

German approaches in promoting energy efficiency

KfW best practice experience

Workshop on Energy Efficiency
Paris, March 2012

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KfW Bankengruppe

Die Zukunftsförderer





- Founded 1948 as Promotional bank of the Federal Republic of Germany, Shareholders: 80% Federal Republic, 20% federal states
- Balance sheet total at 30.9.2011 EUR 477 billion
- Total Commitments in 2011 EUR 70 billion
- KfW has a wide array of functions
- Environmental and climate protection is a major promotional priority
- Focus: investments in renewable energies and energy efficiency in housing and SMEs
- Commitments in this sector in 2011 EUR 23 billion

KfW Bankengruppe is one of the world's biggest financing institution for energy efficiency and renewable energy

A bank with a wide array of functions



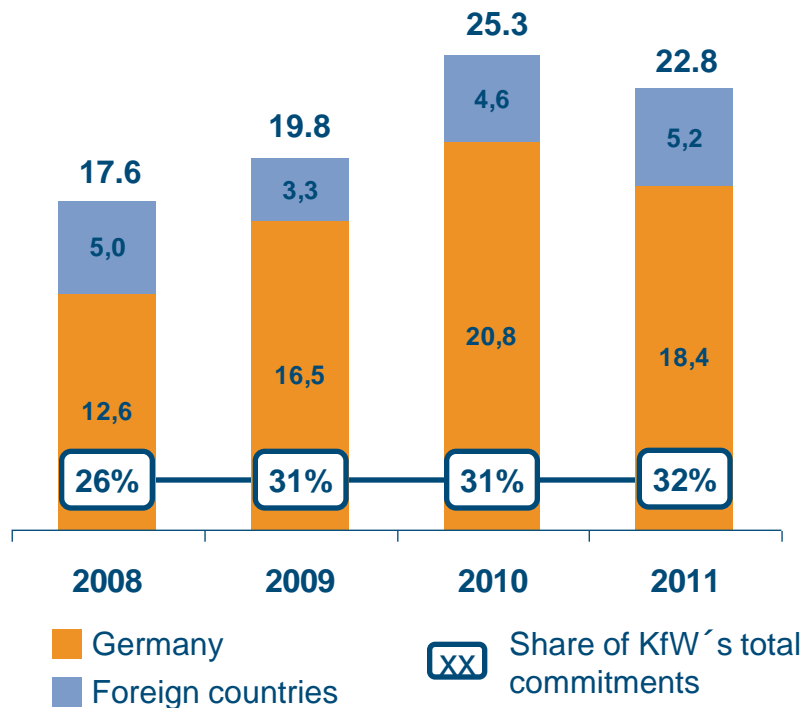
Promotion of environmental and climate protection

Environmental Protection und Climate Protection

KfW is one of the largest financiers in this field worldwide

Environment / Climate Protection

KfW commitments (billion EUR)



Central pillar for KfW's activities.

Ambitious increase of commitments in recent years.

Main focus on renewable energies and energy efficiency.

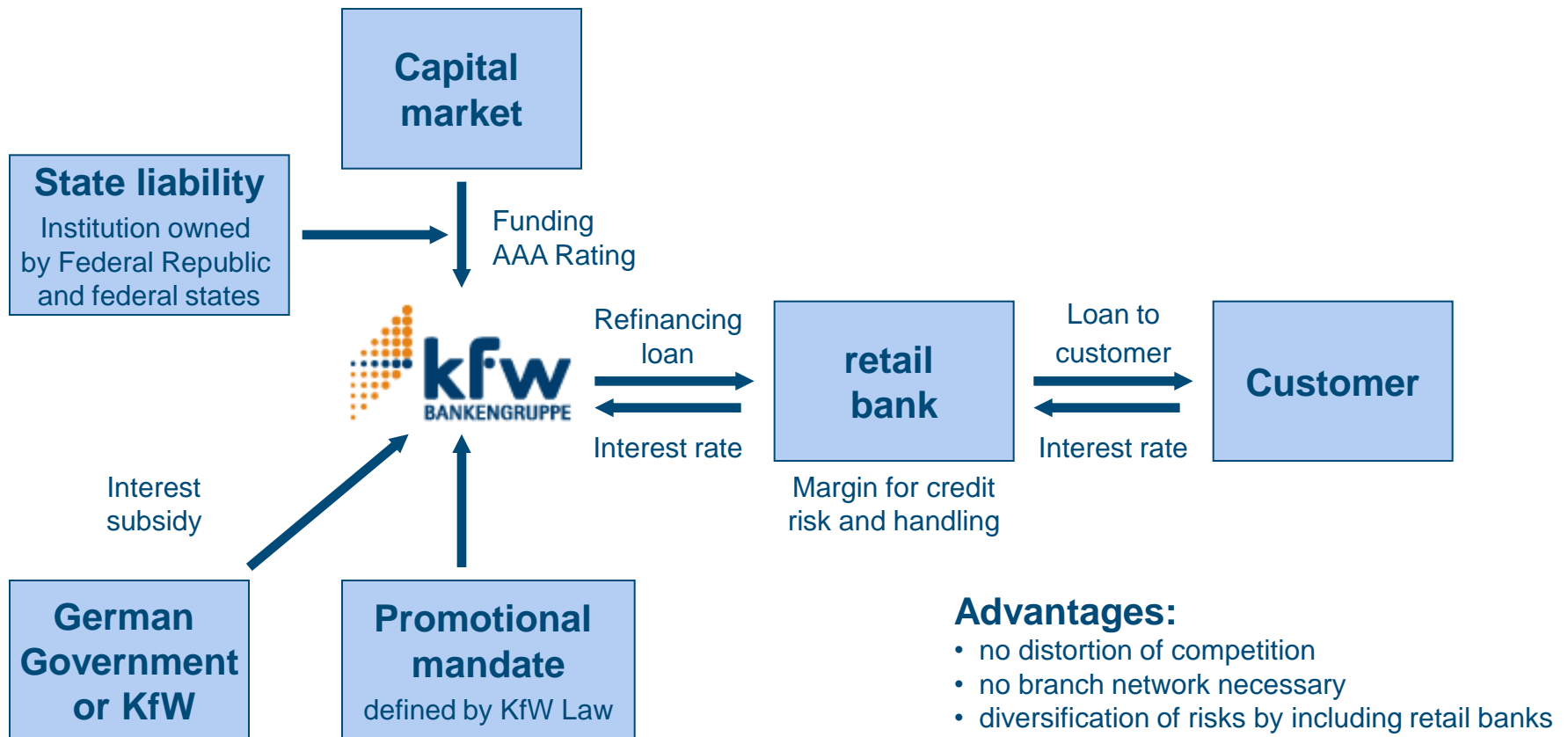
Continuance on high level in future.

Business Area KfW Mittelstandsbank

Proven and successful business model



Funding by KfW and on-lending through private banks



How to Promote Energy Efficiency?

Tambourine



Carrot

Stick

„Information and
Consulting“

Energy
Efficiency

„Promotional
Programmes“

Legislation, Rules and Regulation

Energy efficiency

Renewable energy

Information and
Consulting

Regulation

Promotional
Programmes

Energy Prices

- 2007 - Integrated energy and climate programme (regulation)
- 2008 - Climate Initiative (revenues from tendering carbon certificates)
- 2010 - Energy strategy (reduction targets)
- 2011 – “Energiewende” – turn around of German energy system

Reduction of greenhouse gas emission
compared with 1990

- minus 40 percent by 2020
- minus 80 - 95 percent by 2050

Reduction of primary energy consumption
compared with 2008

- minus 20 percent by 2020
- minus 50 percent by 2050

not
mandatory
targets

The EnEV covers

- Energetic permissible limits for the construction and the rehabilitation of existing residential and non-residential buildings
 - with regard to building shell
 - with regard to heating, cooling and air conditioning techniques
- Regulation for Energy Performance certificates
- Determination of calculation methods
- Definition of energy consultants

Public Relations



- Internet
- Press
- Trade fairs
- Print media
- Speaker service

Customer Relations



- Call center
- Counseling center
- Partner liaison

Lobbying



- Politics
- Government
- Associations etc.

Awards

KfW Academy

Assistance to On lending banks

Advisor data base

Equity holding

zukunft haus

Energie sparen. Wert gewinnen.

EINE SCHLECHTE WÄRMEDÄMMUNG UND ALTE HEIZUNGEN KOSTEN VIEL GELD. UNSERE MODERNISIERUNGSKREDITE NICHT.



Im CO₂-GEBÄUDESANIERUNGSPROGRAMM
jetzt 1,76 % effektiv
Nach einer Kreditlaufzeit von max. 20 Jahren
bei 3 Energieeffizienzjahren. Der Zinssatz ist
fest für die ersten 10 Jahre
des Kreditsaufbaus.

Wer jetzt die Energieeffizienz seiner vier Wände dichtet, spart doppelt. Dafür sorgen die günstigen Konditionen der **Förderinitiative Wohnen, Umwelt, Wachstum**. Deutlich energiesparende Maßnahmen im Rahmen unseres CO₂-Gebäudesanierungsprogramms lohnen sich besonders. Aber auch einfache Modernisierungen wie der Austausch der Heizung rechnen sich jetzt mehr denn je. Rufen Sie uns an oder informieren Sie sich unter:

www.kfw-foerderbank.de



ENERGIEAUSWEIS für Wohngebäude
(gemäß den §§ 16 ff. Energieeinsparverordnung (EnEV))

Berechneter Energiebedarf des Gebäudes 2

Energiebedarf

Endenergiebedarf (kWh/(m²·a)) CO₂-Emissionswert (t/(m²·a))

0 50 100 150 200 250 300 350 400 450

Primärenergiebedarf (kWh/(m²·a))

Primärenergiebedarf („Gesamternergieeffizienz“)

Nachweis der Einhaltung des § 3 oder § 9 Abs. 1 EnEV

Energieeffizienzkategorie		Energieeffizienzkategorie	
Gebäudekategorie	Endenergiebedarf (kWh/(m²·a))	Gebäudekategorie	Endenergiebedarf (kWh/(m²·a))
0-1 (sehr energieeffizient)	≤ 10	0-1 (sehr energieeffizient)	≤ 10
2 (energieeffizient)	≤ 15	2 (energieeffizient)	≤ 15
3 (moderat energieeffizient)	≤ 20	3 (moderat energieeffizient)	≤ 20
4 (wenig energieeffizient)	≤ 25	4 (wenig energieeffizient)	≤ 25
5 (nicht energieeffizient)	≤ 30	5 (nicht energieeffizient)	≤ 30

Endenergiebedarf

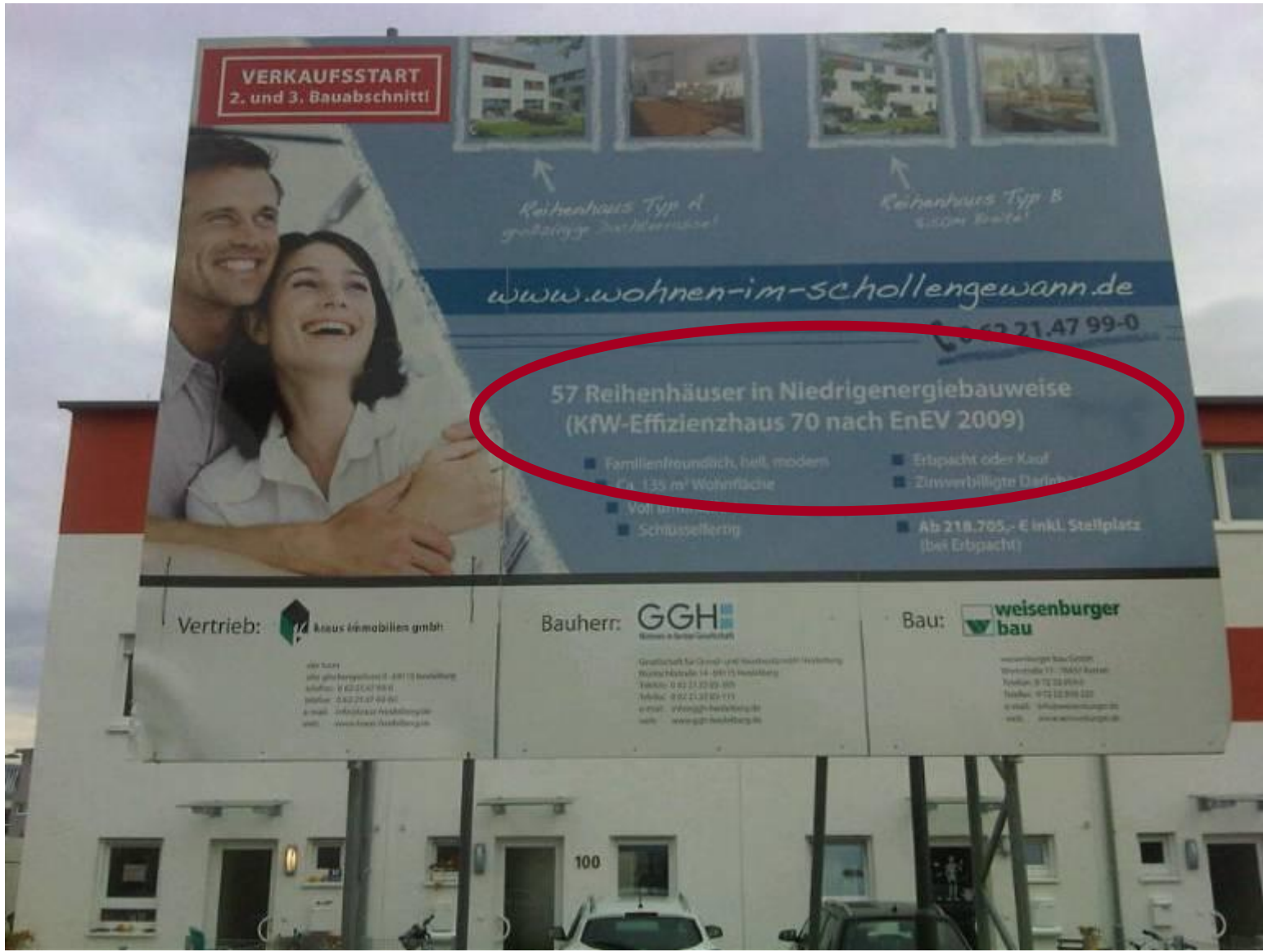
Energieeffizienz

Ähnlicher Endenergiebedarf (kWh/(m²·a))

Standard-Endenergiebedarf



KfW Efficiency House as a brand



VERKAUFSSTART
2. und 3. Bauabschnitt!

Reihenhaus Typ A
größtzügige Doppelhaushälfte


Reihenhaus Typ B
kleinere Variante

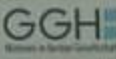
www.wohnen-im-schollengewann.de


06 21 47 99-0

**57 Reihenhäuser in Niedrigenergiebauweise
(KfW-Effizienzhaus 70 nach EnEV 2009)**

- Familienfreundlich, hell, modern
- ca. 135 m² Wohnfläche
- Voll unterkellert
- Schlüsselfertig
- Erbpacht oder Kauf
- Zinsverbilligte Darlehen
- Ab 218.705,- € inkl. Stellplatz
(bei Erbpacht)

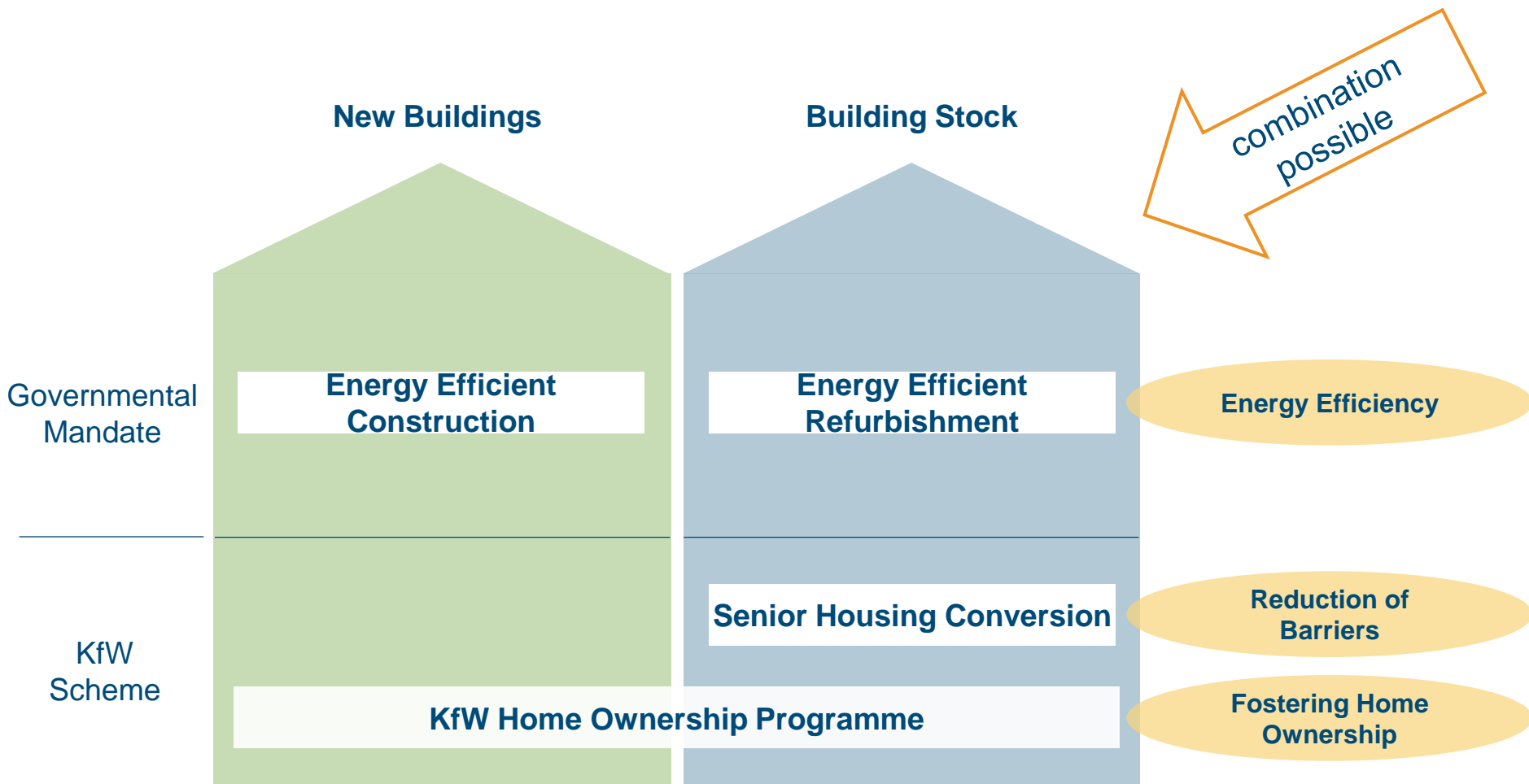
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100

Overview of KfW's Residential Promotion



Key Principles of KfW's Energy Efficiency Promotion in Housing



KfW-70

Effizienzhaus

German Energy Conservation Ordinance (EnEV) is the baseline

- + Harmonizing of legal framework and promotion
- + promotional incentives require higher efficiency standards than legal framework

KfWs promotion is focussed on a holistic approach

- + Focussing on energy efficiency and renewable energies
- + Technological neutral (heating system or building envelope)
- + Cost efficiency and reduction of energy consumption is crucial

KfW-Efficiency House as standard and brand for energy efficiency

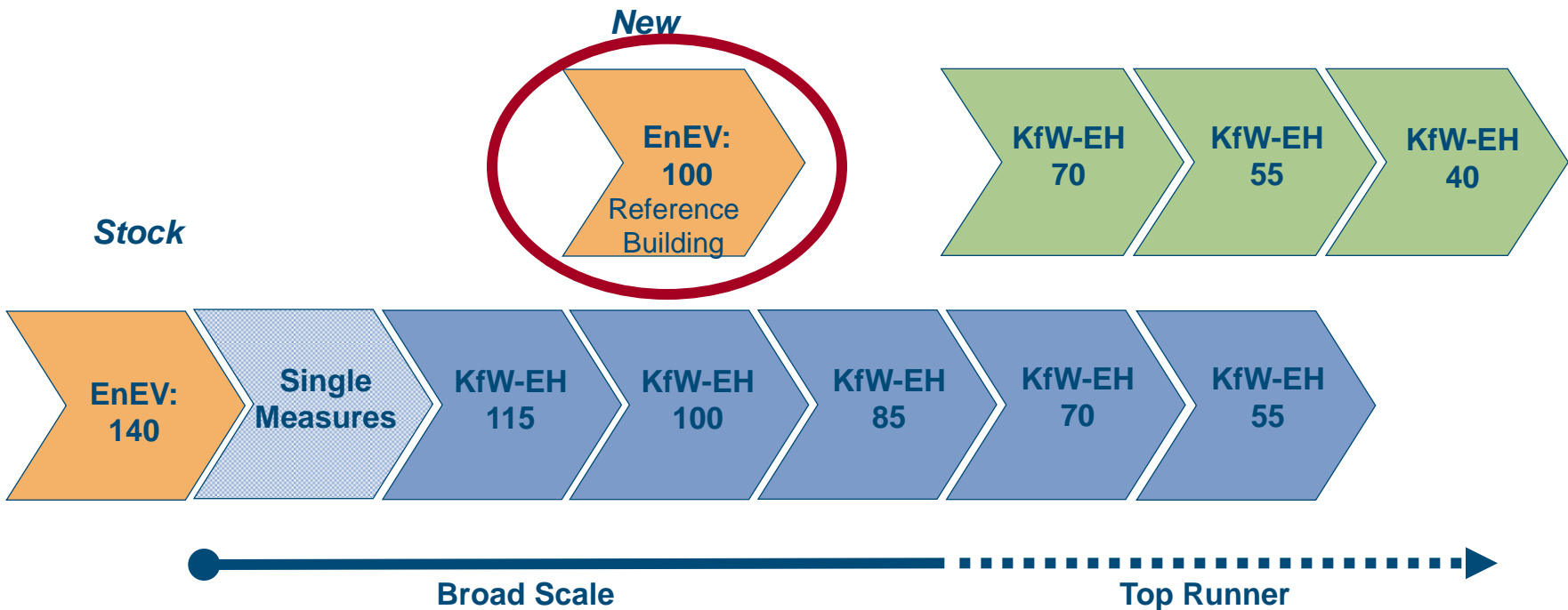
- + consistent standard for construction and refurbishment approved by an energy auditor
- + makes a difficult regulation easy to understand:
“The smaller the number the higher energy efficiency.”
- + creates high transparency

Higher energy efficiency means higher promotional incentives

Promotional Stages of KfW Efficiency House

KfW Efficiency House standard

- Consistent standard for retrofitting and construction with different stages
- Benchmark is legal requirement for new buildings defined in EnEV
- Reduction of complex legal requirements to two dimensions primary energy demand and specific transmission heat loss in defining the stages



KfW's Energy Efficient Construction and Rehabilitation Programme

New Homes

Energy Efficient Construction

- Promotion of **KfW-Efficiency House 70, 55 and 40**
- Interest subsidised loans
- Partial debt relief from 5% to 10%
- Up to 50.000 Euro per housing unit

Building Stock

Energy Efficient Rehabilitation - Loans

- Promotion of **KfW-Efficiency House 115, 100, 85, 70 and 55**
- Interest subsidised loans
- Partial debt relief from 2,5% to 12,5%
- Up to 75.000 Euro per housing unit

KfW-Efficiency
House

or

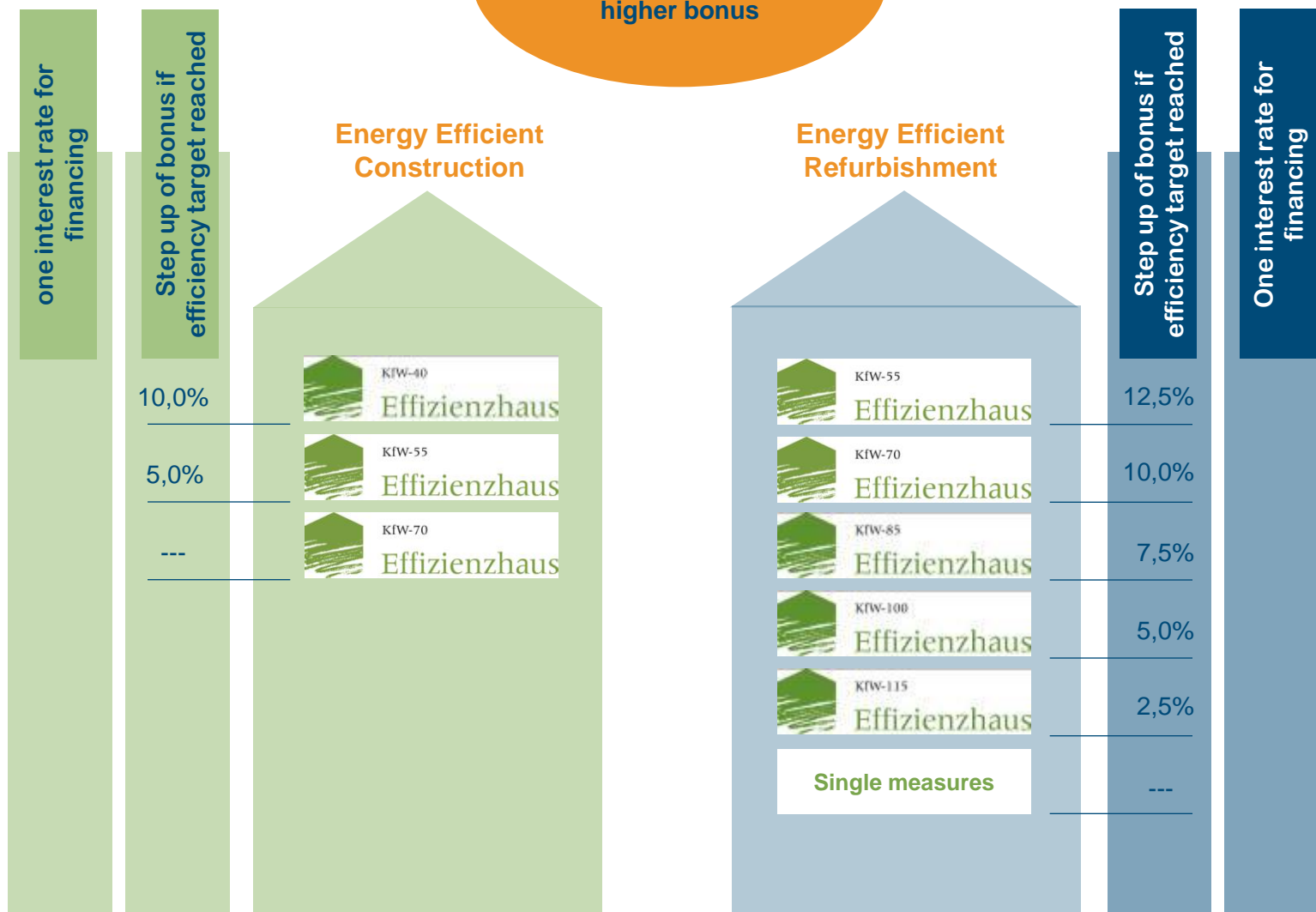
Single measures

- **Single measures** to improve energy efficiency
- Interest subsidised loans
- Up to 50.000 Euro per housing unit

- Subsidised interest rates for a maximum of 10 years
- All groups of investors are eligible

Promotional Incentives

Higher energy efficiency means a higher bonus



Promotional Effects Housing

	2009	2010	2011
Commitments (in millions of EUR)	8,863	8,746	6,510
housing units (in 1.000)	617	953	282
reduction of CO ₂ (in 1,000 Tonnen p.a.)	1,452	1,049	567
jobs * (in 1,000)	292	342	247
investments (in millions of EUR)	18,335	21,330	18,427
federal budget (in millions of EUR)	2,033	1,337	934
leverage	9.0	16.0	19.7

* safeguarded employment for one year

Effects of promotion

Since 2001

- More than 740.000 loans committed since 2001
- commitment volume 45bn EUR
- 2,1m housing units promoted

Since 2006

- CO2 reduction sums up to 156 bn tons

Budget funds being recovered by additional revenues of taxes

Comprehensive system of incentives in Germany

- Regulation is baseline
- Harmonizing of regulation and promotion
- Information is crucial to raise awareness

KfW's eligibility criteria are linked to residential buildings

- All groups of investors can apply
- Incentives for different investor groups provided

Focus on interest subsidised loans

- provides capital and incentives
- Effective leverage on government funds

KfW-Efficiency House as brand for energy efficiency

- creates visibility and transparency

On-lending principle promotes scale up

- broad distributional network through retail banks
- local risk assessment



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Thank you for your attention !

Die Zukunftsförderer

