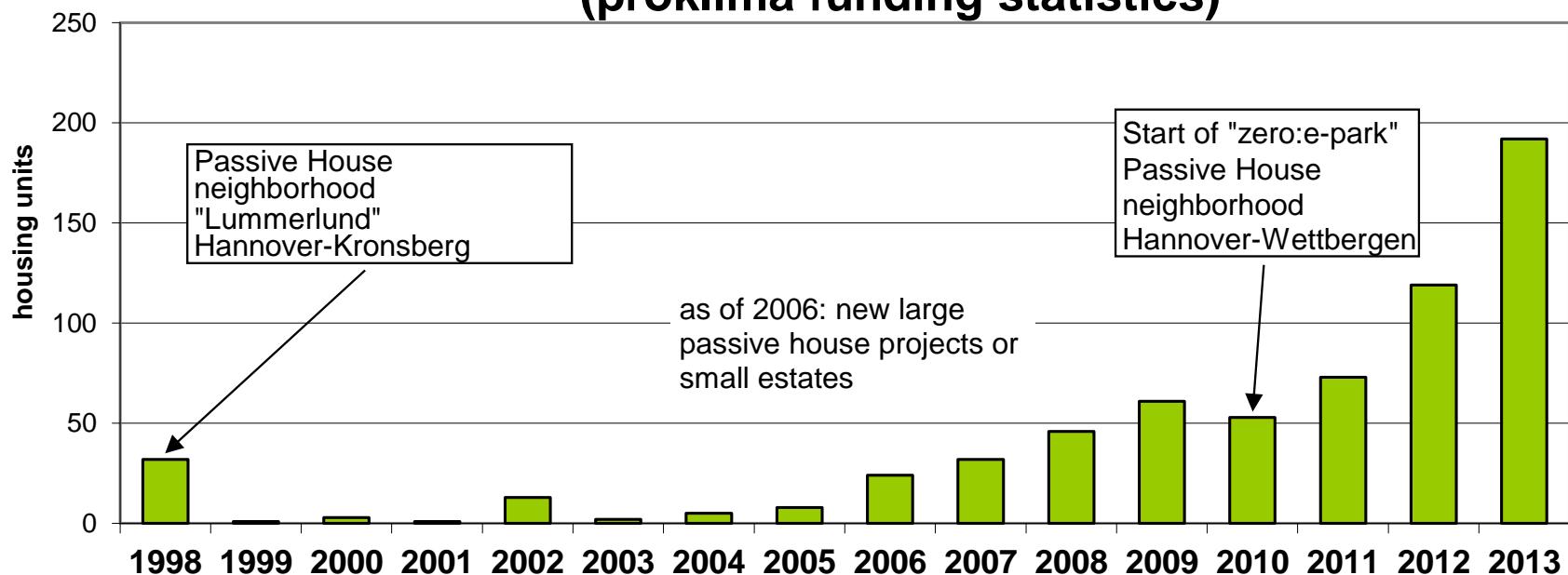
Fig.: voluntary monitoring programme for zero:e park- housing owners  
(source proKlima)

# 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...**

## New Passive House housing units over the years (proklima funding statistics)



Source : proKlima, 2014

# Thank you for your attention!

## Matthias Wohlfahrt

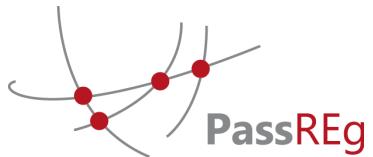
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[www.klimaschutz-hannover.de](http://www.klimaschutz-hannover.de)

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