



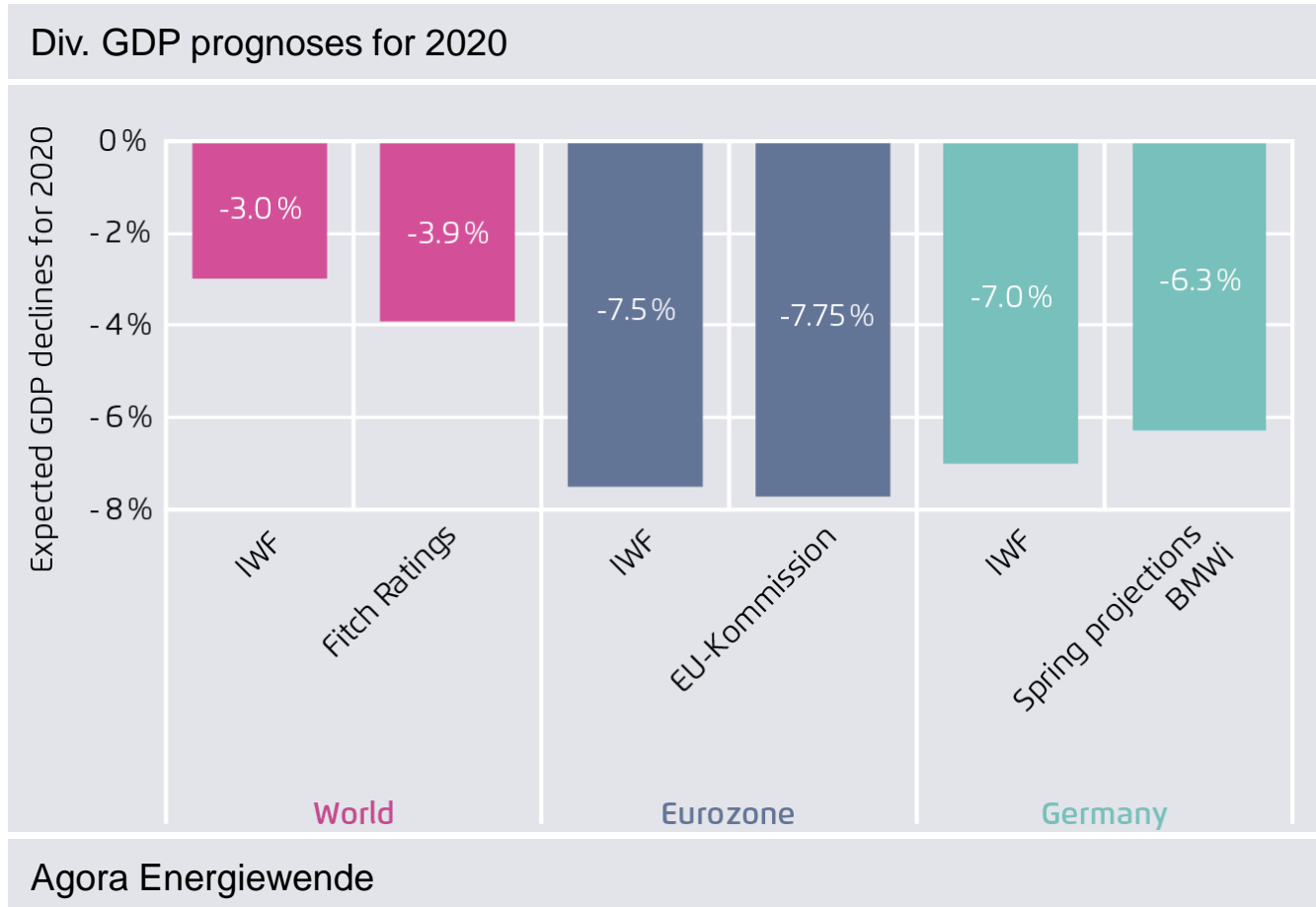
Dual-Benefit Stimulus

*Suggestions for Green Growth and
Investment Initiatives*

Michael Schäfer

BERLIN, 18 JUNE 2020

The corona crisis will result in heavy economic losses



The International Monetary Fund declared on 14 April 2020 that they expect the worst recession since the Great Depression.

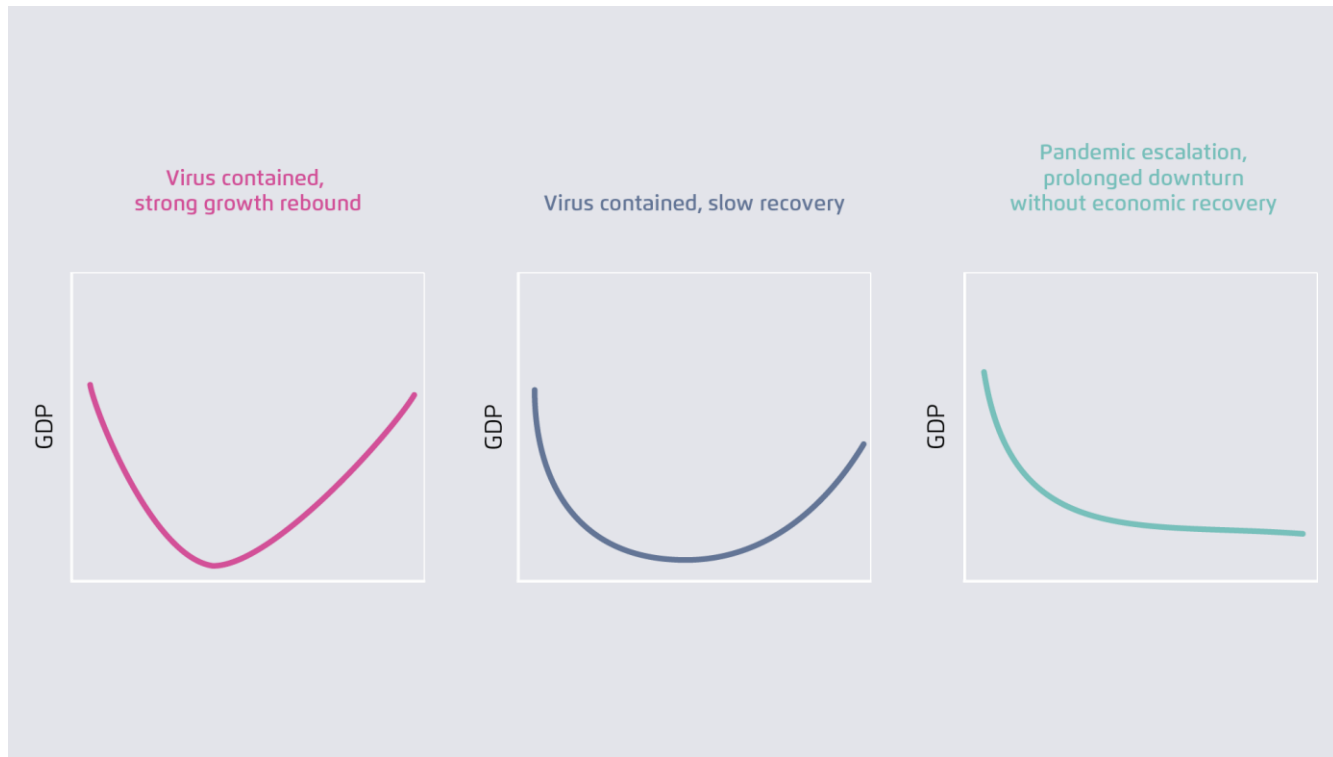
Most forecasts for the slump in GDP in Europe for 2020 are between -6% and -7%.

The biggest difference between the financial crisis of 2008/2009 and now is that this time the no growth impulse from Asia is expected to strengthen the economy in OECD countries again.

New situation: Both supply and demand shock as consumers (can) consume less due to lockdown and companies (have to) reduce their production.

In view of the still high infection rates in many parts of the world, a U-course is to be expected

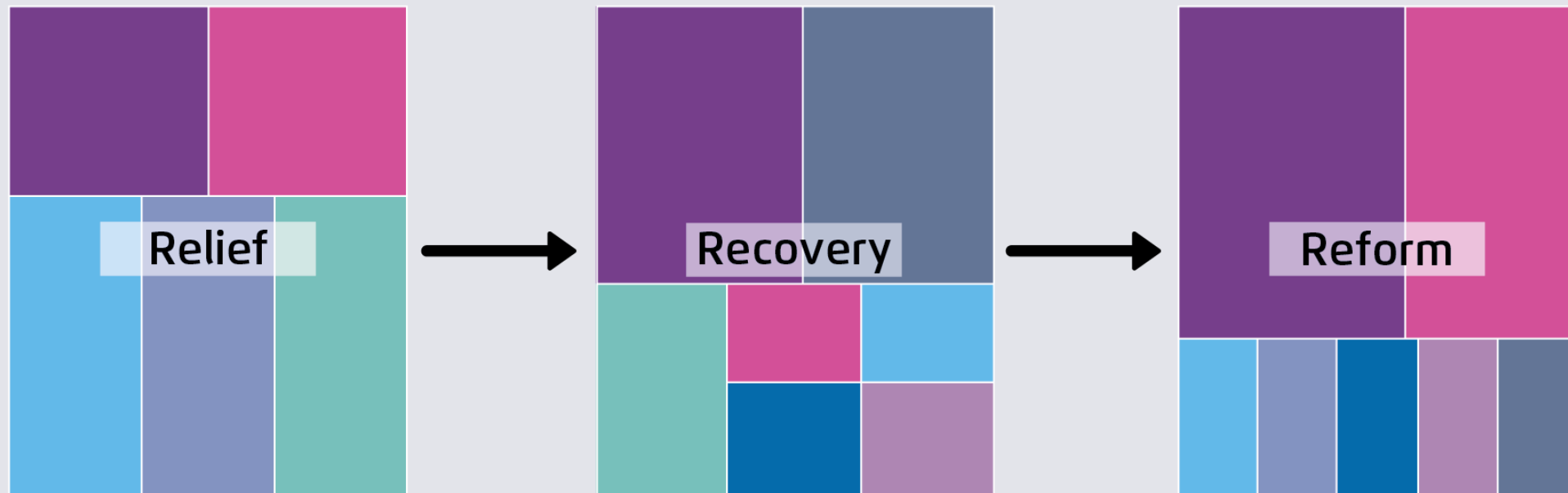
Economic recovery curves



- Depending on the success or failure of measures to contain the virus on the one hand and measures to stimulate the economy on the other, V, U or L trends in economic development can be expected.
- At present, the most likely course is a U or L course, since a rapid recovery (V course) only appears possible with the receipt and rapid widespread application of a vaccine.
- In this context, economic policy has the task of preventing an L-progression and allowing a U-progression instead.

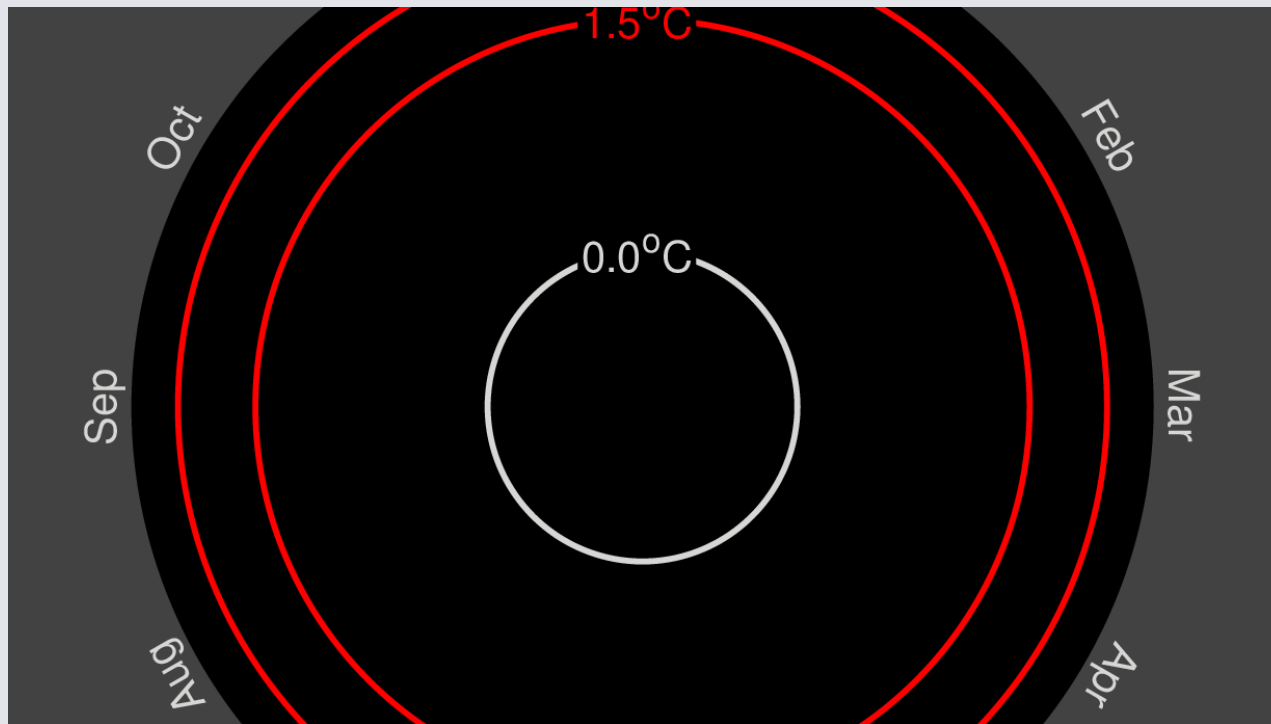
Three phases for economic policy in and after economic crises: relief, recovery, reform.

Framework for economic policy in and after economic crises



At the same time: the climate crisis is not gone away.

Global temperature change (1850-2020)

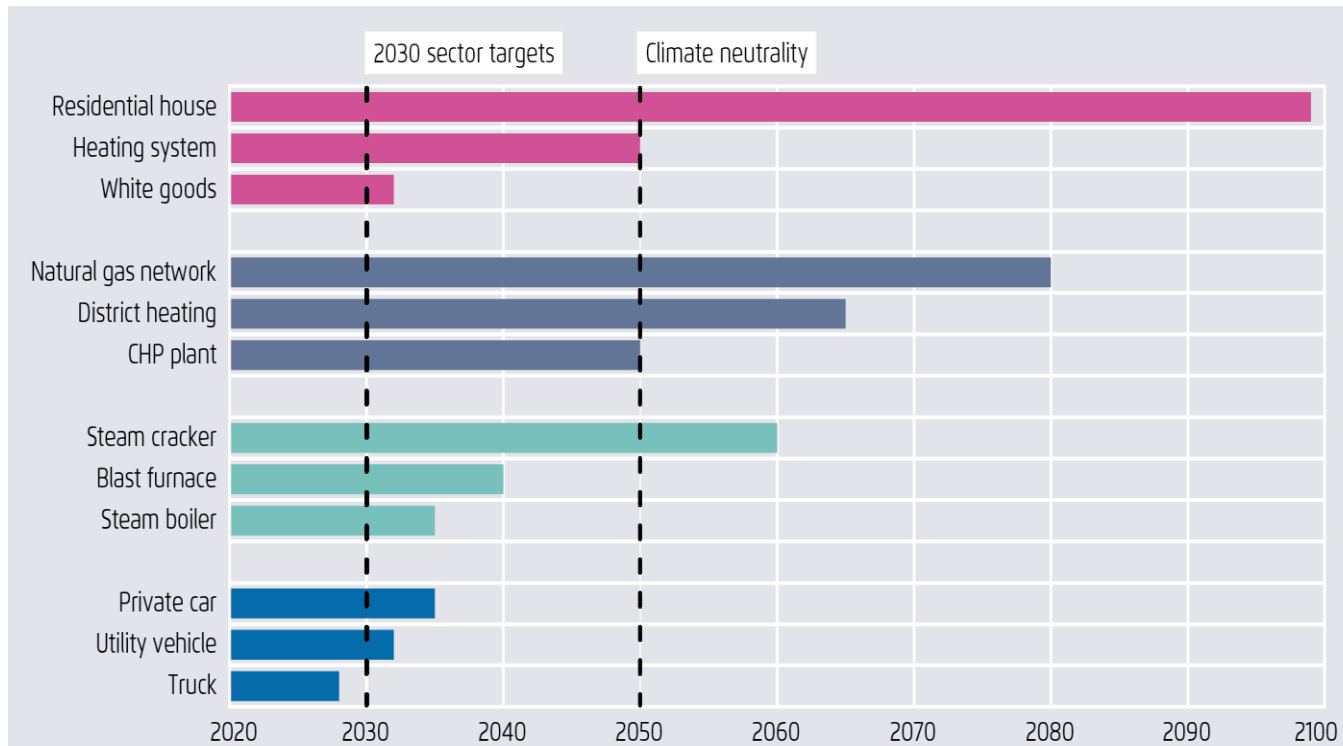


Ed Hawkins

→ while the effects of global warming will not become noticeable all at once, the challenge they pose is no less acute than that of the corona pandemic

Why climate neutrality must guide the economic stimulus

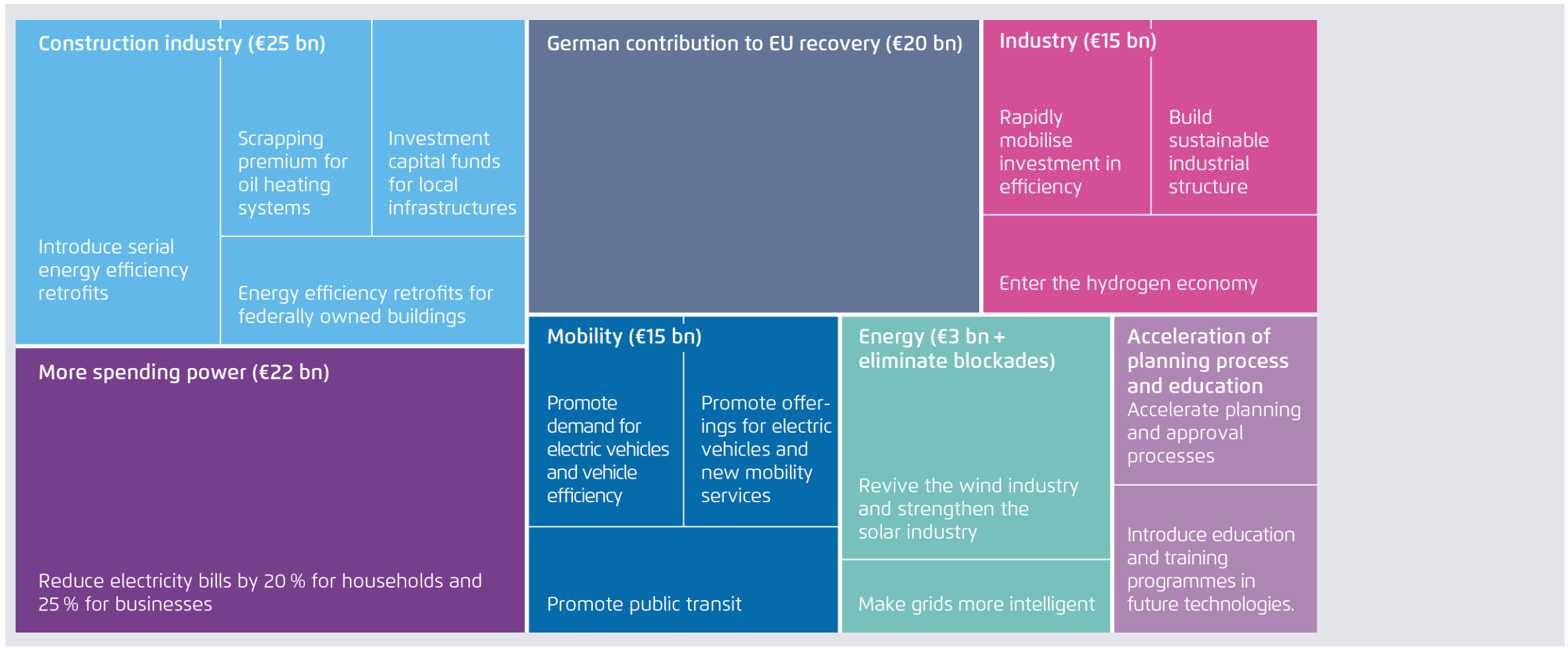
Lifetime of specific technologies if reinvestment takes place in 2020



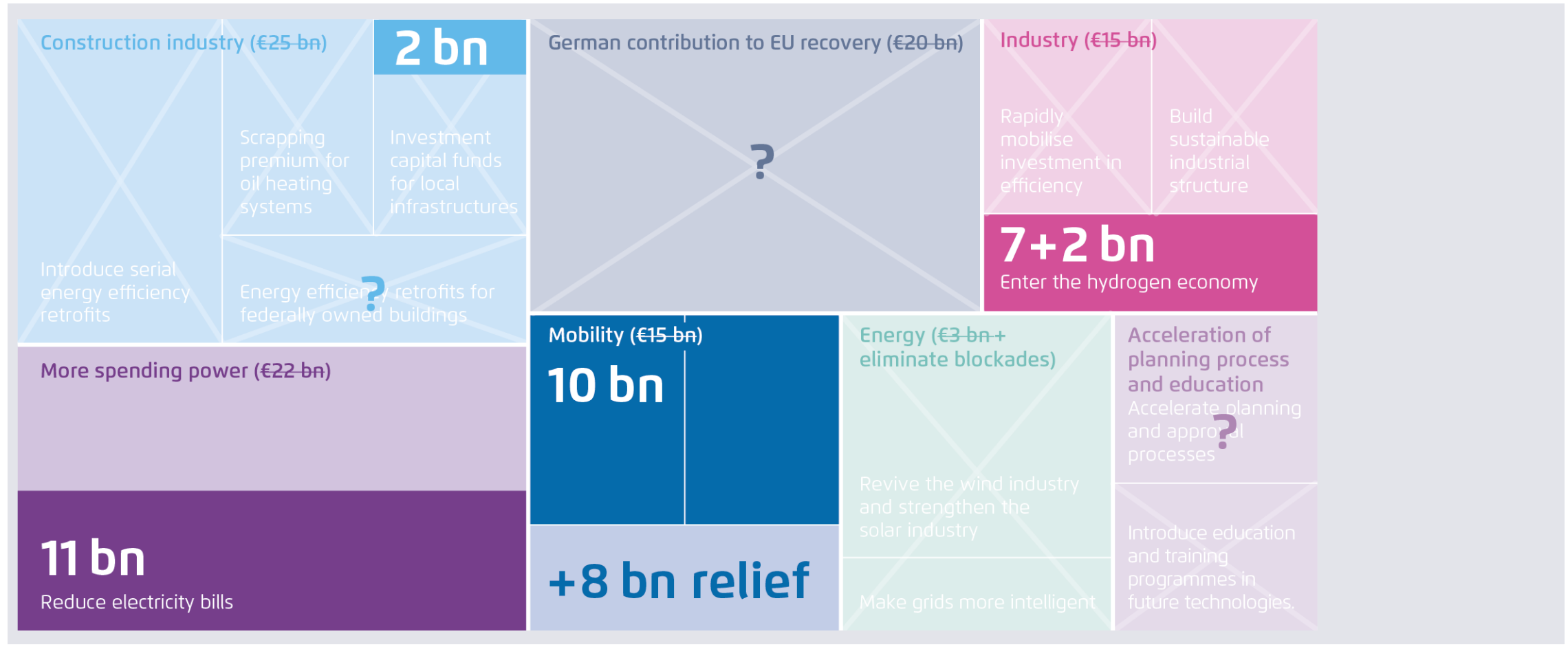
Agora Energiewende

- It is not possible to get the economy back on its feet first and care about climate afterwards:
- Investments initiated now have a lifetime until 2030, 2040, 2050, ...
- Investments initiated now have a climate impact until 2030, 2040, 2050, ...
- Limited financial space, time constraints and economic efficiency required to tackle the coronavirus crisis and the climate crisis at once.
- Every recovery programme needs to be a dual-benefit stimulus.

Our proposal for Germany: A recovery programme with 50 dual-benefit measures



German Government: 130bn-recovery-programme (Euros)



Dual-Benefit Stimuli are country-specific since the regulatory framework differs from country to country

Agora proposal for Germany



- Our proposal for a targeted growth and investment programme for Germany contains over 50 dual-benefit measures
- Dual-benefit stimuli are mostly country-specific due to the differences in the regulatory framework
- Most of our specific suggestions for Germany are not applicable for other countries
- However: In our work on a stimulus programme for Germany, we identified mechanisms that may help develop dual-benefit measures outside of Germany
- This presentation focuses on these mechanisms and illustrates them mainly with examples from our proposal for Germany.

See www.agora-energiewende.de

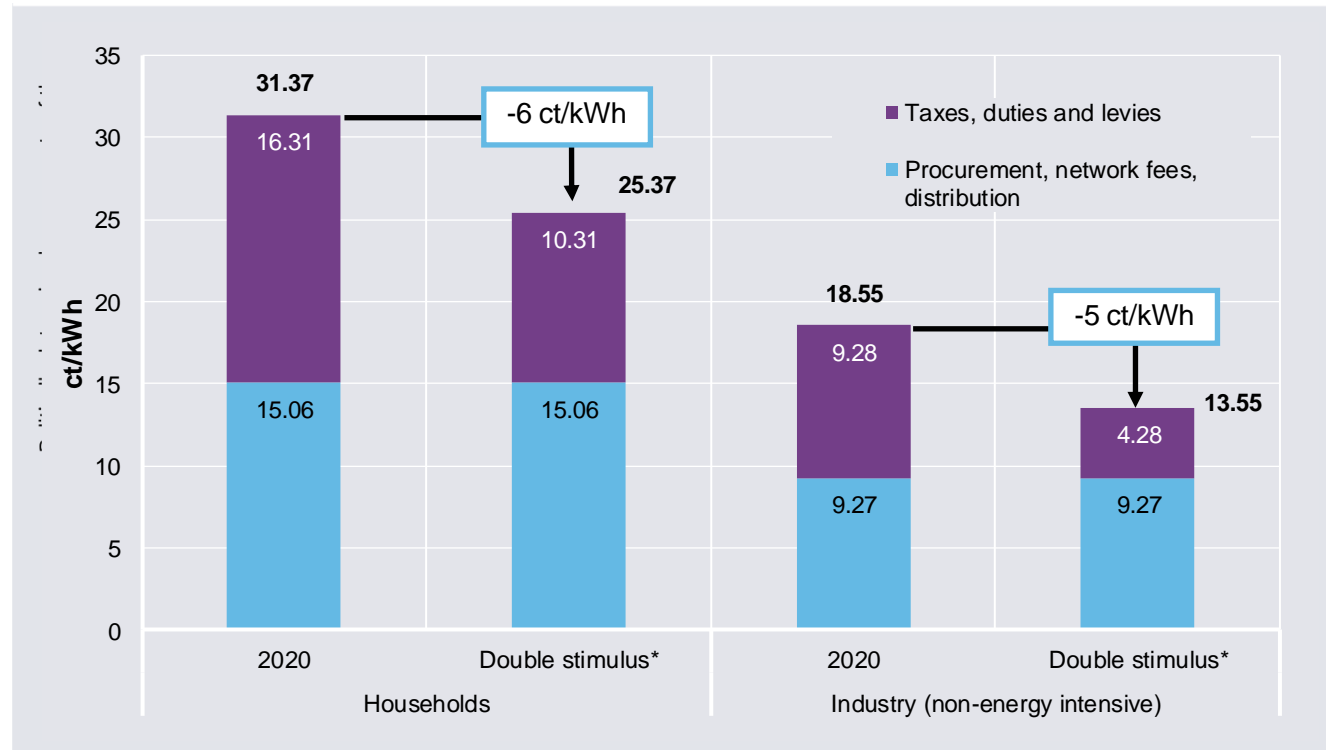


**Dual-Benefit Stimuli:
Underlying mechanisms**

1. New ways to increase purchasing power

Example: lowering the price of electricity

Electricity price 2020 before and after reduction by dual benefit stimulus

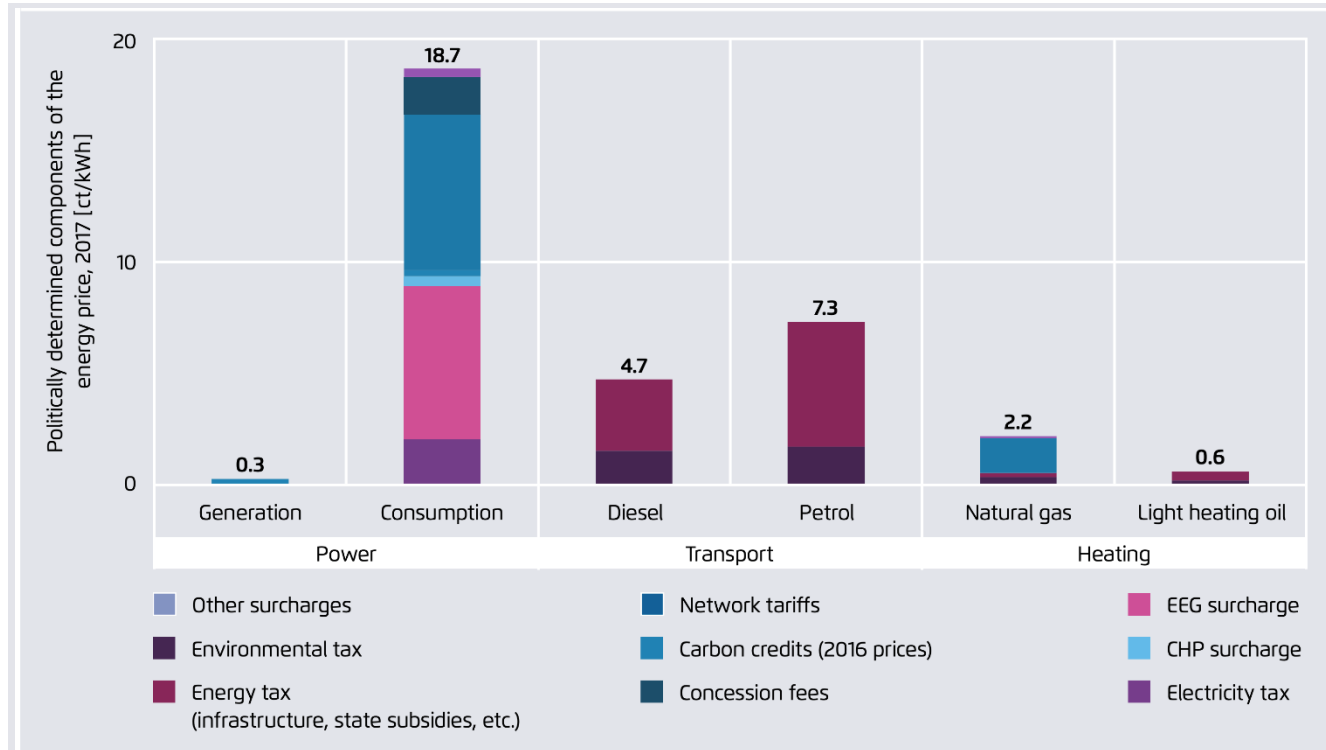


Own illustration based on BDEW (2020), *starting 1 July 2020

- Measures to **increase purchasing power** are classic elements of recovery programmes.
- Lowering the price of electricity (by lowering the EEG levy) is a targeted way to strengthen purchasing power quickly
- It is a **socially balanced** measure, since electricity consumption correlates only weakly with household income.
- **Climate benefit:** Green electricity in transport, heating and industry only becomes economically viable, when electricity is unburdened from high taxes and levies.
- From 2022 on: revenue-neutral through higher CO₂-pricing.

Lowering electricity prices: Is it relief, recovery or reform?

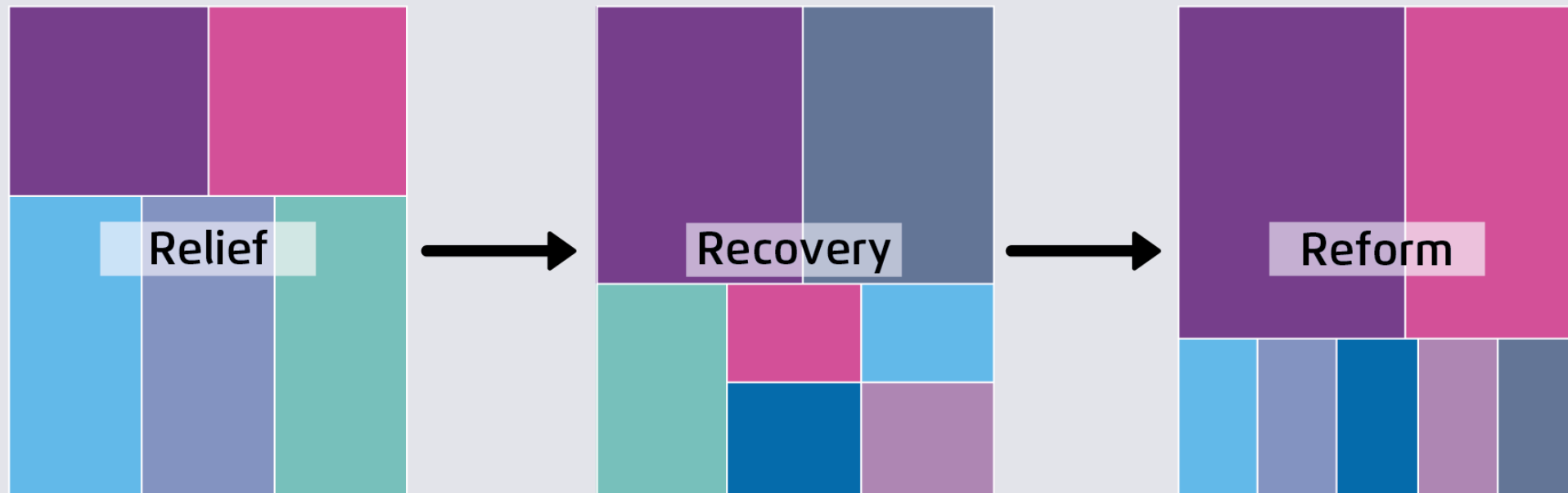
Taxes, levies, surcharges and tariffs in the energy sector in Germany



- **Relief:** This measure will be most beneficial to households and small businesses, groups particularly hard hit by the coronavirus crisis.
- **Recovery:** The tax cut will produce immediate savings, and the increased spending power will boost the economy.
- **Reform:** First step of a CO2-pricing scheme.
- Is this a measure of recovery or reform?

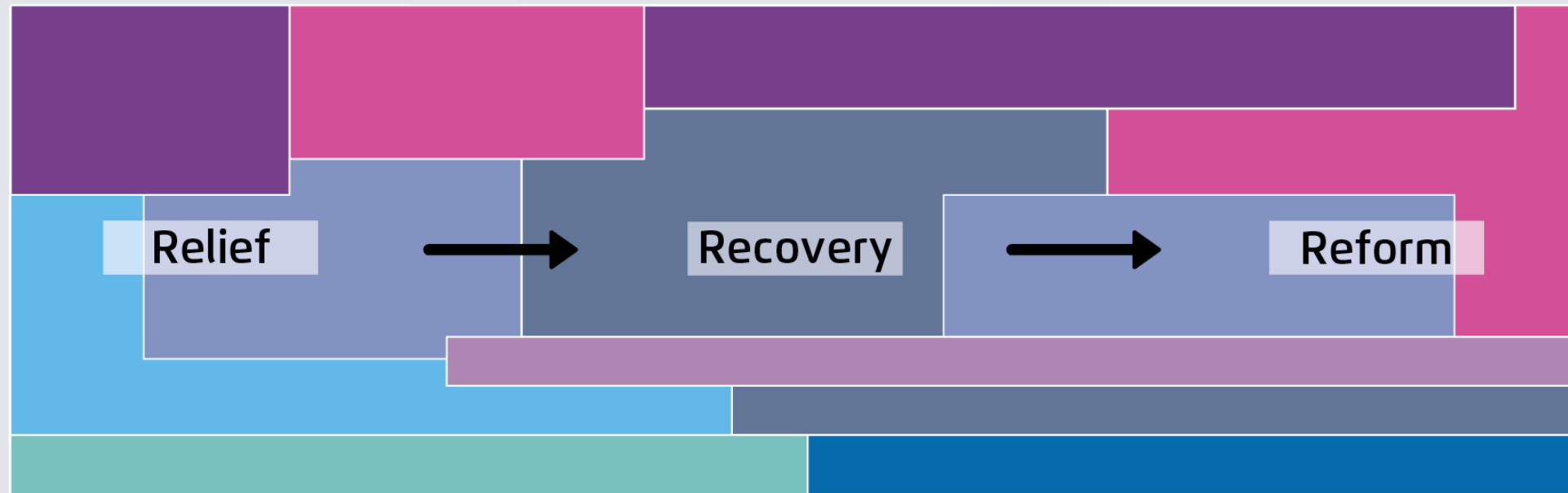
Recovery in light of reform: Dual-benefit stimuli boost economic growth and move the economy towards climate neutrality

Framework for economic policy in and after economic crises



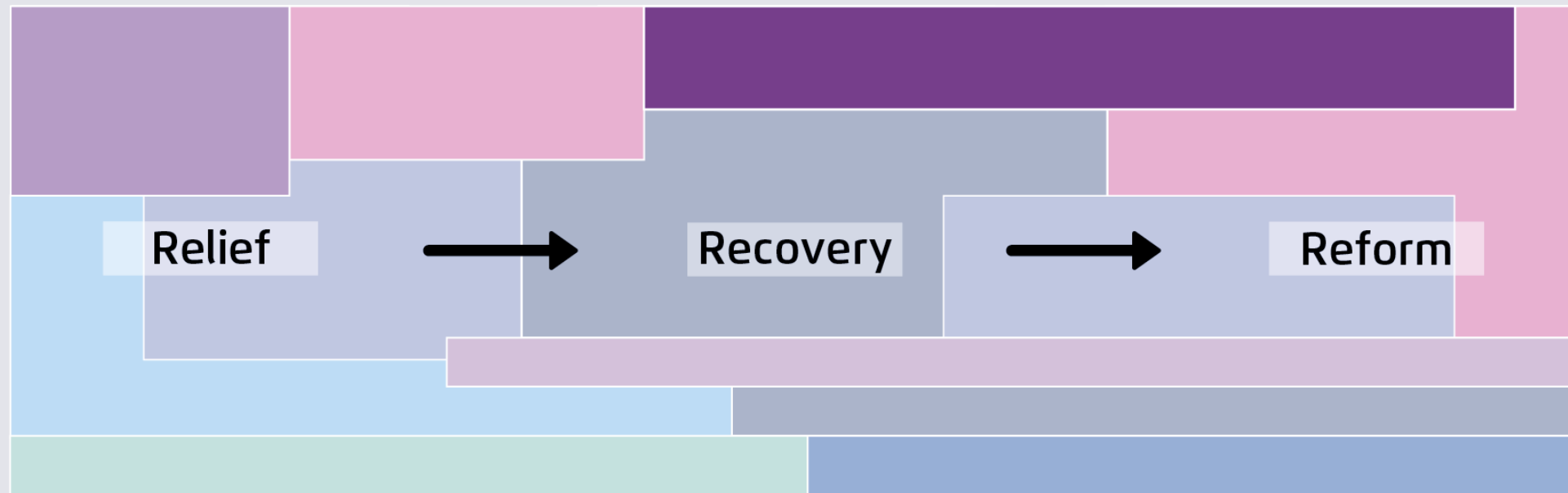
Recovery in light of reform: Dual-benefit stimuli boost economic growth and move the economy towards climate neutrality

Framework for economic policy in and after economic crises



Splitting of reform-policies: investment/ incentive now – reciprocal financing later

Framework for economic policy in and after economic crises



2. Splitting of reform proposals

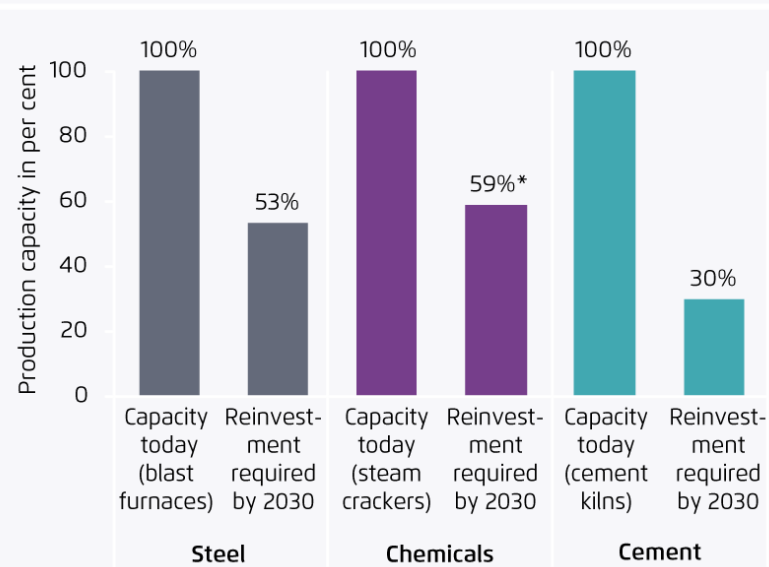
Examples: CO₂-pricing, reform of vehicle taxation

- **Many reform-policies towards climate neutrality are revenue-neutral** (to increase political feasibility). The incentive or investment receives priority in the economic stimulus package. When the economic crisis is over, the measures can continue with the support of funding measures.
- **Example 1: CO₂-pricing.**
- **Example 2: Reform of vehicle taxation.** Reduced rates for low emission vehicles (bonus) and higher rates for vehicles with high emissions (malus).
- **Bonus now, malus later.** The recovery package should already include the funding measures that come into effect two years later since they can provide security for investments and encourage an additional stimulus. **Example CO₂-pricing in the heating sector:** Higher prices for fossil heating in the future can be an incentive to invest in energy efficiency or renewable heating today.

3. Create investment security

Example: steel industry

REINVESTMENT REQUIREMENT OF PRIMARY PRODUCTION CAPACITIES IN GERMANY BY 2030



Wuppertal Institute, 2019

* Steam crackers are normally maintained and modernised continuously so that they are not completely replaced at one time. However, the need for reinvestment gives a rough impression of the need to modernise existing facilities.

- **In practice, the long-term measures that private-sector decision makers count on can bring about short-term investment decisions.** A current example is the German steel industry.
- **Investment grants for the construction of future-proof industrial plants, e.g. direct reduction in the steel industry or electrification & pyrolysis in the chemical industry.**
- **Hydrogen tenders:** About 10 GW of power-to-gas plants will be needed in Germany by 2030. Investment grants for hydrogen and electrolysis plants as well as hydrogen pipelines can help the hydrogen economy to achieve a breakthrough.

4. Expansion of existing incentives

- **Higher purchase rebates on all-electric cars:** a 1 bn euro investment, the rebates should be funded by a bonus-malus system
- **Expansion of purchase rebates for possibly 100.000 electric utility vehicles up to 7.5 tonnes** designed for companies, small businesses, organizations and associations
- **Expand existing support programmes on energy efficiency** by doubling the percentage of expenditures that qualify as tax deductible from 20 to 40 percent for two years. The maximum subsidy per property should be increased from 40,000 euros to 80,000 euros. Additionally, low-income residential units should receive special subsidy conditions
- **Special auctions for the installation of groundmounted PV arrays:** expand the areas in which PV can be installed and increase output limit on ground-mounted arrays from 10 to 25 MW
- ***Example China:** The government extended tax exemptions and subsidies for electric vehicles that would have expired this year – subsidies will now be in place until end of 2022*

5. Prioritise the industrial component of a policy

- **Example 1: Bold investments in green hydrogen:** Green hydrogen is central to the reduction of emissions in the chemical and manufacturing industries and parts of the transport sector. German Government dedicated 9 bn EUR towards a national hydrogen strategy and international cooperation on hydrogen.
- **Example 2: Heat pumps instead of oil-fired heating systems - 1 million heat pump programme:** To generate a strong ramp up of heat pumps in residential and non-residential buildings, heat pumps including deep drilling and the necessary accompanying measures (conversion of radiators) should be subsidised with up to 50 percent.
- **Example 3: Market launch of serial energy-efficient refurbishment (Energiesprong).** To scale the demand for serial refurbishment for the broad market and to initiate innovation processes in the construction industry, the federal government should incentivise the refurbishment of 100,000 residential units. The goal should also be to enable the construction industry to develop “home retrofit factories“ to be used as energy efficient models in both Germany and abroad.

6. Accelerating Innovation

Examples from the transport sector

- **Innovation corridors for climate-friendly truck technologies:** investments in innovative roadways to include alternative truck propulsion systems, fuel-cell powered trucks with a hydrogen fuel station network, battery-electric trucks and charging stations
- **State investment funds** for business start-ups in the sector of "New Mobility"
- **Pilot projects:** Innovation competition for rural mobility, a 500 million euro programme funding up to 100 innovative pilot projects for rural mobility
- **Innovative bus systems:** Support for "mobility alliances" to foster cooperation between departments of transport, public transport companies and private mobility service providers to link public transport with modern mobility services.

7. Smart investments

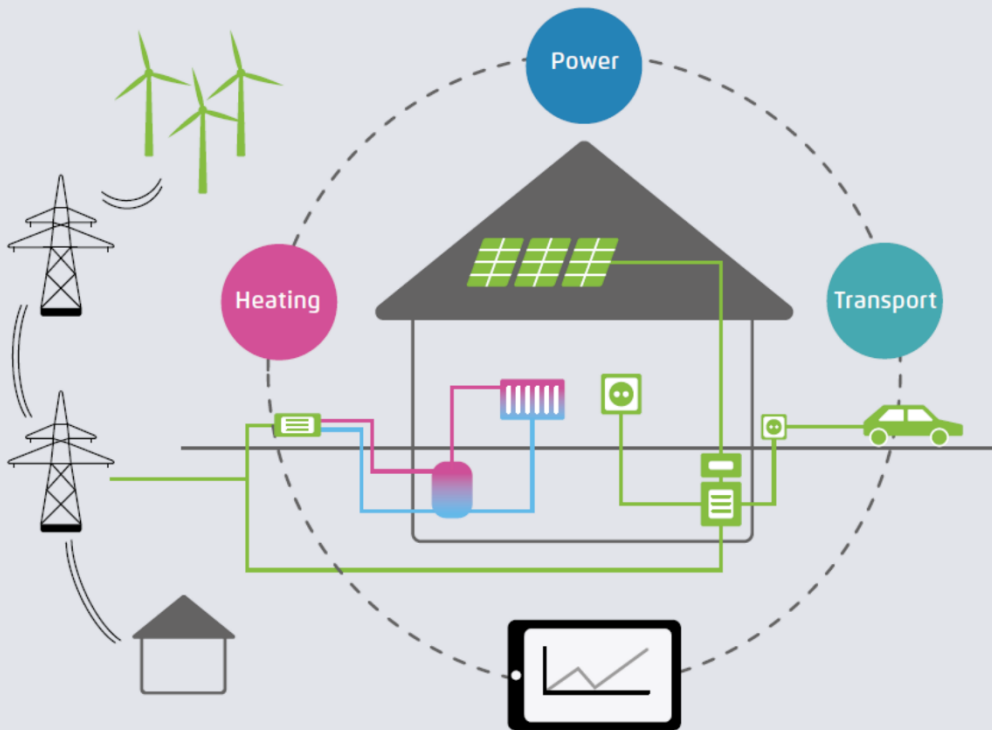
In Germany (and many other countries) state investments have been postponed in the last few years. Many investments in carbon neutrality pay back.

- **A doubling of the retrofit rate of public buildings** to make federal buildings “role models of efficiency” while boosting the construction sector in 2021 and 2022.
- **Fund modern bus systems for sustainable transport in cities:** Electric Bus lines with separate busways or “trams on wheels” can be built faster and cheaper than trams.

8. Invest today in the integrated infrastructures of tomorrow

Examples: renewables, e-charging, electricity grid

Infrastructures for the integration of power, heating and transport sectors



Agora Energiewende

- **Strengthen the solar and wind industry:** In Germany the essential issue at hand is not to channel additional resources to the sector, but rather to eliminate existing hurdles to growth.
- **Expansion of the charging infrastructure for e-mobility:** Up to 200,000 additional charging stations for private households and workplaces.
- **Smart boost for electricity grids:** double the subsidies for retrofitting and upgrading power distribution stations with smart sensor and actuator technology

9. Improve the investment environment

Examples: Vocational training, removing investment barriers, enhance personnel capacity in permitting authorities

- **Qualification and retraining for future technologies:** state-financed training programs for existing skilled workers to prepare the automotive industry, construction industry and trade for technological developments. Close partnerships between the government and private sector to develop regional transformation plans, open source hubs and training centres
- **Accelerate planning and approval processes** to boost the construction of modern infrastructure, promote the development of future technologies and remove existing barriers to investment without losing sight of legal standards or the protection of people and the environment. Additionally, a special commission to dismantle barriers to investment and design in line with the EU Green Deal
- **Enhance personnel capacity at planning and permitting authorities** to ensure the acceleration and efficacy of public-sector investments projects. The federal government should partner with states to create a fund providing financial resources to pay for new personnel.
- **Example South Korea:** *The government established training centers to retrain workers for the energy transition with the South Korean recovery programme*

10: Regional collaboration

Example: tackling the crisis together with European partners

- **Reformulate EU aid framework and policies in line with the EU Green Deal:** Adaptation of the state aid framework is central for the implementation of many of the above measures, but also to the establishment of new policy instruments to enable European industry to invest towards climate neutrality.
- **Increased investment in projects of common European interest:** Proposals for new initiatives including clean hydrogen, offshore wind hub for the North and Baltic Seas, green steel, EU Electric Vehicle Fast Charging Initiative, reconstruction of an EU solar industry
- **Increase the leverage of the European Investment Bank through Green Bonds:** The EIB issues bonds that are bought on the secondary market by the ECB as part of its euro stabilisation measures allowing the EIB to finance considerably more projects than before.
- **Sensibly increase the EU budget 2021 - 2027:** EU regionalisation funds are central to public investment in many countries in Southern and Eastern Europe. By increasing the German contribution to the EU budget in line with the Green Deal, many projects can be initiated.



EU recovery budgets need climate-safeguards

1	The overall amount of climate-related funding across all budget lines is simply not enough. It also remains unclear whether funding that is <i>in principle</i> available for accelerated climate action <i>will actually be used</i> to this end.
2	The 2021-2027 budget must help increasing the EU's 2030 climate target to -50 or -55%. Based on the current 2030 framework, 2443 bn EUR climate-related investments are needed in the buildings, transport, industry and power sectors. A 2030 target increase will also increase investments-needs.
3	Three climate-safeguards for the future EU Budget (1) increasing the climate share to 40% across all budget lines (not counting agriculture); (2) establishing dedicated EU facilities to accelerate climate action in critical areas; (3) a clear exclusion-list of climate-negative activities that will not be eligible for EU funding.
4	A budget-governance that combines flexibility with climate-integrity, in particular: (1) consistency of spending activities with different planning processes; (2) devising a role for the EU Taxonomy in developing national spending priorities; (3) a budget review in 2024 after adoption of updated EU's 2030 climate and energy laws.

Agora Energiewende
Anna-Louisa-Karsch-Str.2
10178 Berlin

T +49 (0)30 700 1435 - 000
F +49 (0)30 700 1435 - 129

www.agora-energiewende.de

 Please subscribe to our newsletter via
www.agora-energiewende.de
 www.twitter.com/AgoraEW



**Thank you for
your attention!**

Questions or Comments? Feel free to contact me:
michael.schaefer@agora-energiewende.de

Agora Energiewende is a joint initiative of the Mercator
Foundation and the European Climate Foundation.