



**Paris Climate Conference 2015:
CO₂ taxation worldwide as key strategy to
achieve the targets of COP 21**

Dr. Heinz Kopetz

World Bioenergy Association, Stockholm

Vilnius, Nordic Bioenergy

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COP 21: targets and measures



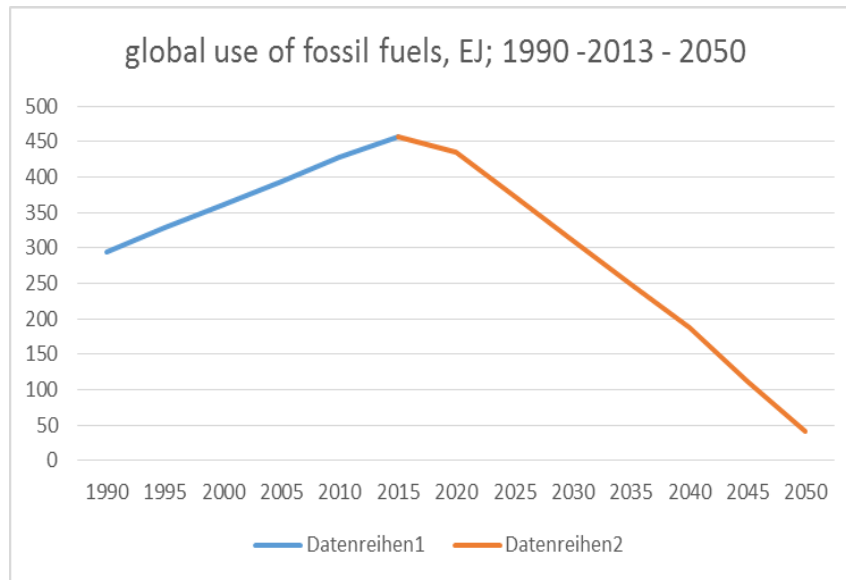
About Targets:

- global temperature rise well below 2°C and pursue efforts to limit the temperature increase to 1,5°C above pre-industrial levels (Art. 2)
- To achieve a balance between anthropogenic emissions by sources and removals by sinks of GHG in the second half of this century (Art. 4)
- Developed countries taking the lead by economy wide absolute emission reduction targets (Art. 4)

Meaning for Europe, for the world:

Stop using fossil fuels before 2050! Worldwide shortly later!

Fossil fuels 1990 - 2050: use and emissions



Global use of fossil fuels and CO2 emissions (source: IEA, outlook)

	EJ	CO2 emissions Mt
2010	427	30190
2013	463	31 646
2030 target	311	21 257
2050 target	41	1 716



The oil prices: drop from 120 Dollar/b to 40 Dollar/b



Low oil price – a unique opportunity



- Low oil prices: consumers invest more into and consume more fossil fuels,
- A contradiction to climate mitigation
- The current oil price level: a unique chance to introduce carbon taxes!

The need for carbon taxes



From 2010 to 2013

- the use of fossil fuels increased by 36 000PJ, almost 9%
- the oilprice was between 95 and 125 Dollar/barrel,

now 2016

- the oilprice is about 40 Dollar/barrel

Conclusion.

- without carbon taxes it will impossible to achieve the targets of the Paris agreement,
- in many countries emissions will not decline but grow.
- And after one decade the window of opportunity to reach the Paris targets will be gone for centuries!

What are carbon taxes?



- Taxes per ton CO₂ emission
- To avoid an increased tax burden new carbon taxes should come hand in hand with the reduction of other taxes (on labor as example)

3 groups of countries



- Countries that have already carbon fees or taxes – they should increase now the existing carbon fees or taxes
- Countries with no taxes on carbon emissions should introduce them now, before oil prices climb again
- Countries with subsidies on fossil fuels or state guaranteed prices should take away the subsidies step by step now

**Carbon emission fees are the most efficient tool to combat climate change!
Why?**

Benefits of carbon taxes 1



- They increase the price of fossil emissions, penalise fossil fuels and thus favor renewables and energy efficiency.
- Carbon taxes address all individuals and enterprises, they make better choices for our common future, they have clear signals to reduce fossil fuels, to save energy or go for renewables.
- Trading schemes only address parts of the economy.

Benefits of carbon taxes 2



- Carbon fees increase energy bills for poor and rich people, however wealthy people use the most energy – using bigger cars, larger houses, travelling more! In addition, part of the revenue can be used to help poor people.
- Carbon dioxide fees also help to create new jobs by new investment in energy efficiency or renewable energy
- They help to prepare the economy and consumers for future times with higher energy prices

How to introduce carbon taxes?



- The best way would be a common European or global level – but this is just unrealistic!
- Every government should act on its own, not waiting for an European or global agreement!
- Several countries already used the situation to act in this way:
India, Portugal, also France, Sweden to give a few examples!

Carbon taxes and bioenergy



- Plants are absorbing carbon dioxide from the atmosphere, therefore bioenergy does not pay carbon taxes. But carbon taxes make the use of fossil fuels in the production and transport of biomass more expensive. A reason to replace them by renewable sources also!
- Alltogether, carbon taxes improve the competitiveness of bioenergy in the heating and transportsector.
- **At the present oil price situation they are to strenghten the bioenergy industry.**

Annual Development of CO₂ emissions; fossil fuels – the main problem!

(Nov 2014)

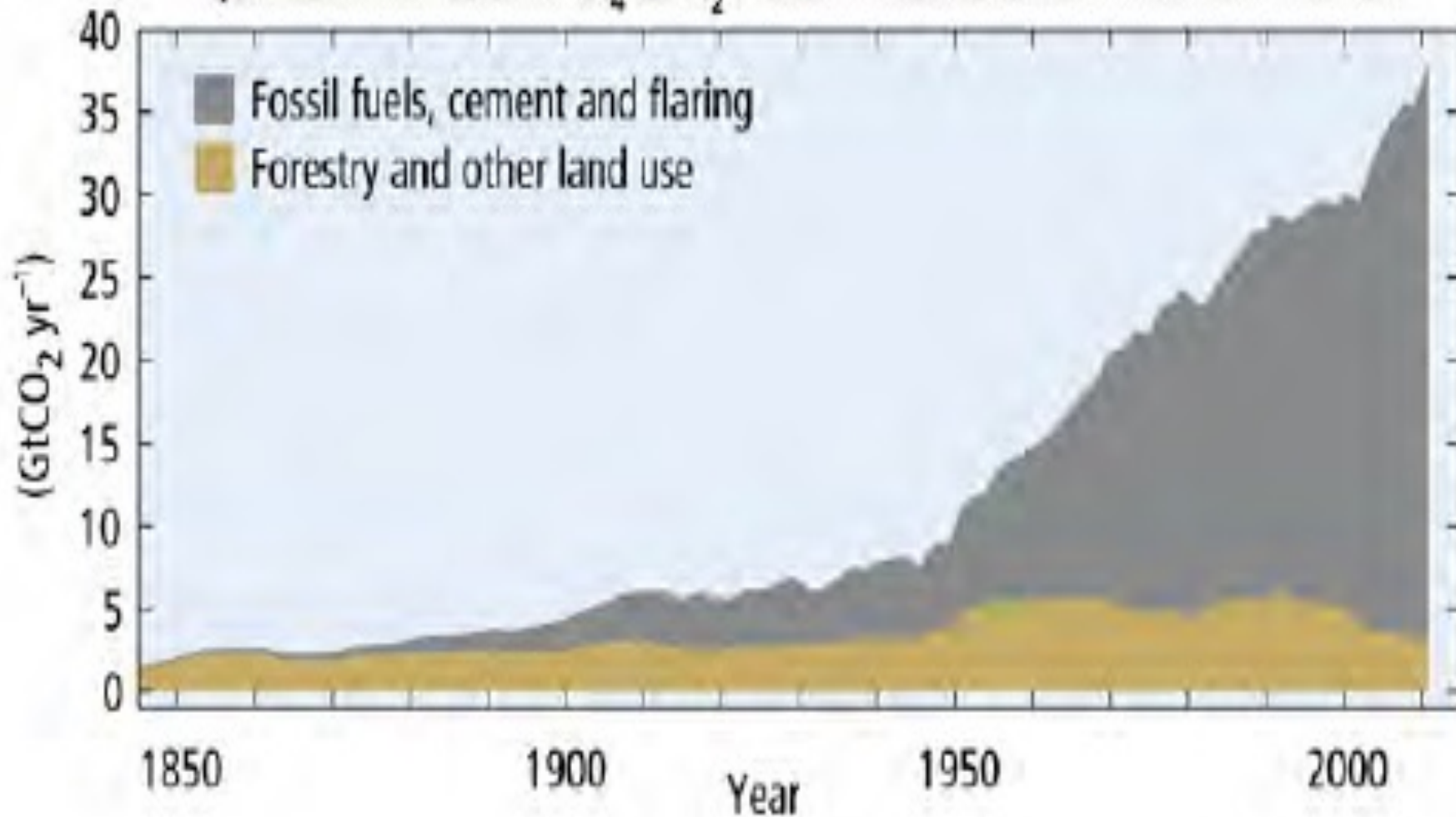
(source: IPCC 5th assessment Synthesis report – summary for policy makers. 1



(d)

Global anthropogenic CO₂ emissions

Quantitative information of CH₄ and N₂O emission time series from 1850 to 1970 is limited



What conclusions from COP 21?



- 1. ALL STATES:** *all continents, all countries, all regions and cities have to accelerate the deployment of renewables as fast as the leading regions now!*
- 2. ALL TECHNOLOGIES:** *All renewable technologies have to be developed that fit in a region: hydro, bioenergy, wind, solar, geothermal!*
- 3. ENERGY EFFICIENCY** *in all dimensions has to be improved considerably and the demand for energy in the developed countries reduced!*
- 4. ROLE OF BIOMASS:** in all countries and regions with a high share of RES biomass is the leading renewable energy source with a share of 25% (Brazil), 34% (Sweden), around 80% (Kenya, Mureck!)

What are the key instruments for the transition?



A carbon tax in all developed countries instead of emission trading and a stop to all subsidies of fossil fuels worldwide.

More attention to the support of sustainable agriculture and forestry and land use worldwide!

Awareness building, technology transfer, training, education, financing

Global Renewable Energy Action Plan (GREAP), supplemented by

- Continental Action Plans (CREAP) by
- State (National) Action Plans (SREAP) and by
- Regional Action Plans (RREAP)

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Thank you!

And join WBA, the global voice of the bioenergy industry!



Heinz Kopetz

World Bioenergy Association

Holländargatan 17, 111 60, Stockholm, Sweden

info@worldbioenergy.org

www.worldbioenergy.com



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