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Fixing long-term price paths for fossil energy

A new proposal for cutting carbon emissions

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Main theses

- Triple challenge: Economic, social, ecological crisis >
- Investments in social coherence and ecological sustainability, in particular to reduce GHG emissions
- Necessary price incentive: Expectation that costs of CO_2 emissions rise steadily and faster than inflation
- Reason: Profits consist of saved fossil energy costs
- Carbon taxes or emission trading cannot establish such an expectation due to the instability of both, fossil energy prices as well as EU emission permit prices
- Alternative: EU sets a rising price path of crude oil, coal and natural gas through a flexible fossil energy tax
- The tax skims off the difference between the EU target price and the respective world market price

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Projects as part of a green-growth-transition towards a circular economy

- Transition calls for a renovation of the capital stock in energy production, transport, buildings and energy-intensive manufacturing (steel, cement, etc.) >
- Examples of respective mega-projects, carried out over decades:
- Energetic refurbishment of the entire stock of buildings in the EU (isolation, PV, heating pumps, batteries)
- Construction of a high-speed railways net across Europe as alternative to air transport
- Transition to emission-free cars and trucks
- Switch to hydrogen technologies in industry
- Massive increase of energy production from renewable resources

Price incentives for „green investments“

- Long repayment periods of investments in energy efficiency and renewable energy >
- Transition requires maximum long-term planning security > reliable expectations about the prices of fossil energy = the effective emission costs
- Profits from investments = avoided emission costs
- Fluctuations of fossil energy prices and emission permit prices > no reliable expectations about emission costs
- Example: Since 2008 fuel prices declined three times by 30% due to even greater oil price declines >
- Price path of fossil energy (= world market prices plus carbon/energy tax) must be stabilized

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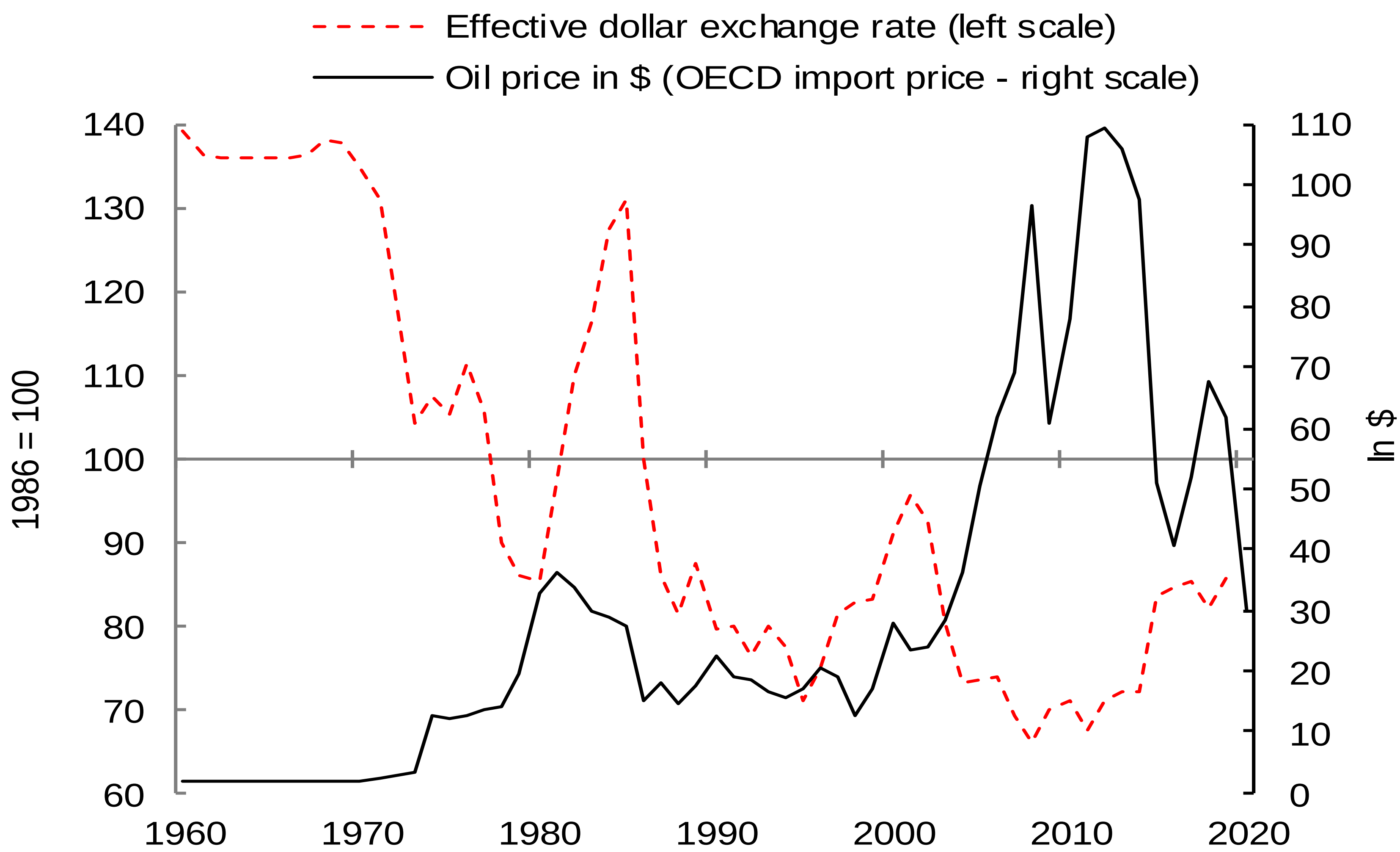
Dollar exchange rate and oil price fluctuations



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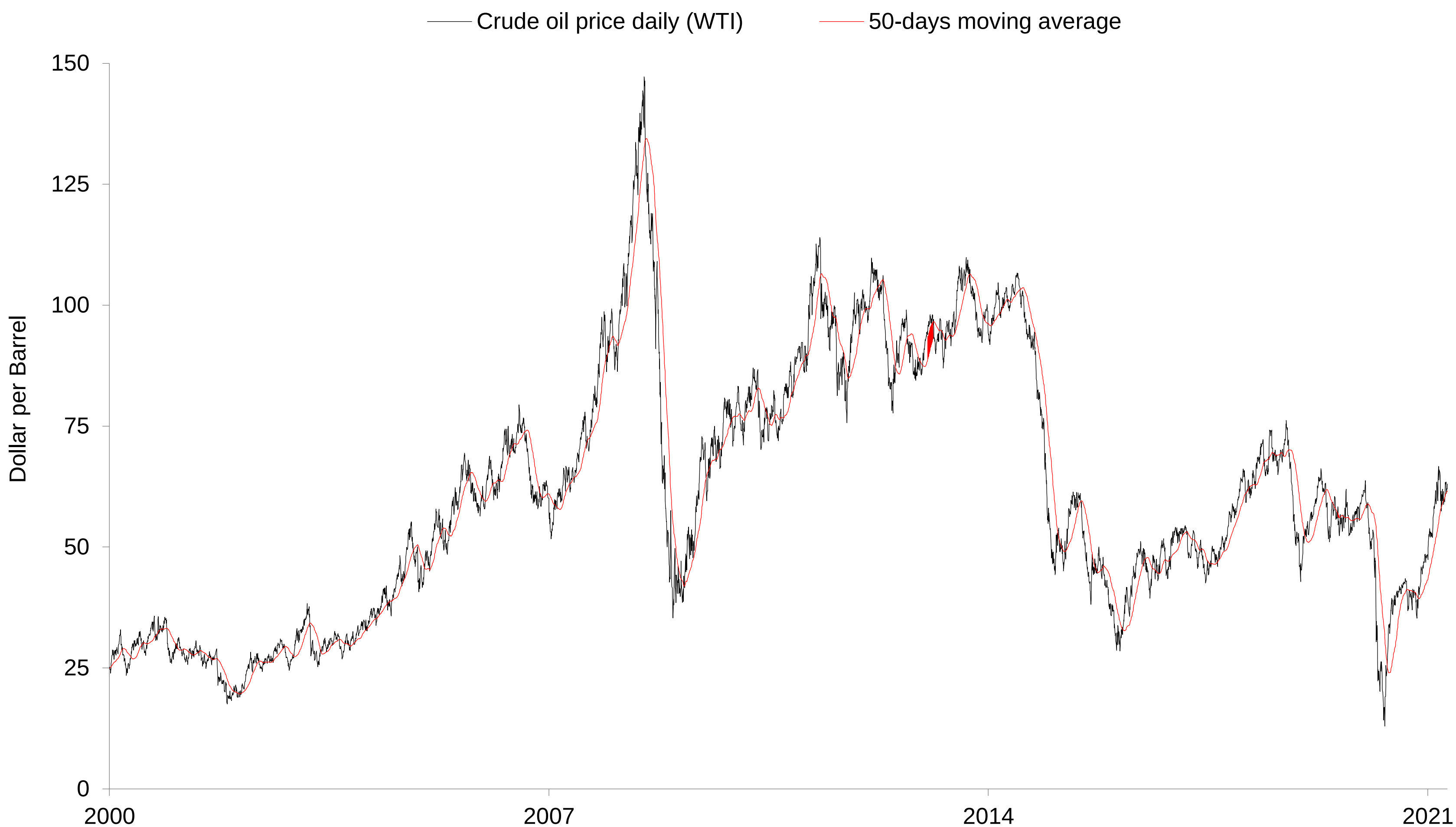
Trending and speculation in the crude oil futures market



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Fluctuations of the price of EU CO_2 emission allowances

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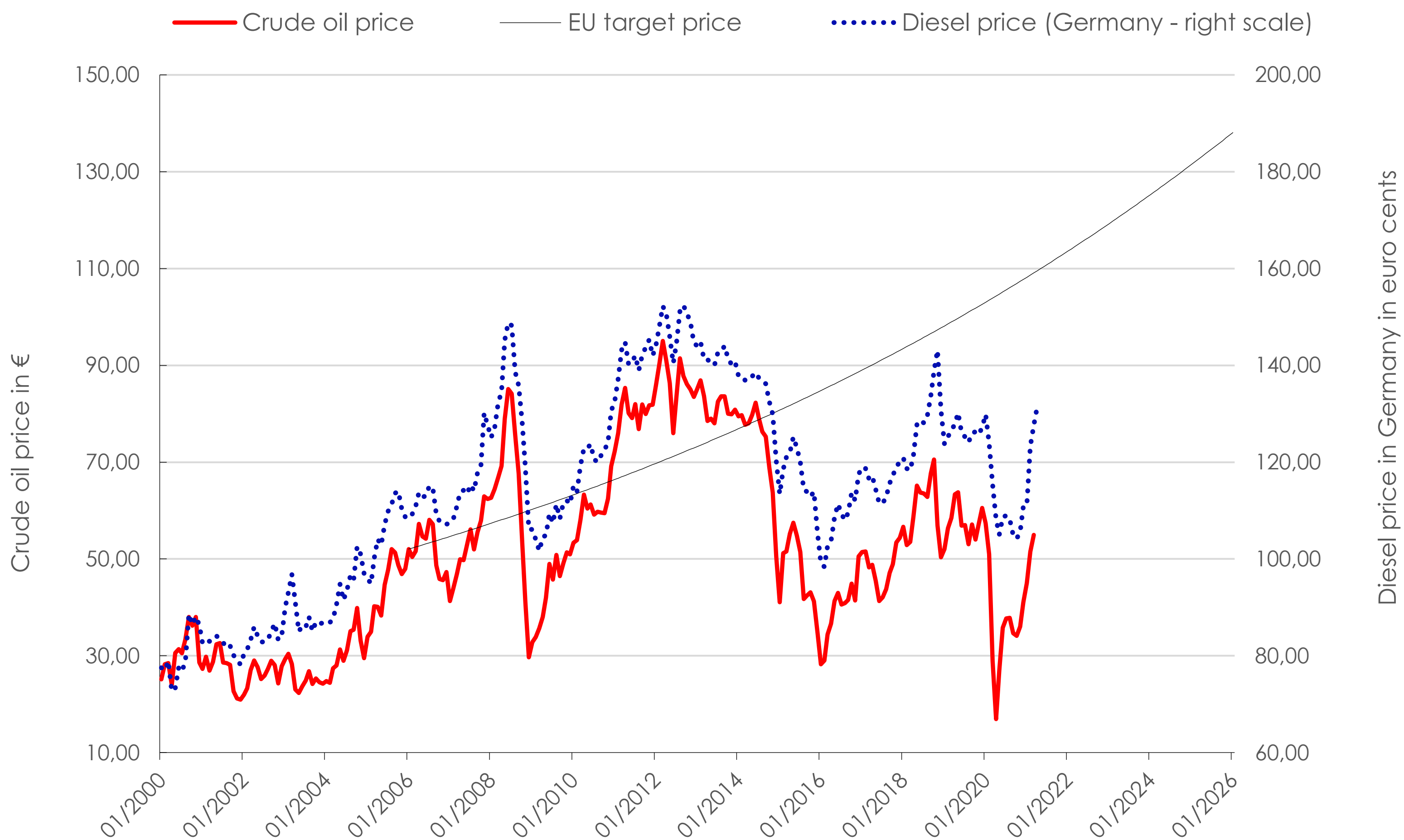
Price incentives for CO_2 reduction – market versus target prices



Target price path: Crude oil prices in the EU rise by 3 percentage points faster than target inflation, i.e., by 5% per year (fictitiously from January 1, 2006).

Long-term price path of fossil energy

- Stabilizing expectations over decades > profits from reducing GHG emissions can be calculated
- Promotes investments from refurbishment of buildings to the production of energy from renewable sources
- The higher the fossil content, the more expensive goods become
- Price path realized through a - monthly adjusted - quantity tax on crude oil, coal and natural gas
- Tax receipts could easily exceed € 500 bill. due to the rising spread between the EU target price and the world market price > redistribution of "oil rents"
- Tax returns used for "green investments" and for compensating low-income groups
- Imports burdened with a carbon adjustment tax, exports relieved from the tax