

»» German Energy Turnaround and KfW Promotion

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The KfW logo is displayed in a bold, blue, sans-serif font. It consists of the letters 'K', 'F', and 'W' in a stylized, blocky arrangement.

»» Challenges of the Energy Turnaround

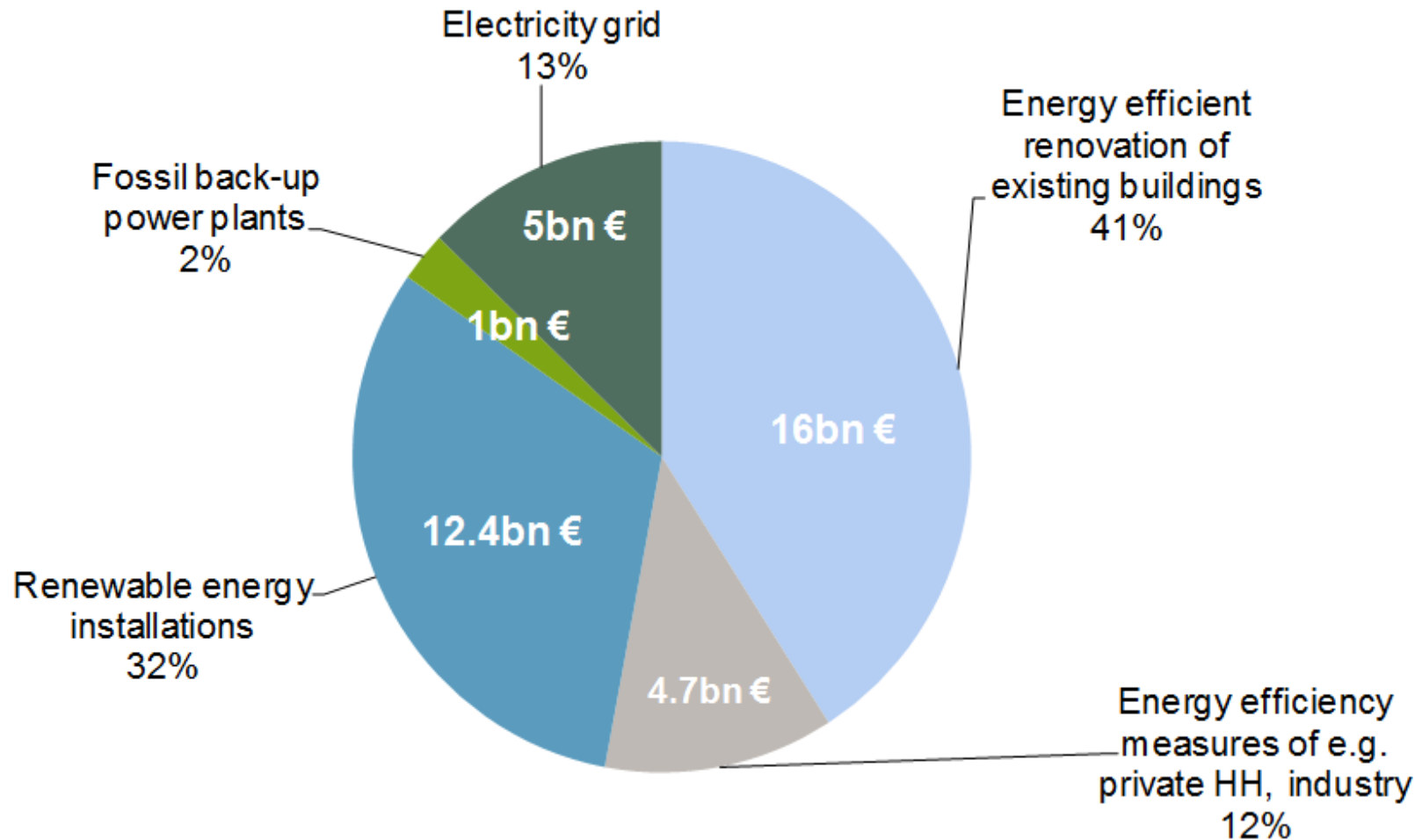
- › Nuclear power phase out by 2022
- › Long-term switch to an energy system based mainly on renewables
- › Significant reduction in energy consumption of households, industry, and transport.

	2020	2050	
Greenhouse gas emissions (vs 1990)	-40%	-80-95%	
Expansion of renewable energies' (RE) share in			
	› final energy consumption	18%	60%
	› electricity supply	35%	80%
Energy efficiency (vs 2008)			
	› primary energy consumption	-20%	-50%
	› electricity consumption	-10%	-25%

»» Challenges of the Energy Turnaround - Investment needs

Large Investment needs until 2020: Annually at least **39 bn. EUR** on average

Source: KfW Economic Research.



»» KfW promotion for the Energy Turnaround – Action Plan Energy Transition

- › KfW is the most important financier of the German energy transition. Since 2011 KfW committed more than **80 bn EUR**.
- › In 2014, KfW supported Germany's energy transition with **EUR 18.4 bn EUR** loan commitments – 40 % of KfW's total domestic promotional business volume.
- › KfW's promotional activities address both pillars of the German energy transition:
 - › Renewable energies: **EUR 4.6 bn** → 25%
 - › Energy efficiency: **EUR 13.8 bn** → 75%



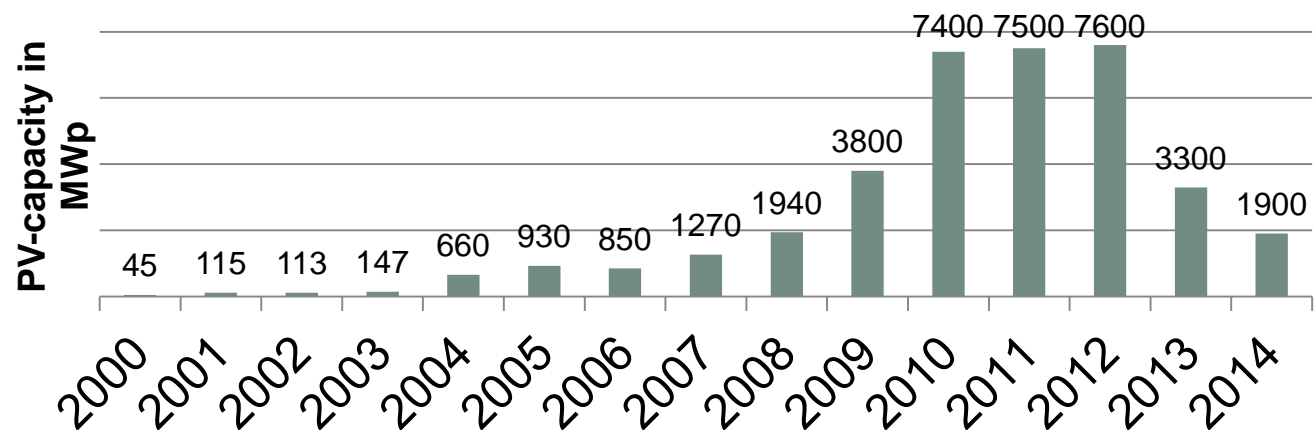
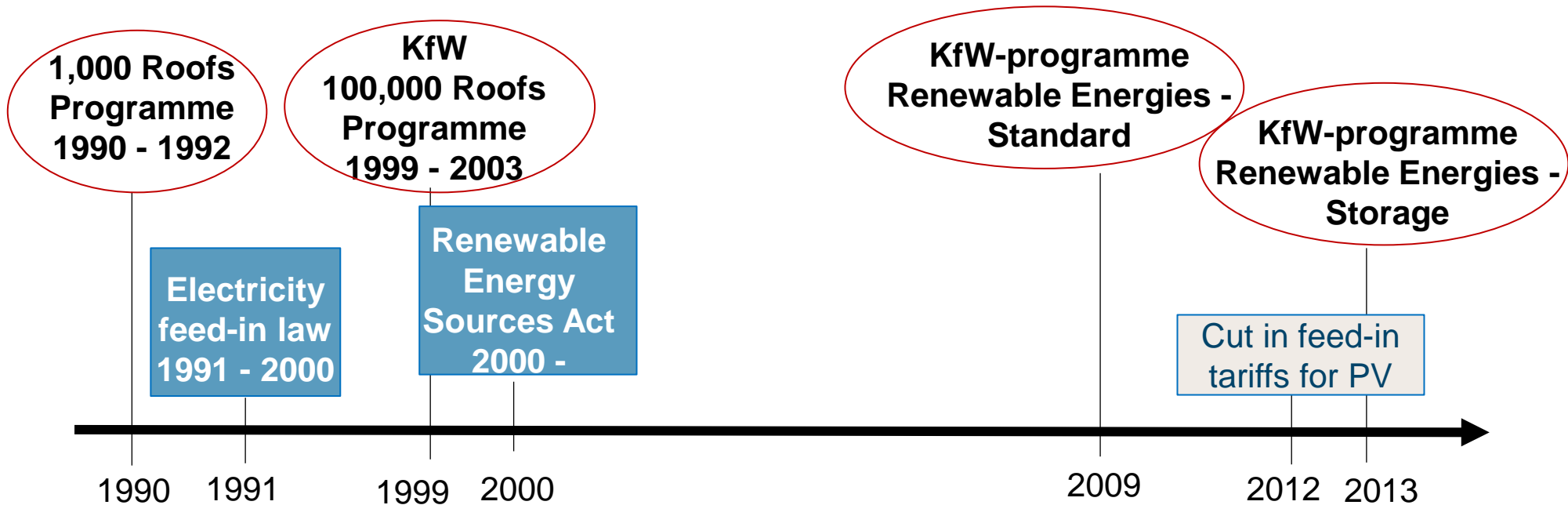
Renewable Energies

- › KfW Renewable Energies Programme
- › KfW Offshore Wind Energy Programme
- › KfW Energy Turnaround Financing Initiative

Energy Efficiency

- › KfW Energy Efficiency Programme
- › KfW Programme Energy-efficient Construction and Rehabilitation

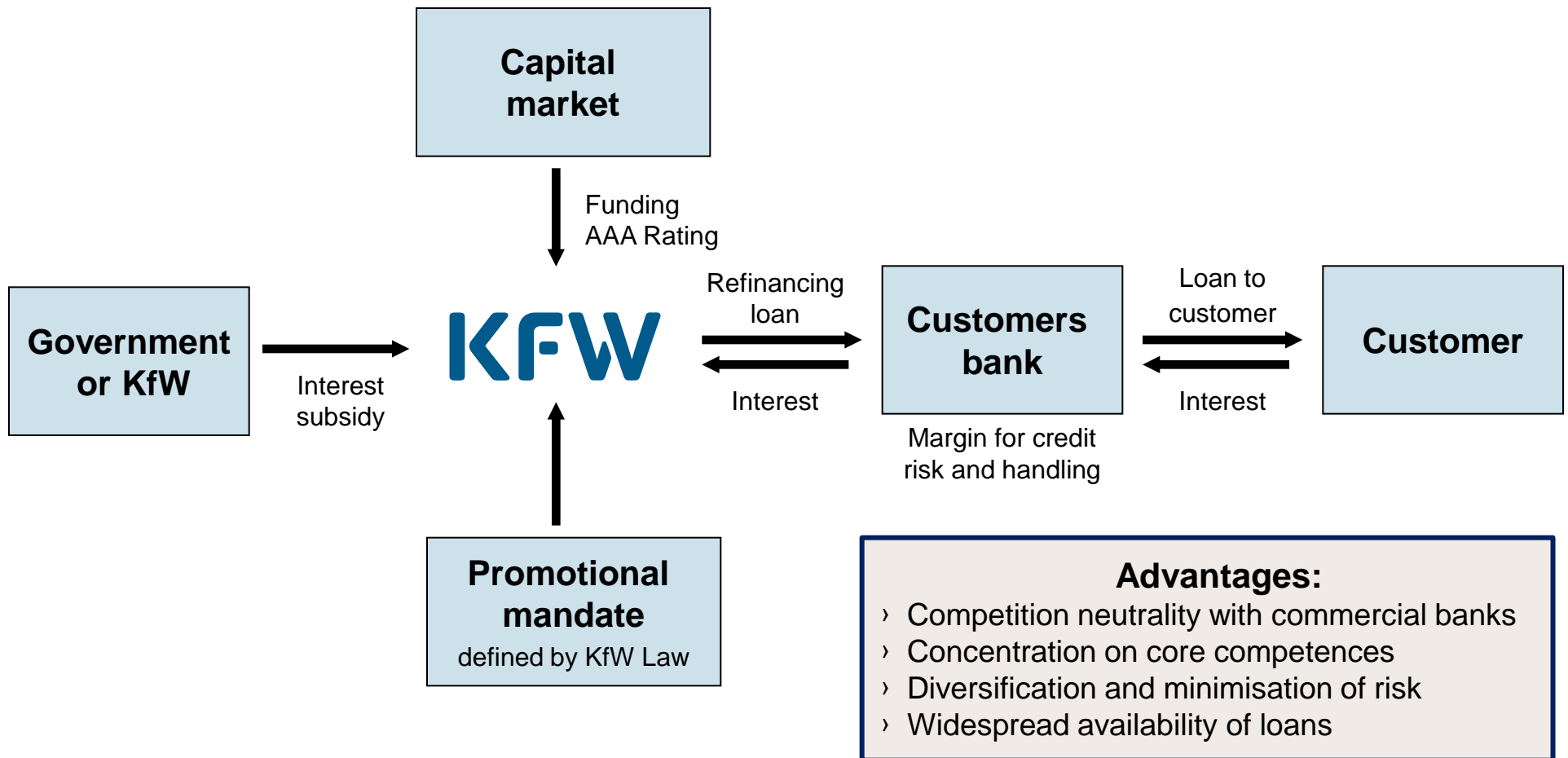
»» KfW promotion for the Energy Turnaround – a brief history



»» KfW promotion for the Energy Turnaround – Proven and successful: on-lending of loans

No branch network of our own

KfW refinancing and on-lending through regular banks



»» Backup

KFW

»» KfW-Programme Renewable Energies – Standard

Loans for investments in renewable electricity installations

For what?	<ul style="list-style-type: none">› Systems installed under the scope of the Renewable Energy Sources Act (EEG), e.g. wind onshore, photovoltaic
For whom?	<ul style="list-style-type: none">› Private individuals and non-profit organisations which feed the generated electricity into the grid› German and non-German enterprises with majority-ownership by private individuals (e.g. project companies)› Self-employed professionals and farmers› Enterprises in which municipal authorities, churches or charities hold an interest
How?	<ul style="list-style-type: none">› Low interest rate loans of up to EUR 25m› Loan term financing up to 20 years, up to 3 years repayment-free start-up period› Risk-based interest rate

»» KfW-Programme Renewable Energies - Premium

Promotion of large plants in which heat is generated from renewable energies

For whom?	<ul style="list-style-type: none">› SMEs (EU-Definition) and self-employed professionals› Non-profit organisations, municipal authorities and companies in which municipal authorities hold an interest of more than 25%› Private individuals which use the generated heat exclusively for their own needs
For what?	<ul style="list-style-type: none">› Construction and expansion of large solar collector systems› Biomass plants for combustion of solid biomass for thermal utilization› Heating networks which are supplied from renewable energies› Systems for development and utilization of deep geothermal energy
How?	<ul style="list-style-type: none">› Loan amount of usually up to EUR 10m, Loan term of up to 20 years, up to 3 years repayment-free› Risk-based interest rate

Customers benefit from attractive repayment bonuses financed by Federal Ministry for the Environment, Nature Conservation and Nuclear Safety.

Particularly favourable conditions for small enterprises (EU definition).

»» KfW-Programme Renewable Energies - Storage

Promotion of storage battery systems

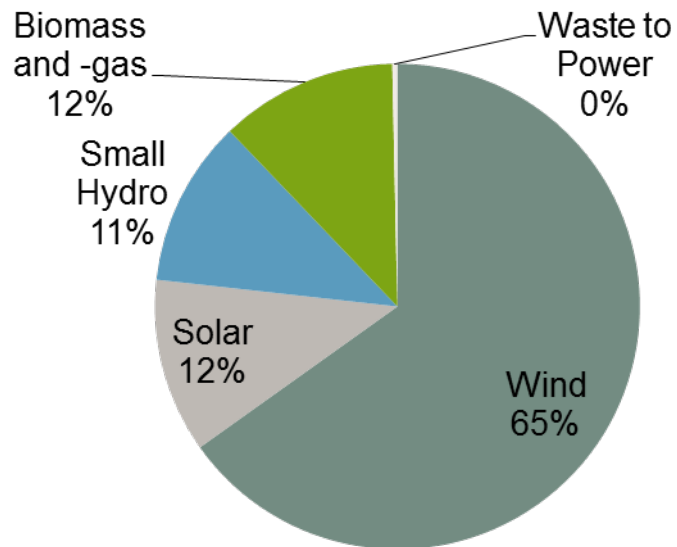
For whom?	<ul style="list-style-type: none">› German and non-German enterprises majority-owned by private individuals› Self-employed professionals and farmers› Enterprises in which municipal authorities, churches or charities hold an interest› Private individuals and non-profit organisations which feed the electricity generated by a solar collector system into the grid
For what?	<ul style="list-style-type: none">› Financing of new installations of stationary battery storage systems combined with photovoltaic systems› Prompt integration of small and medium sized solar collector systems into the grid
How?	<ul style="list-style-type: none">› No maximum amount, financing of up to 100 %› Loan term of up to 20 years, up to 3 years repayment-free› Repayment bonus from BMU of up to 30 % of financeable costs

Customers benefit from attractive repayment bonuses financed by Federal Ministry for the Environment, Nature Conservation and Nuclear Safety.

»» Renewable energy sources in India

› 15% of generation from renewable energy targeted by 2020

› Installed capacity by fuel type in % (December 2015)



in MW

Fuel type	Installed cap. by 30.09.2015	Added until 30.09.2015	Target by 2022
Wind	24,678	1,234	60,000
Solar	4,347	1,715	100,000
Biomass and -gas	4,419	405	10,000
Small Hydro	4,147	343	5,000
Waste to Power	127	20	NA
Total	37,416	5,724	175,000

Achieving its 175 GW RE target calls for EUR 110 billion in capital investment.

› Source: Ministry of Power, Status December 2015