

# ALLIANCE FOR WORK AND ENVIRONMENT

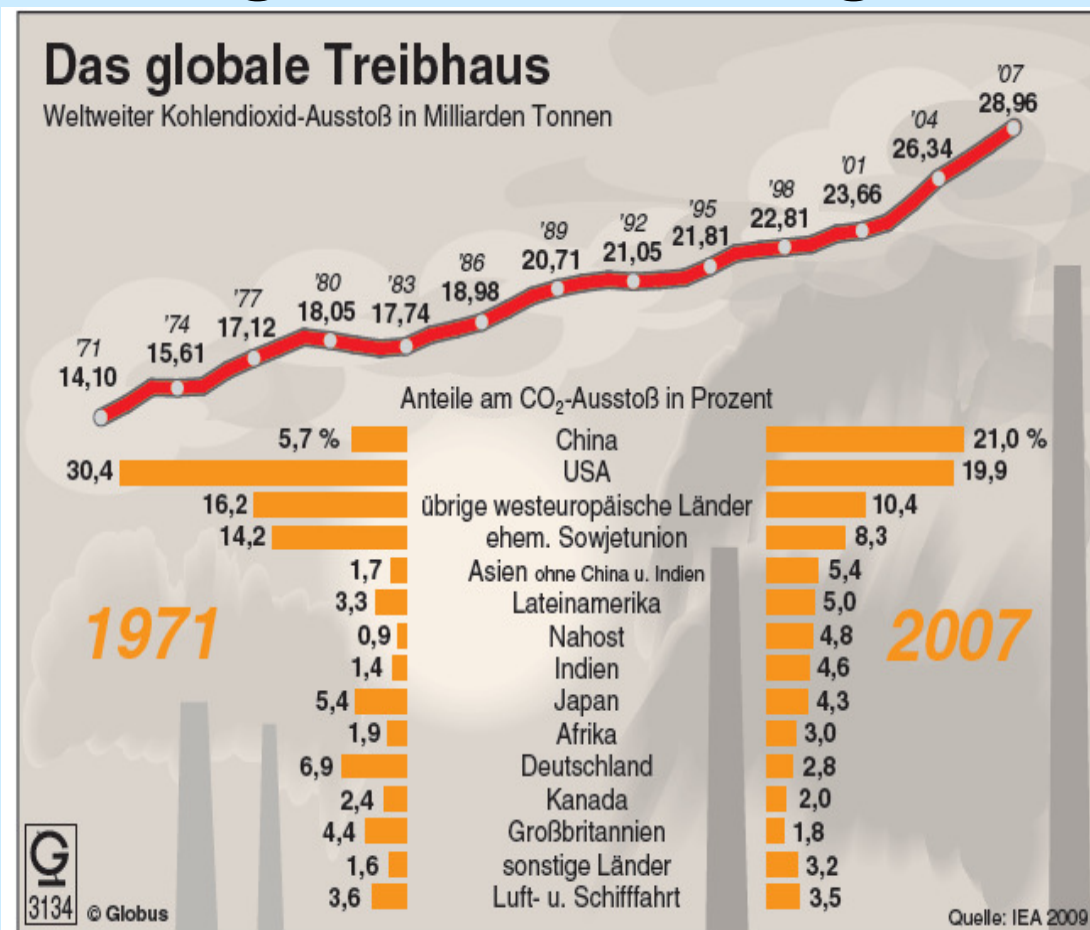
in Germany, by

## ENERGY SAVING AND ENERGY EFFICIENCY IN THE REDEVELOPMENT OF EXISTING BUILDINGS,

- A CONTRIBUTION TO CLIMATE PROTECTION AND EMPLOYMENT,
- A CONTRIBUTION AGAINST FINANCIAL CRISIS THROUGH A ECONOMIC STIMULUS PACKAGE AND GREEN JOBS INITIATIVE.

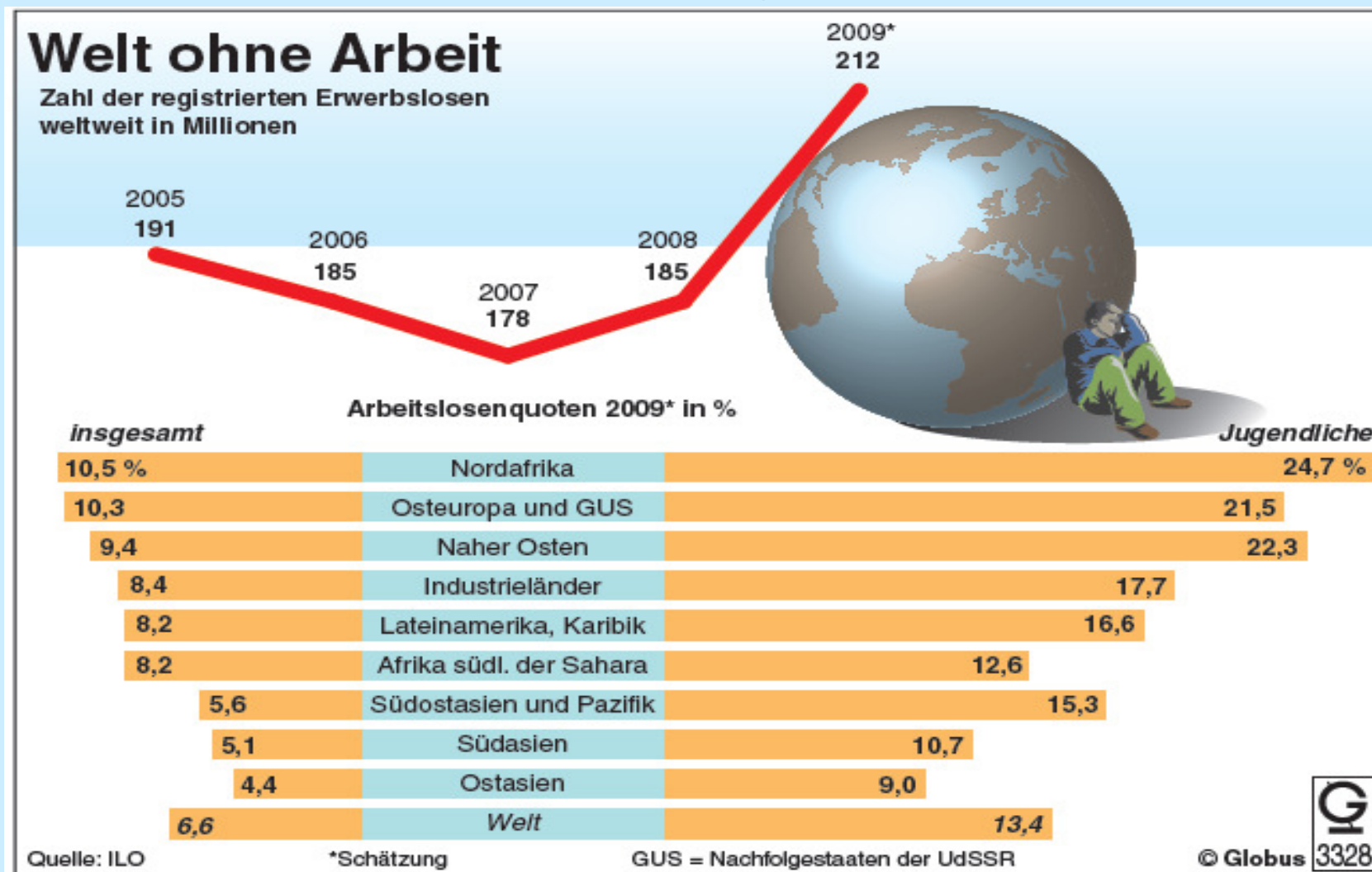
# Rising Greenhouse gases

1. Greenhouse gas emissions rising worldwide
2. IPCC-report Feb. 2007 Paris demands a dramatic reduction
3. **IPCC-report May 4, 2007 Bangkok increase energy efficiency of buildings plays a significant role**
4. To reach Kyoto targets additional measures of CO<sub>2</sub>-reduction are necessary
5. Countries like USA, Canada, China, India etc. must follow
6. A post Kyoto agreement is needed after Copenhagen/ Cancún, maybe at Durban 2011



IEA2009

# Reducing unemployment worldwide



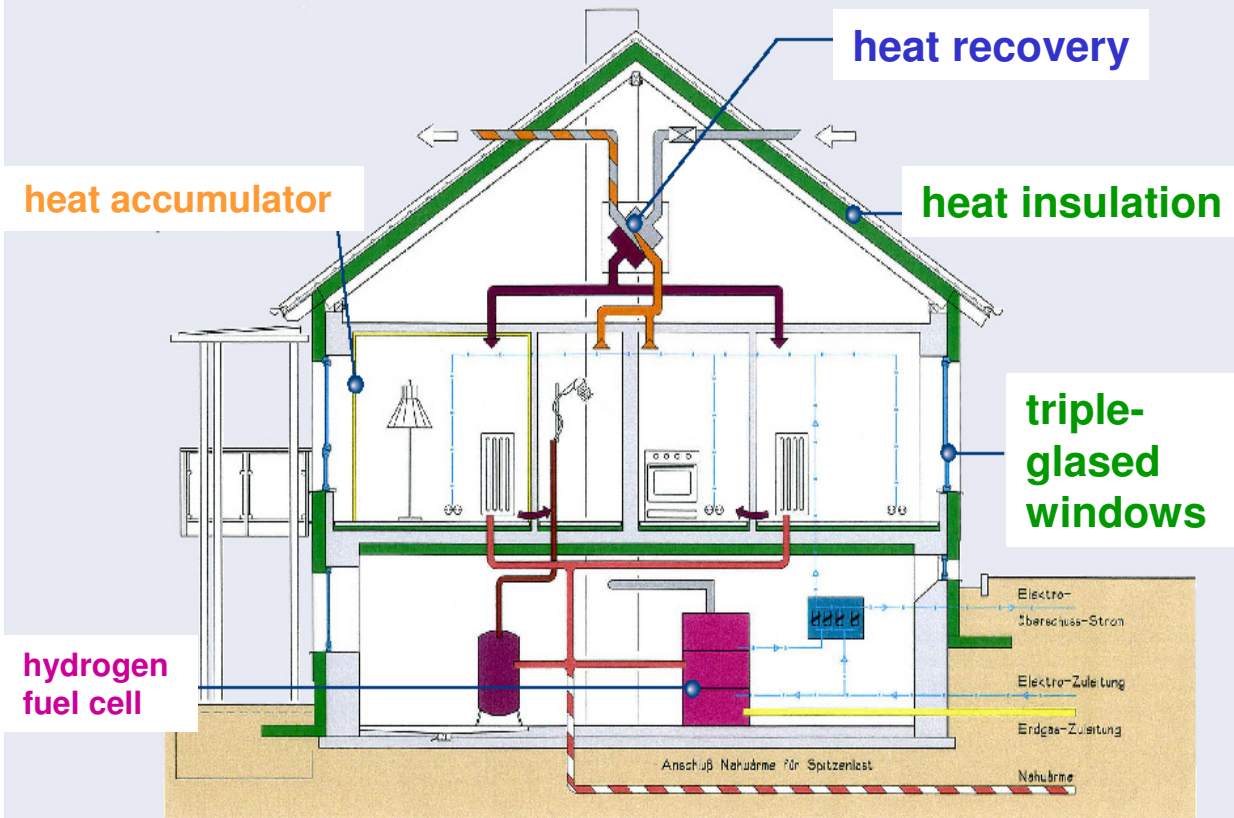
## Initiating the „**Alliance for Work and Environment**“

- DGB developed 1998 with the affiliated unions a programme to renovate existing buildings by energy saving and energy efficiency measures.
- The immediate objective is to improve insulation of buildings, advanced heating technologies, and use of renewable energy, such as photovoltaic or solar thermal systems.
- Hundreds of thousands of Green Jobs are anticipated in the construction, insulation, heating, sanitary and air-conditioning and building services.
- DGB initiated the „**Alliance for Work and Environment**“ 1999 by cooperating with government, trade unions, environmental NGO´s and employer´s federations.

## What are the objectives of the programme?

- renovate 300.000 apartments per year
- create 200.000 Green Jobs
- reduce 2 million  $t/a$  CO<sub>2</sub>-emissions
- lower heating bills for tenants and landlords
- unburden the state by about 4 billion Euro, through reduction of unemployment costs and increased income taxes etc.
- get more independent from oil imports

## 3-liter-house



### concept:

- improvement by the **heat insulation** of buildings **roof, windows and walls**
- more efficient energy supply by replacement of condensing boiler, low temperature – heating boiler, **hydrogen fuel cells**
- increasing use of renewable energy supply, application of photovoltaic and solar thermal systems for self supply with electricity and hot water

### future:

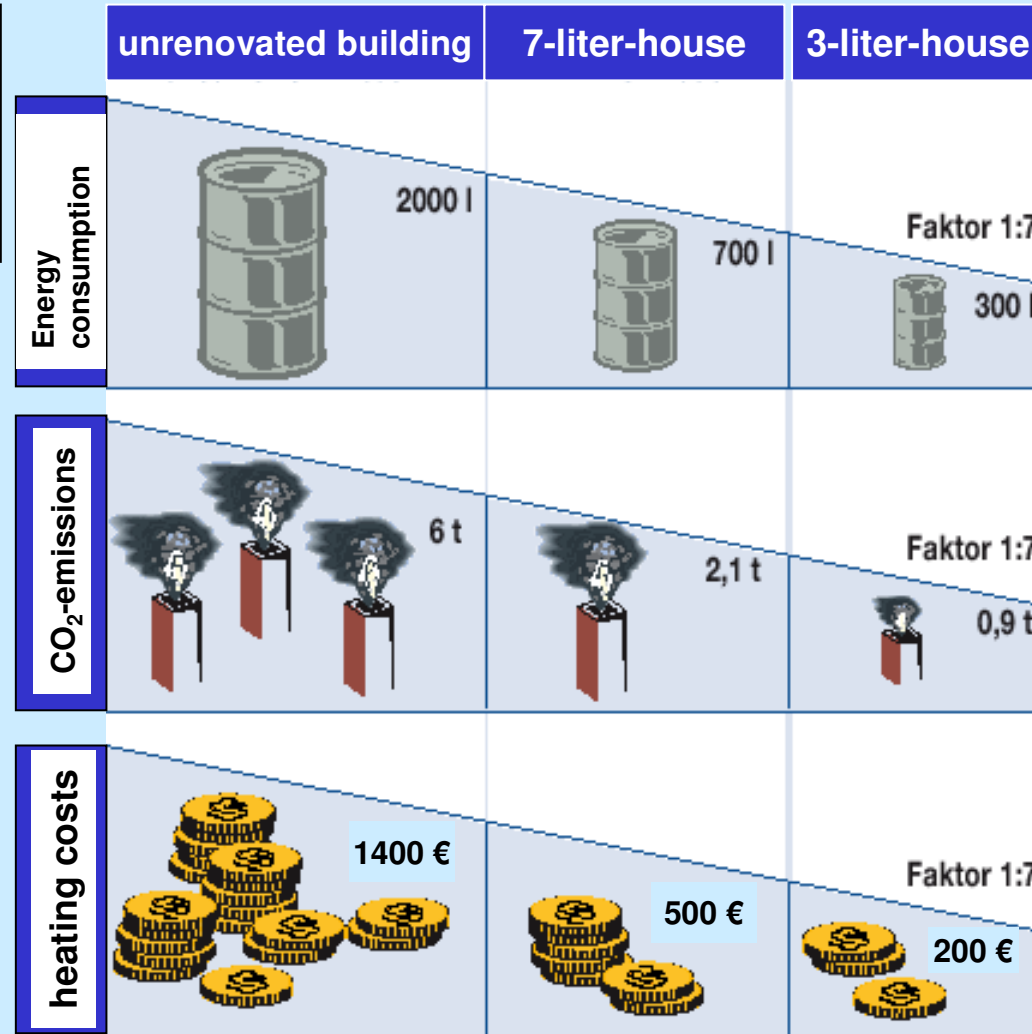
- passive house or zero energy houses
- energy producing houses [plus house]

- controlled air ventilation systems with 85 % **heat recovery**

# 3-liter-house

## Energy saving

- lowering heating costs
- climate protection



**economic, social and ecological dimension**

→ **80% reduction**

→ **80% reduction**

→ **80% reduction**

el einer 100 m<sup>2</sup> Wohnung - berechnet auf ein Jahr

## new technologies

### Technical innovations leading to new markets

- low temperature heating
- hydrogen technology – hydrogen fuel cell
- photovoltaic / solar thermal systems
- cross flow heat exchanger for ventilations systems with 85 % heat recovery
- triple-glased windows with inert gas contents
- thermal insulation material

## sustainable revitalisation of cities

### Positive effects inside citys by renovation of existing buildings

- revitalisation of city centers or quarters
- less use of ground, less extention of suburbs
- short ways are promoted
- rush-hour traffic is reduced
- quality of life for inhabitants is increased

## employment

### What are the effects for employment?

- hundreds of thousands of Green Jobs are generated:  
in skilled crafts, construction, heating installation etc.
- other Green Jobs are:  
in insulation glass production, thermal insulation material, construction material, photovoltaic and solar thermal systems, etc.
- additional Green Jobs are generated:  
by consulting, architects, consulting engineers, environmental consultants, etc.



## Financing of the CO<sub>2</sub>-Building Modernisation Programme

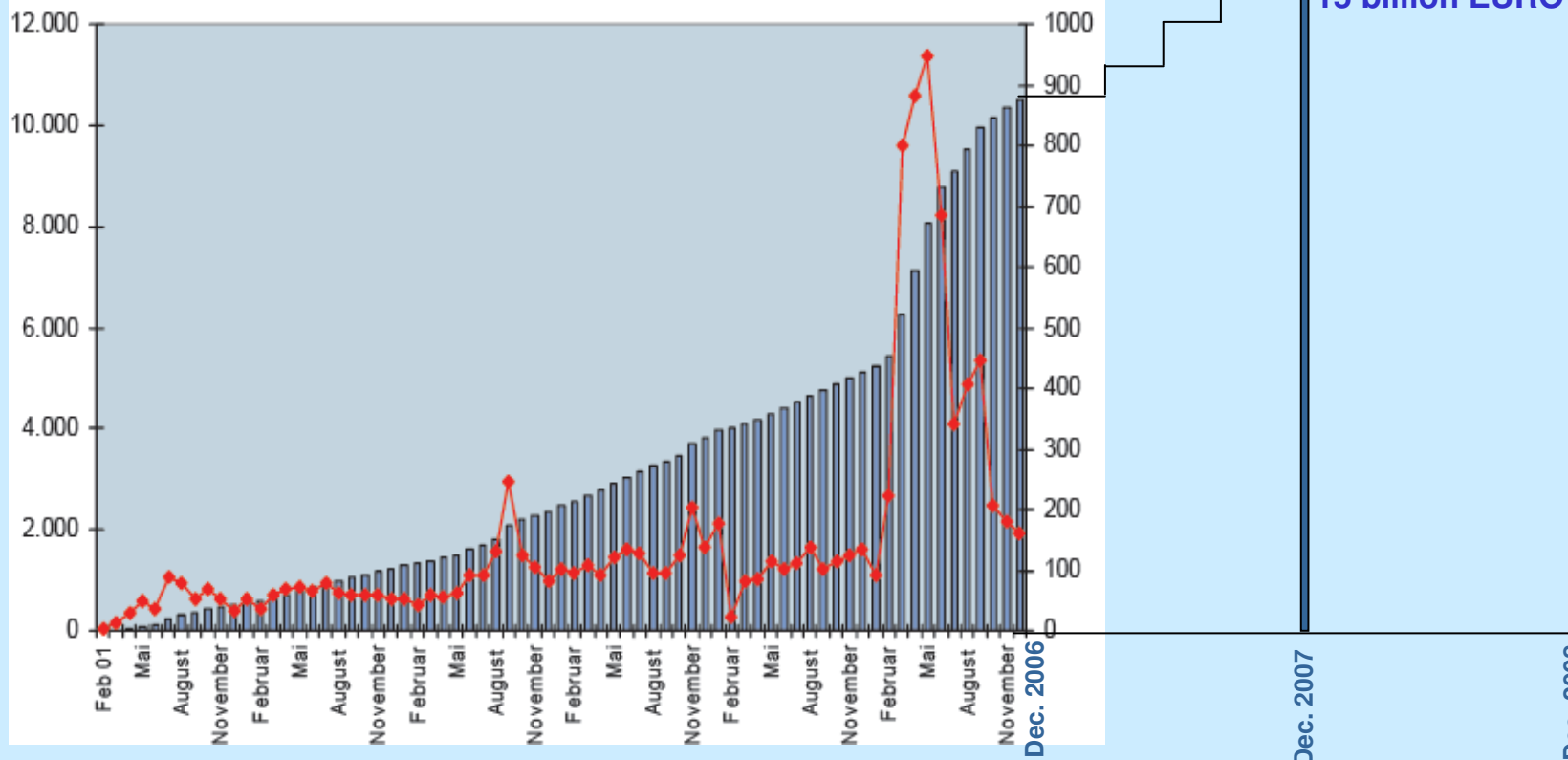
- Financing for the programme is provided by German government, from 2001 to 2005 with about 1,48 billion Euro.
- 2006 to 2009 German government will finance the programme with about 6 billion Euro (1,5 per Year).
- A total of 21 billion Euro of investments had been available 2001 - December 2008 through credits at favorable rates of interest.

# KfW-CO<sub>2</sub>-Building Modernisation Programme

monthly development of credits in million Euro

accumulated

monthly



2008  
(+ 6,1 billion)  
21 billion EURO

2007  
(+ 4,1 billion)  
15 billion EURO

**Accumulated Investments: 2001 – December 2008 = 21 billion Euro**

## Reaching our targets since 2006

KfW 2009	2006	2007	2008
<b>Appartments renovated*</b> *in thousand	<b>327</b>	<b>204</b>	<b>280</b>
<b>Green jobs created*</b> *in thousand	<b>217</b>	<b>177</b>	<b>221</b>
<b>CO<sub>2</sub> reduced in t/a*</b> *in thousand	<b>1.038</b>	<b>568</b>	<b>767</b>



## **Additional Support by European energy efficiency – directive and action-plan**

- 1. Priority objective is the improvement of energy efficiency of building in all memberstates of the European Union.**
- 2. The measures apply as well for existing building, where the biggest potential for energy saving exists.**
- 3. If a real estate is sold or rented a **energy passport** for buildings has to be issued, which informs about the heat demand of the building.**
- 4. So the energy demand of a building will get an important competitive factor on the real estate market (**green house number**).**

## European “Alliance for Work and Environment”

**Just to remind: It was 2004 when DGB recommended to the Irish EU presidency first time to implement this programme in a European growth and employment initiative. With support by all European Unions (ETUC), environmental NGO´s (EEB) and European Social Platform on the European Conference at Dublin, organized by ETUC.**

- **End of 2008 DGB recommended German Government to stimulate economy against the global financial crisis by developing a **economic stimulus package**, including a programme to support additional Investments in energy efficiency of buildings for Green Jobs, because the global financial crisis started to infect our real economy, by decreasing production, export and demand, followed by dramatic increasing unemployment.**

## Strengthening growth and employment by energy efficiency of buildings against financial crisis

- Economic stimulus package I: for 2009, 2010 2011

December 2008 about 30 billion Euro had been decided by German Government, including **3 billion Euro** to support investments in energy efficiency of buildings through **KfW bank by low-interest credits**.

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### 6 billion Euro **PLANNED BUT NOT DECIDED BY GOVERNMENT**

- Economic stimulus package II: for 2009, 2010

February 2009 about 50 billion Euro had been decided by German Government, including **6 billion Euro** to support investments in energy efficiency of buildings **for federal states and local authorities** (eg. school-, kindergarten- and university-buildings).

## What results we expect for the next years

- The financial support for energy efficiency of buildings by the economic stimulus package I is about 1,5 + 1 billion EURO = **2,5 billion Euro** for the year 2009.
- The **effects** of the programme could rise nearly **two times bigger** than before:
- First results from the economic stimulus package I we got from KfW for 2009/2010:

KfW April 2010 / Feb 2011	2009	2010
<b>Appartments renovated*</b> *in thousand	617	600
<b>Green jobs created*</b> *in thousand	292	340
<b>CO<sub>2</sub> reduced in t/a*</b> *in thousand	1.492	1.400

## Final Remark:

- The government decided 28 September 2010 the energy concept for Germany. Energy efficient buildings should be 2050 nearly climate neutral, reached by the extension of financial support.
- Looking back, there are really good results 2006 – 2010: About 900.000 credits with a volume of 36 billion Euro had been granted, which produced more than 75 billion Euro of Investments. 2,4 Million Flats had been sanitized on a energy efficient level, which reduces 4,7 tonnes CO<sub>2</sub> - emissions every year. And last not least every year about 340.000 workplaces are new created or saved.
- Looking forward, DGB and Trade Unions are not satisfied by this new real policy of the government, cutting down the financial support to 950 Million Euro in 2011 for energy efficiency of existing buildings.
- DGB and trade unions are not amused by this new development of governmental policy. We are criticizing this development since last year together with environmental NGO's and employer's federations as well with the opposition of the parliament.



## **IN GERMANY 1,8 MILLION PEOPLE ARE WORKING IN THE ENVIRONMENTAL SECTOR.**

**(That's more than in the whole automobile industry!!!)**

Unions around the world are building a powerful movement for carbon control, green jobs, and environmental sustainability.



# **THANK YOU FOR YOUR ATTENTION**