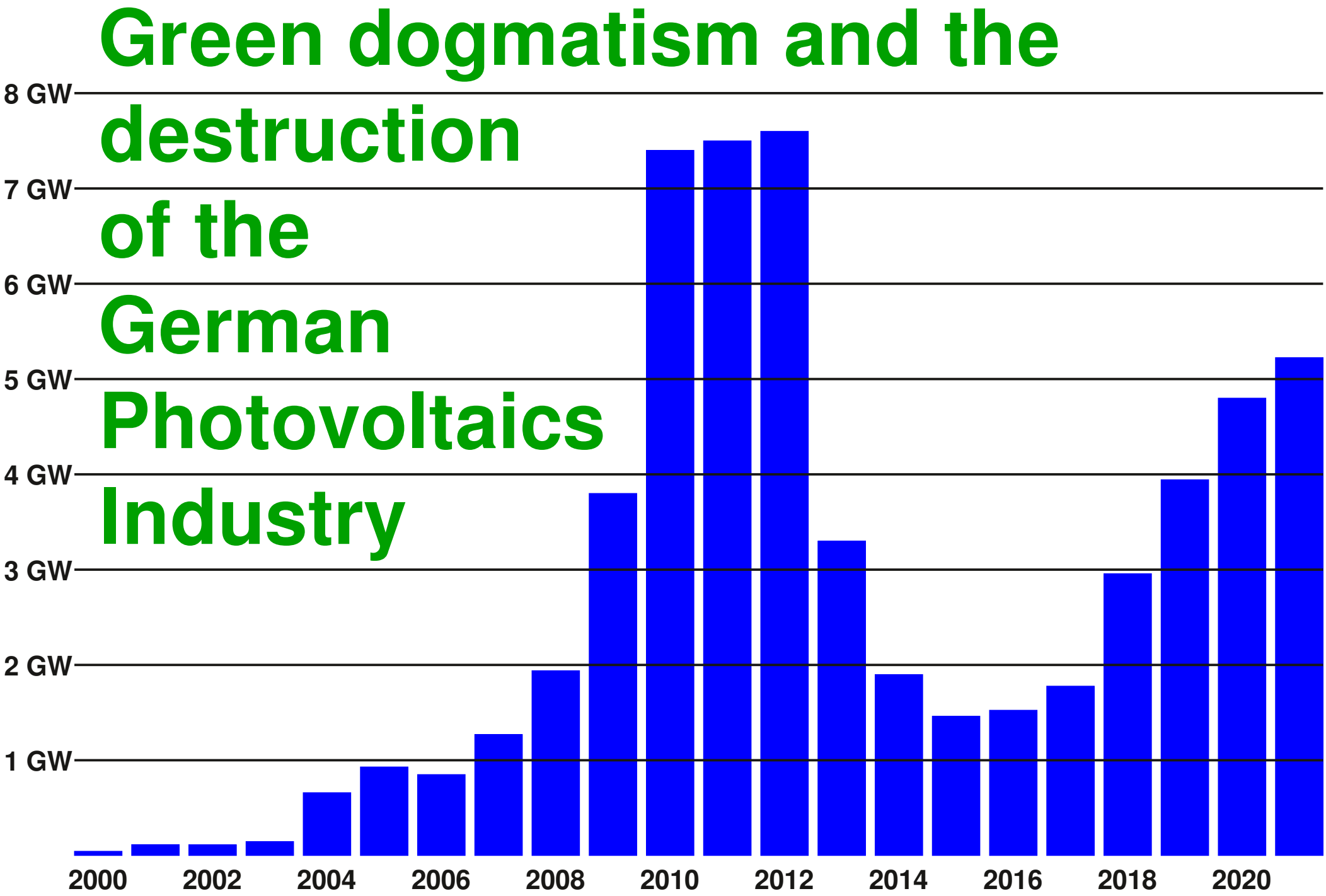
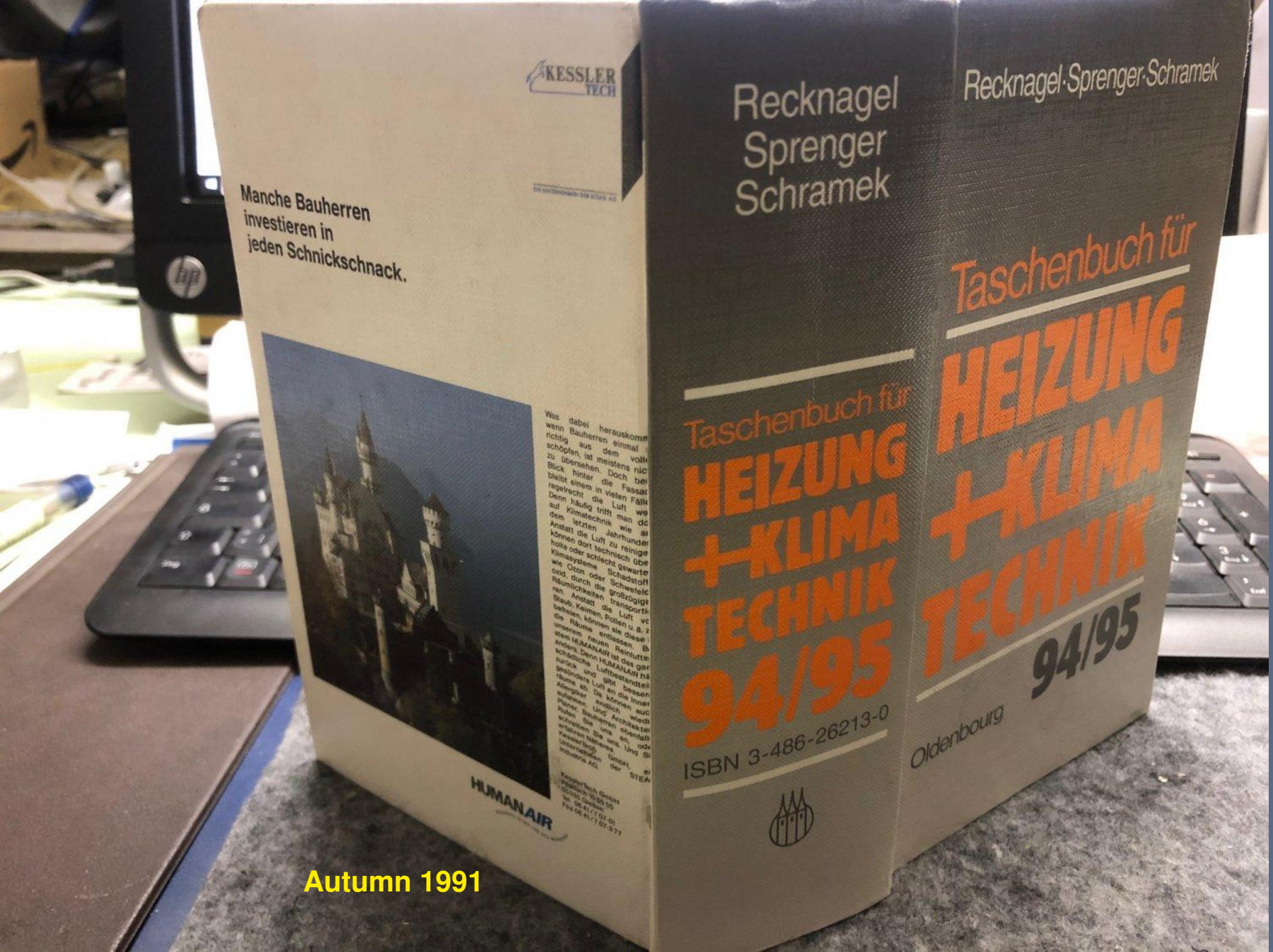

Green dogmatism and the destruction of the German Photovoltaics Industry
8 GW
7 GW
6 GW
5 GW
4 GW
3 GW
2 GW
1 GW
2000
2002
2004
2006
2008
2010
2012
2014
2016
2018
2020


KESSLER TECH
Manche Bauherren investieren in jeden Schnickschnack.
HUMANAIR
Recknagel Sprenger Schramek
Taschenbuch für HEIZUNG +KLIMA TECHNIK 94/95
ISBN 3-486-26213-0
Recknagel·Sprenger·Schramek
Taschenbuch für HEIZUNG +KLIMA TECHNIK 94/95
Oldenburg

Autumn 1991

Thermal energy from renewable energy sources

1 m^2 of rapeseed or sunflower

0.1 liter of vegetable oil per year

1 kWh thermal energy

2 km with a diesel car

40 million cars 15.000 km
are 300.000 km^2

1.000 TWh = 1.000.000 km^2

Electricity from renewable energy sources

1 m^2 photovoltaic (1991)

125 kWh electricity per year

800 km with an electric car

40 million cars 15.000 km
are 750 km^2

1.000 TWh = 8.000 km^2

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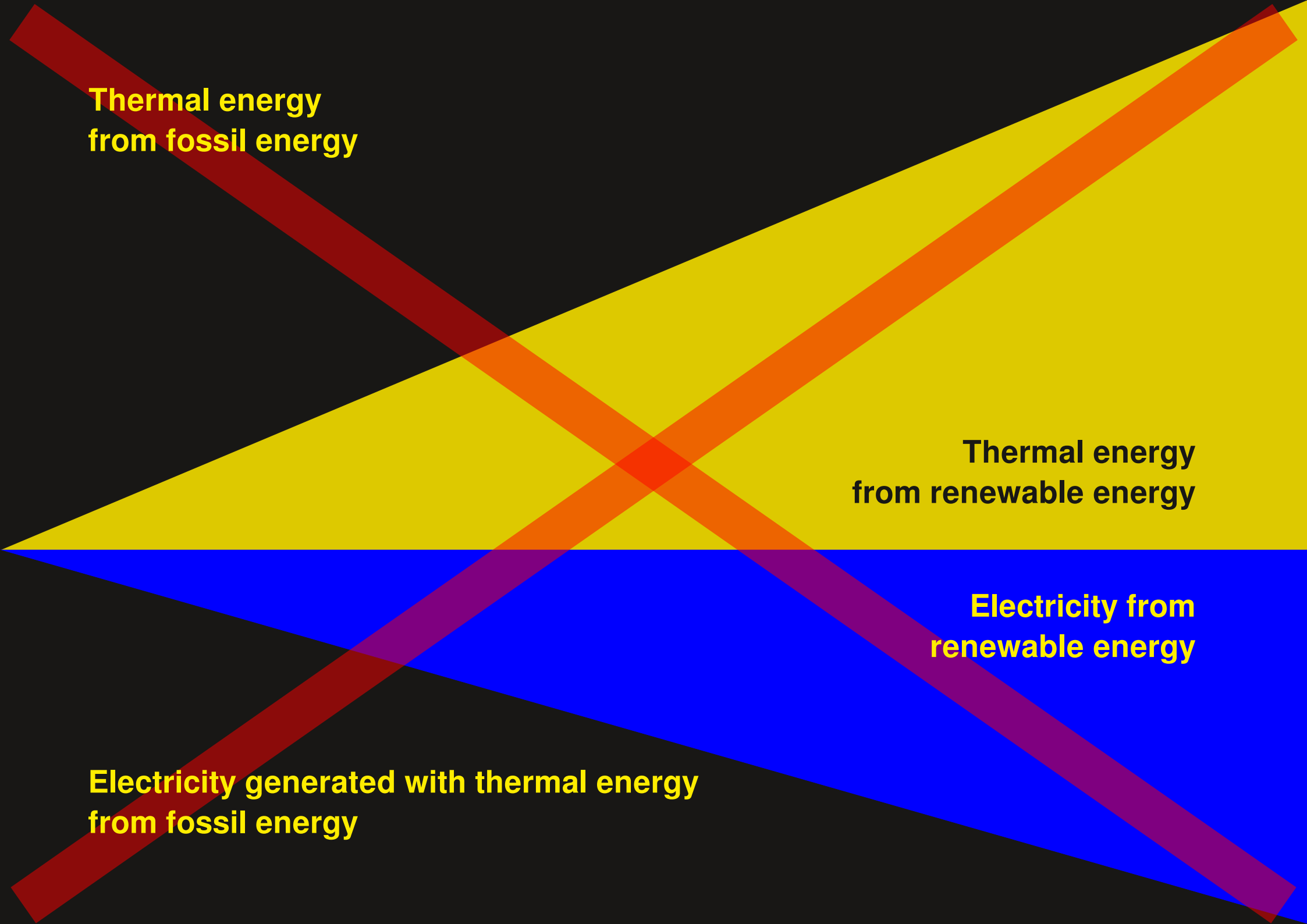
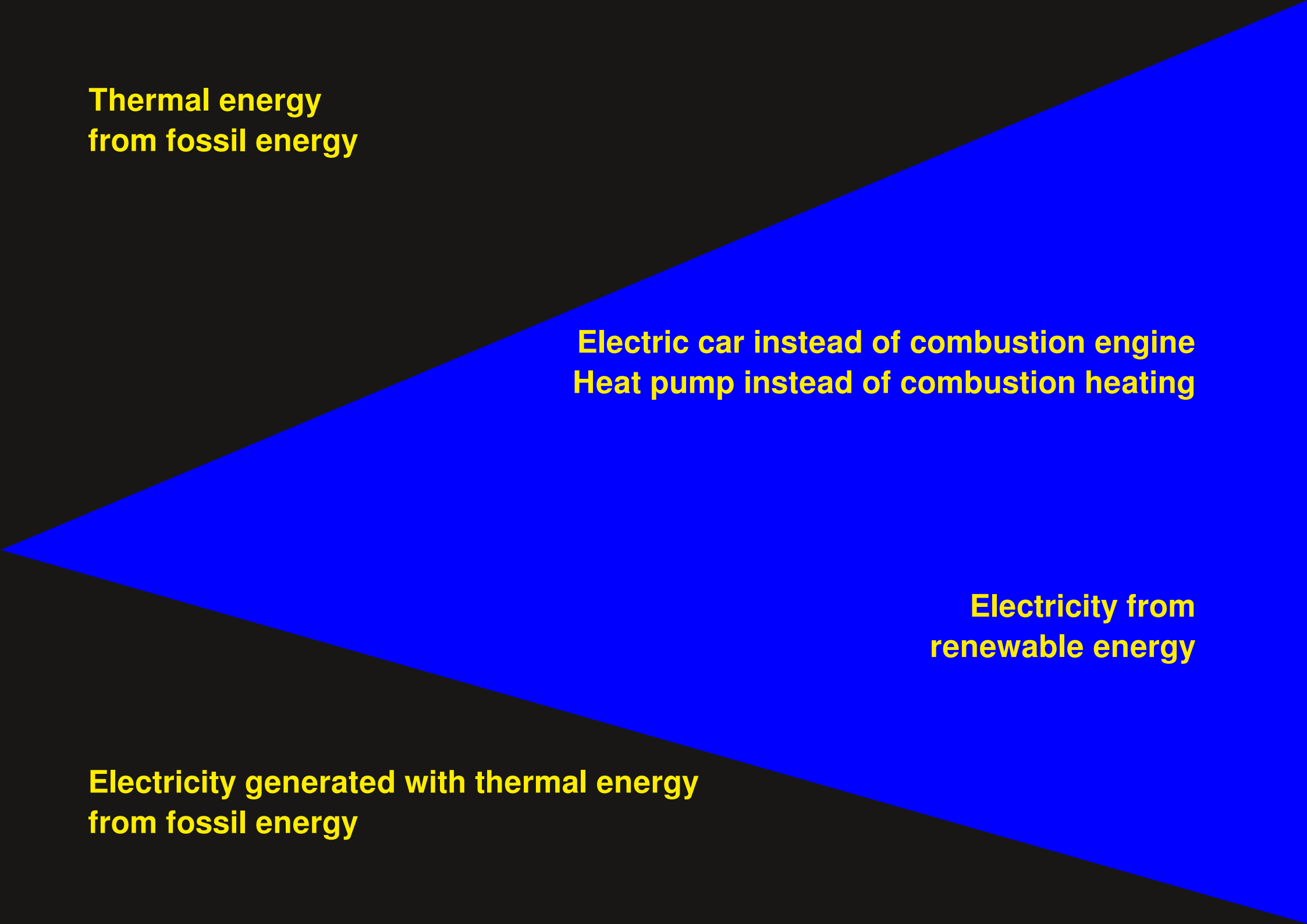

Thermal energy
from fossil energy
Thermal energy
from renewable energy
Electricity from
renewable energy
Electricity generated with thermal energy
from fossil energy


Thermal energy
from fossil energy
Electric car instead of combustion engine
Heat pump instead of combustion heating
Electricity from
renewable energy
Electricity generated with thermal energy
from fossil energy

Roland Mösl

Aufstieg zum Solarzeitalter

eine Veröffentlichung der

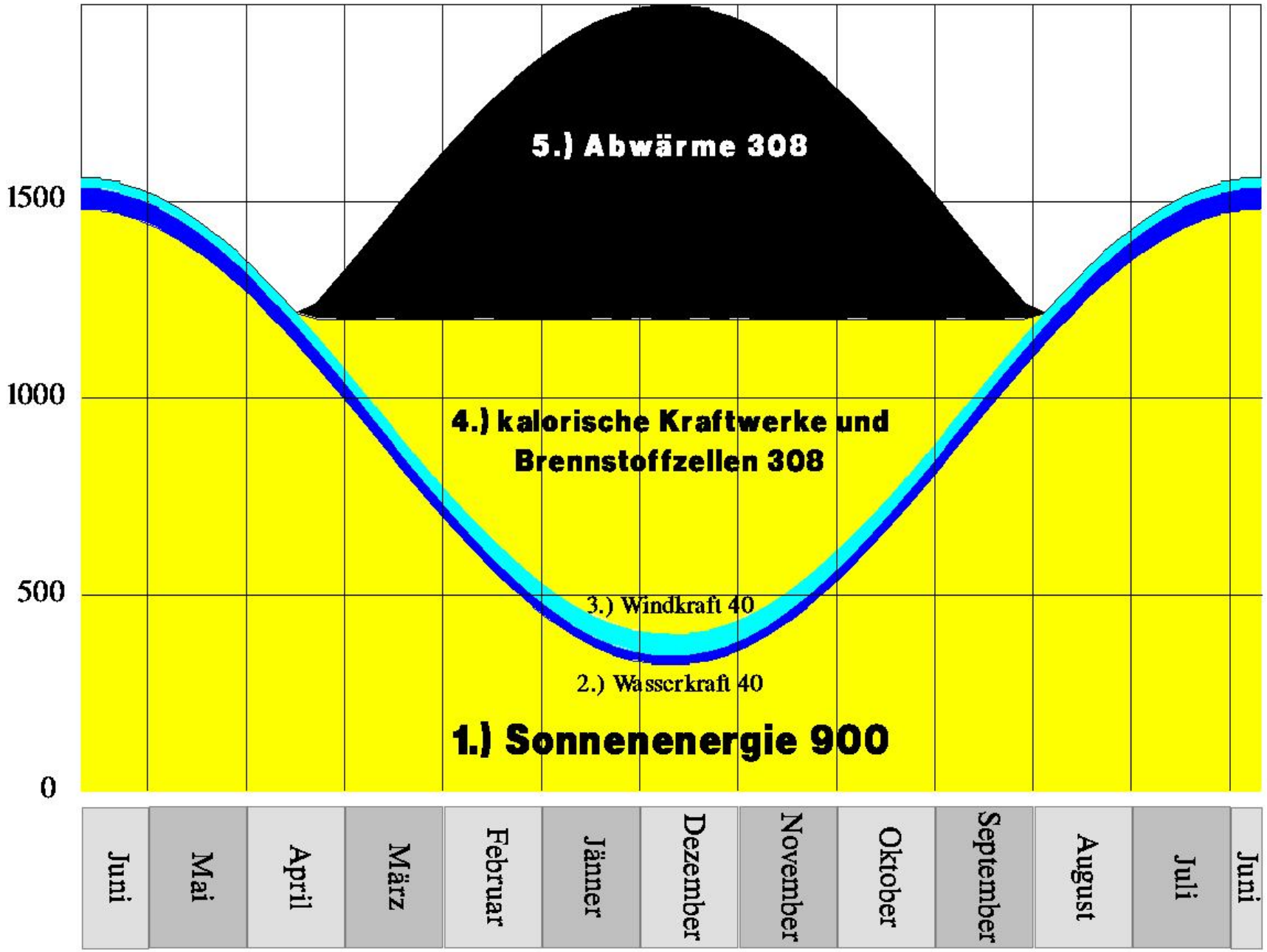
PLANETARY ENGINEERING GROUP

PEGE

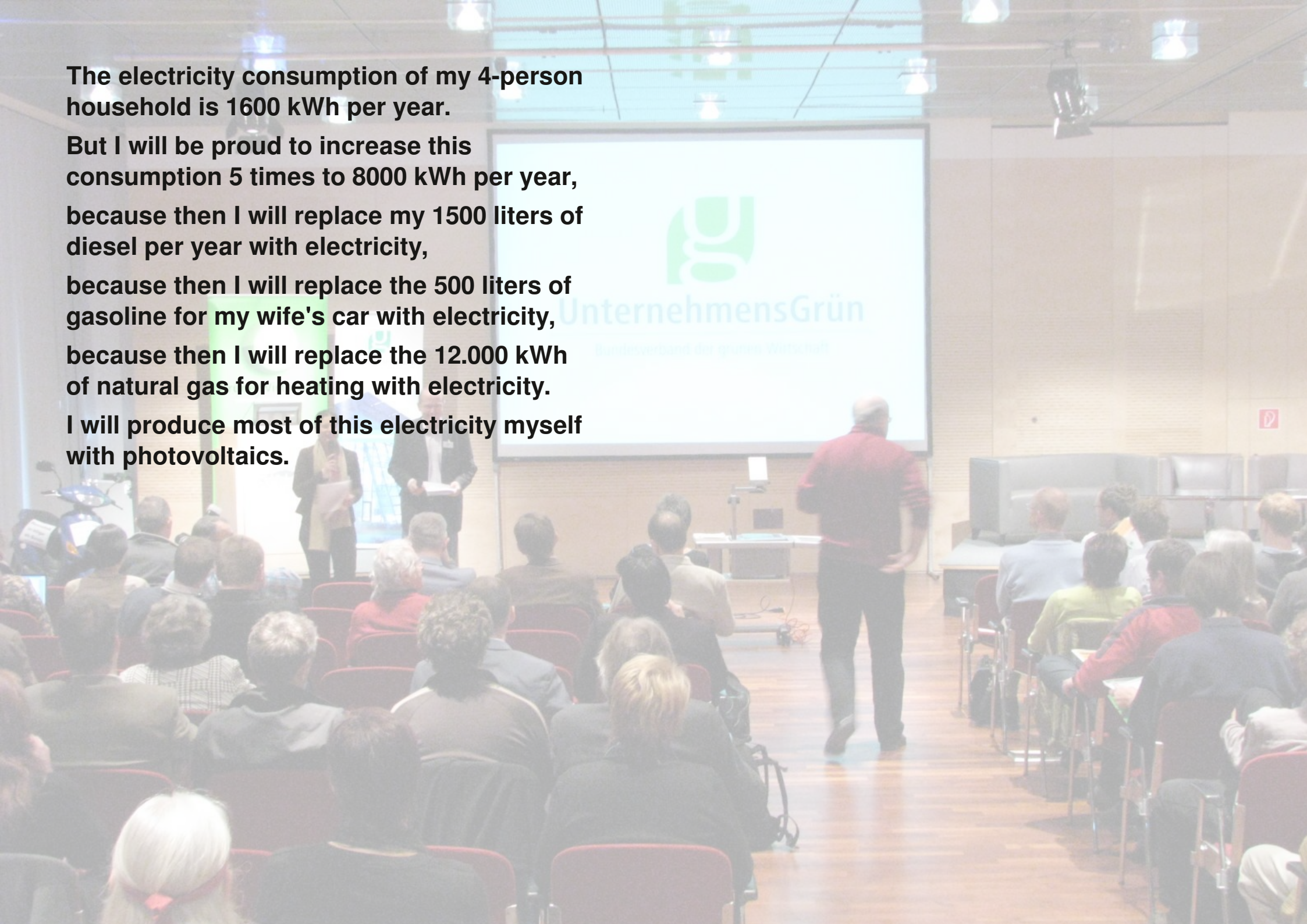
Started February 1992

Publication October 1993

“Advance to the Solar Age” 1992: Electricity demand in Germany will increase from 500 TWh in 1990 to 1200 TWh in 2040.



November 17, 2007 an event of the "green economy" Salzburg.



The electricity consumption of my 4-person household is 1600 kWh per year.

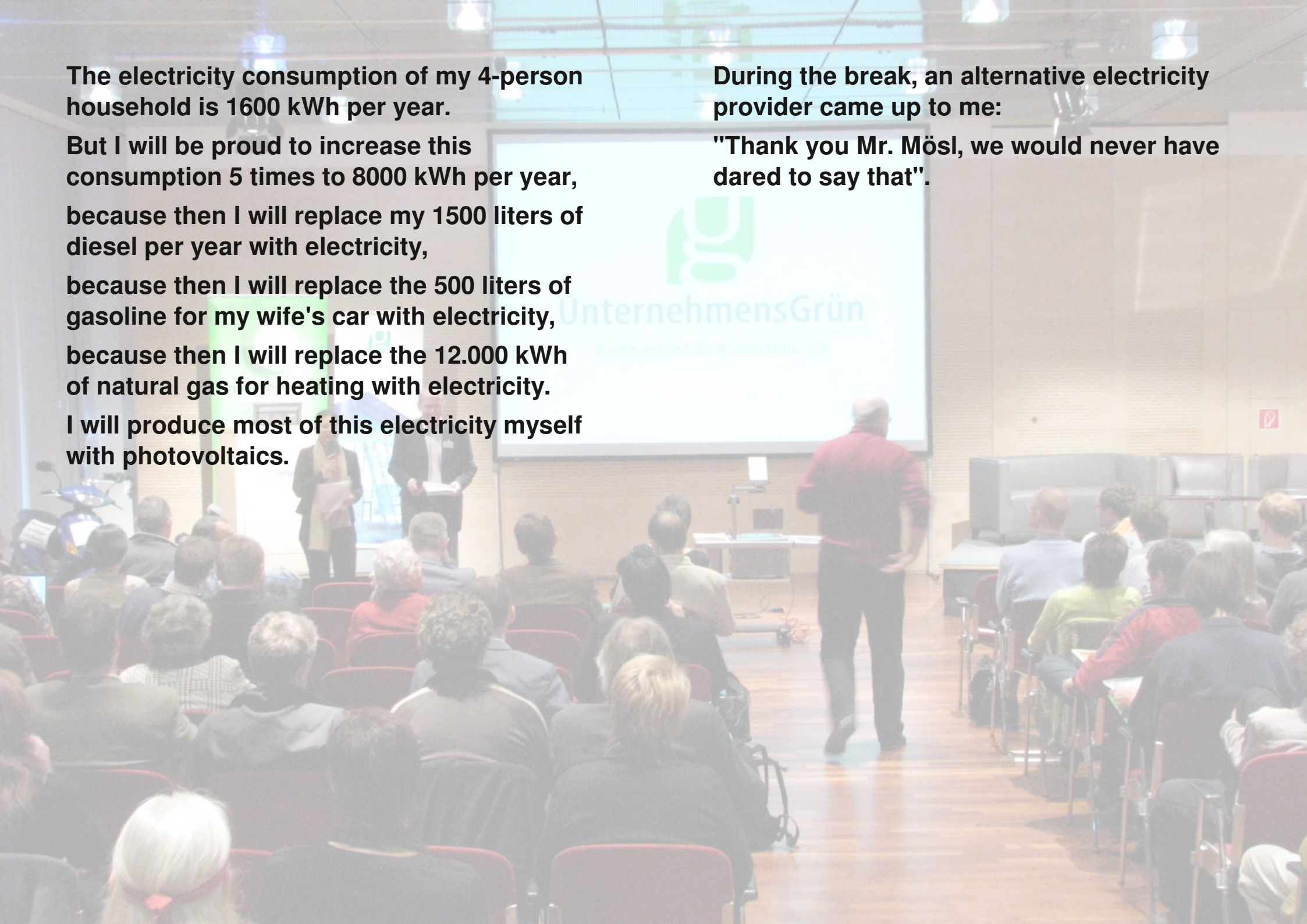
But I will be proud to increase this consumption 5 times to 8000 kWh per year,

because then I will replace my 1500 liters of diesel per year with electricity,

because then I will replace the 500 liters of gasoline for my wife's car with electricity,

because then I will replace the 12.000 kWh of natural gas for heating with electricity.

I will produce most of this electricity myself with photovoltaics.



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because then I will replace the 12.000 kWh of natural gas for heating with electricity.

I will produce most of this electricity myself with photovoltaics.

During the break, an alternative electricity provider came up to me:

"Thank you Mr. Mösl, we would never have dared to say that".

IEA-Chefökonom warnt vor weltweiter Energiekrise

2009-08-03 19:57:40 cri

Paris

Der Chefökonom der Internationalen Energieagentur (IEA), Fatih Birol, hat am Montag vor einer weltweiten Energiekrise gewarnt. Der Grund für die befürchtete Energieknappheit liege darin, dass der Höhepunkt der Ölproduktion bei den weltweit wichtigsten Ölfeldern vorbei sei, so Fatih Birol.

Zudem rechnet er damit, dass die Energiekrise in den kommenden fünf Jahren die Erholung der Weltwirtschaft beeinträchtigen werde.

Paris

The chief economist of the International Energy Agency (IEA), Fatih Birol, warned on Monday of a global energy crisis. The reason for the feared energy shortage is that the peak of oil production at the world's most important oil fields is over, Fatih Birol said.

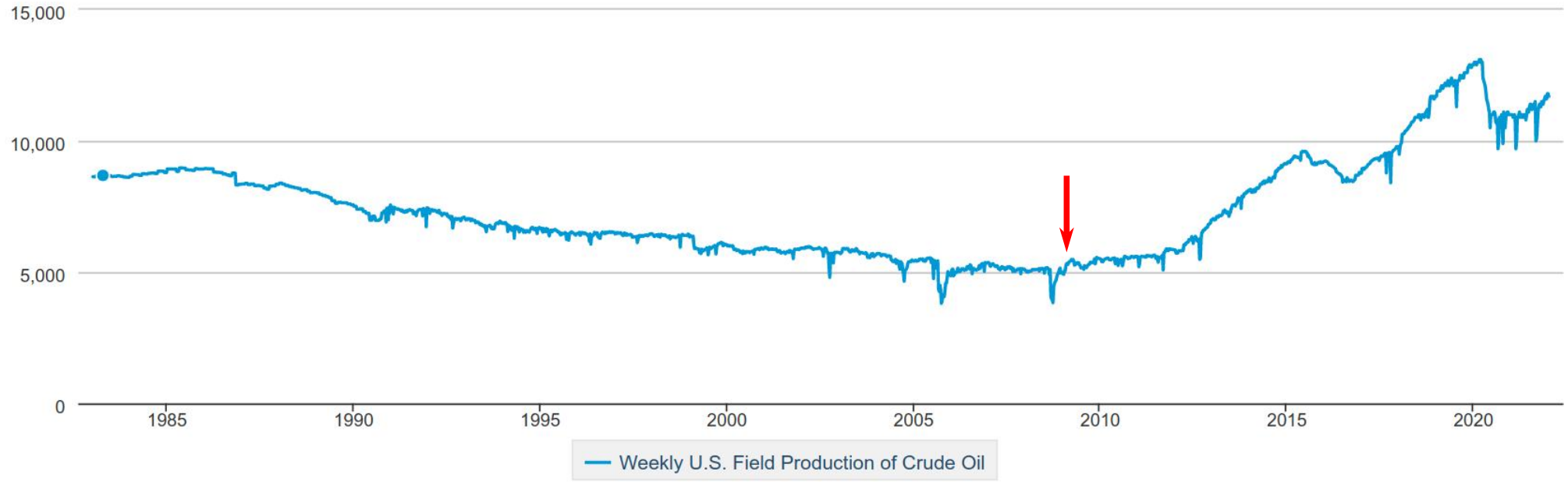
He also expects the energy crisis to affect the recovery of the global economy over the next five years.

View History: (•) Weekly ( ) 4 Wk Avg

Download Data (XLS File)

Weekly U.S. Field Production of Crude Oil

DOWNLOAD



eia Source: U.S. Energy Information Administration

Chart Tools

no analysis applied

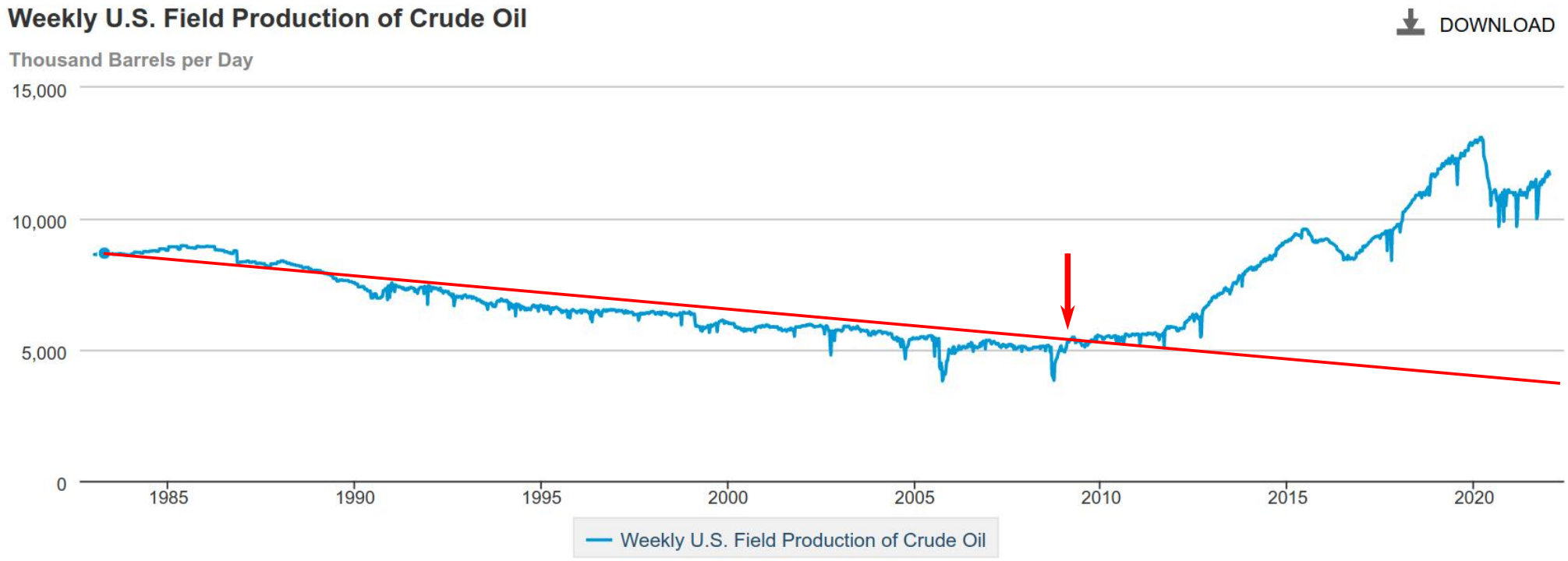
This series is available through the EIA open data API and can be downloaded to Excel or embedded as an interactive chart or map on your website.

Weekly U.S. Field Production of Crude Oil (Thousand Barrels per Day)

	Week 1		Week 2		Week 3		Week 4		Week 5	
Year-Month	End Date	Value	End Date	Value	End Date	Value	End Date	Value	End Date	Value
1983-Jan	01/07	8,634	01/14	8,634	01/21	8,634	01/28	8,634		

View History: Weekly 4 Wk Avg

Download Data (XLS File)

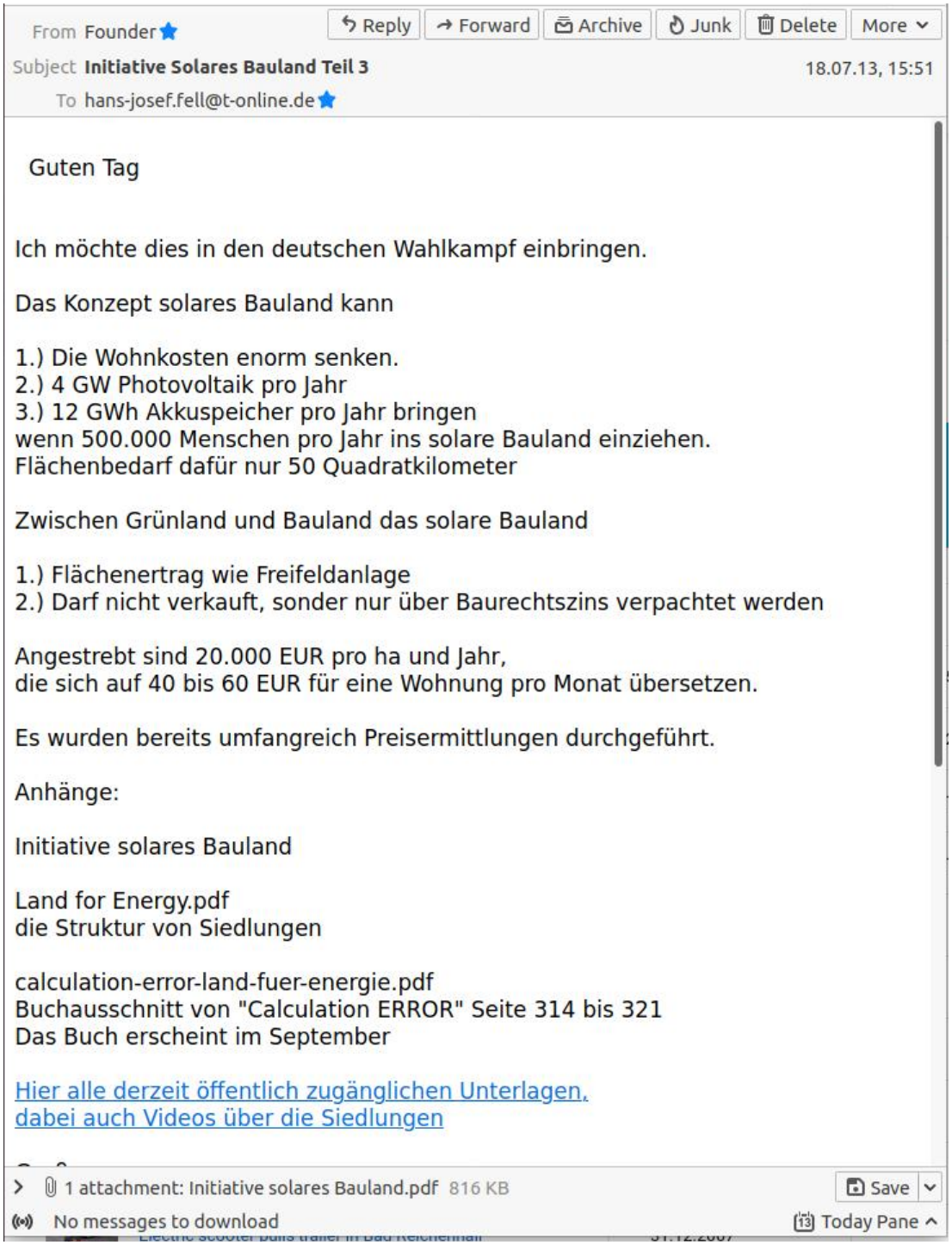


August 2009, the success of US fracking could not have been foreseen.

Without U.S. fracking, there would currently be around 8 million barrels per day less on the world market.

During the severe oil price crisis in 2008, which caused the world economic crisis in 2008, only 3.5 million barrels were missing on the world market.

Therefore, a very drastic danger situation and a very justified warning.



From Founder
Reply | Forward | Archive | Junk | Delete | More
Subject **Initiative Solares Bauland Teil 3**
18.07.13, 15:51
To hans-josef.fell@t-online.de

Guten Tag

Ich möchte dies in den deutschen Wahlkampf einbringen.

Das Konzept solares Bauland kann

1.) Die Wohnkosten enorm senken.
2.) 4 GW Photovoltaik pro Jahr
3.) 12 GWh Akkuspeicher pro Jahr bringen
wenn 500.000 Menschen pro Jahr ins solare Bauland einziehen.
Flächenbedarf dafür nur 50 Quadratkilometer

Zwischen Grünland und Bauland das solare Bauland

1.) Flächenertrag wie Freifeldanlage
2.) Darf nicht verkauft, sonder nur über Baurechtszins verpachtet werden

Angestrebt sind 20.000 EUR pro ha und Jahr,
die sich auf 40 bis 60 EUR für eine Wohnung pro Monat übersetzen.

Es wurden bereits umfangreich Preisermittlungen durchgeführt.

Anhänge:

Initiative solares Bauland

Land for Energy.pdf
die Struktur von Siedlungen

calculation-error-land-fuer-energie.pdf
Buchausschnitt von "Calculation ERROR" Seite 314 bis 321
Das Buch erscheint im September

Hier alle derzeit öffentlich zugänglichen Unterlagen,
dabei auch Videos über die Siedlungen

1 attachment: Initiative solares Bauland.pdf 816 KB
Save
No messages to download
Today Pane

Good day

I would like to bring this into the German election campaign.

The concept of solar building land can

1.) Reduce housing costs tremendously.

2.) 4 GW photovoltaic per year

3.) bring 12 GWh of battery storage per year

if 500,000 people per year move into the solar building land.

Area requirement for this only 50 square kilometers

Between grassland and building land the solar building land

1.) Area yield like open field system

2.) May not be sold, but only leased at a building lease rate

Aimed at 20.000 EUR per ha and year,

which translates to 40 to 60 EUR for an apartment per month.

Extensive calculations of prices have already been carried out.

Attachments:

Initiative solar building land

Land for Energy.pdf the structure of settlements

calculation-error-land-for-energy.pdf

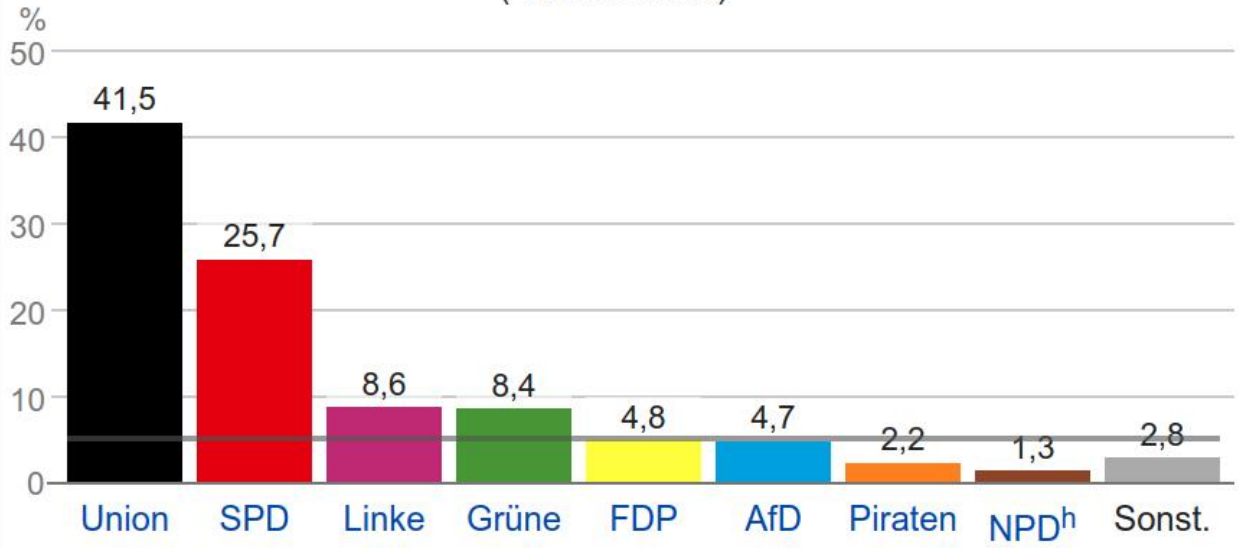
Book excerpt of "Calculation ERROR" page 314 to 321

The book will be published in September

Here are all the documents currently in the public domain, including videos about the settlements

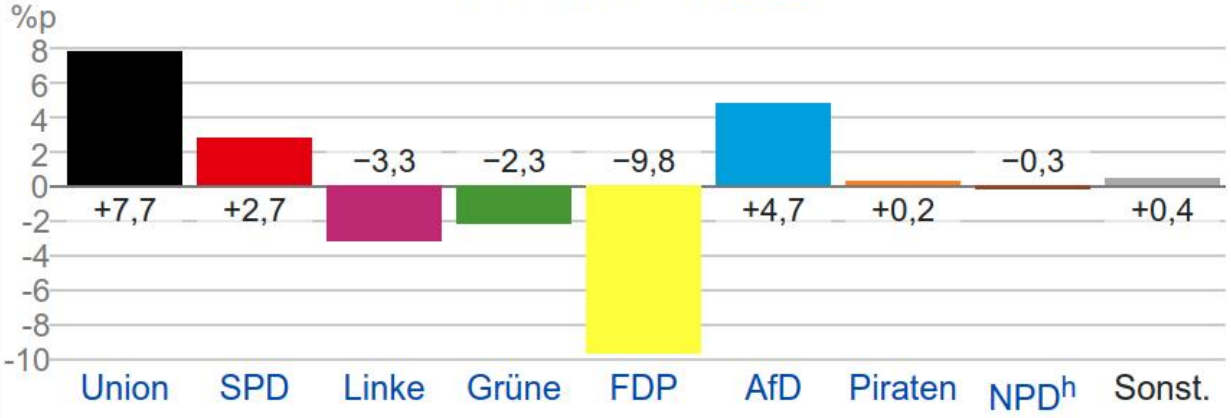
← 2009 **Wahl zum 18. Bundestag 2013** 2017 →

(Zweitstimmen)[1]



Gewinne und Verluste

im Vergleich zu 2009



Anmerkungen:

h 2009: NPD 1,5 % und DVU 0,1 %

100% renewable energy for Germany

Near the equator, it's easy. High demand for cooling allows using ice as a balance between sunny and cloudy weather periods, see Example Philippines page 372 to 373 From 30 degrees away from the equator, electric power to methane conversion becomes more and more necessary for the summer / winter balancing. Germany extends from the 47th up to 55th northern latitudes degree.

In 1992, I wrote, in the transition to renewable energy, the electricity demand will double, see page 82 to 88 Now where it becomes apparent that for the summer / winter balancing the required storage is only possible with electricity to methane and CCPP, this statement must be added: The electric power demand will double, the electric power production will increase 2.5 times. 300 TWh, half of the current electric power production, will be lost at the summer/winter balancing at power to methane and back by CCPP.

At a sunny summer day will 1200 GW photovoltaic produce up to 9 TWh electricity. Three times the daily requirement. Two-thirds of them go into the production of methane, 24 hours run 300 GW of power to methane equipment, producing 450 million cubic meters.

4000 GWh batteries directly at the photovoltaic systems to provide a uniform all day delivery of electricity to the electric power to methane plants. These are preferably directly at one of the approximately 200 combined cycle power plants with 150 GW. From there it goes to one of the underground gas storage facilities whose capacity should be expanded from 20 to 30 billion cubic meters. This storage capacity is sufficient to generate 180 TWh electric power.

On a day with only 1/3 of the electricity yield of a very sunny summer day, sun and the wind is still sufficient for immediate needs. This can be a cloudy summer day, a sunny winter day, but also a cloudy winter day with lots of wind.

Only on a very cloudy windless winter day electricity production runs almost exclusively on the combined cycle power plants, which costs a little more methane than is produced on a sunny summer day.

The cost of energy imports in 2012 were 93 billion EUR. Then there are the costs for the mining of lignite and other non-renewable energy in Germany. Since 1990, the cost of energy imports doubled every decade.

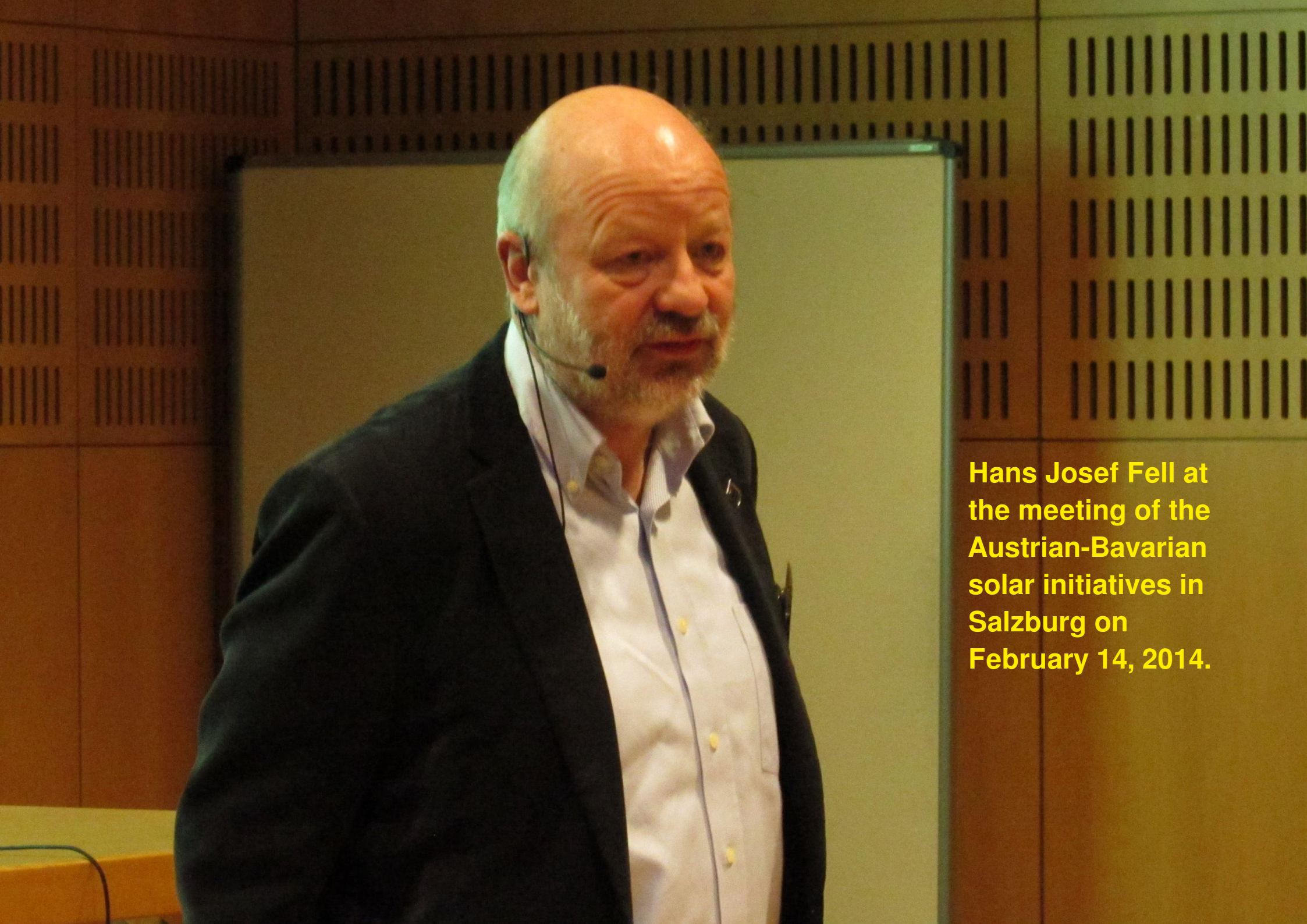
Never mind, Germany is almost export champion and can afford that? Where should Germany export if other countries already are in the death zone of the economy: trade deficit larger oil imports? USA, Greece, India and other countries.

Not only oil and gas will become more expensive, bu also the problems to increase export earnings to pay for these imports may be greater. Calculated correctly, this list of investments to 100% renewable energy a bargain in comparison to increase the export earnings to compensate for a further price doubling of oil and gas imports.

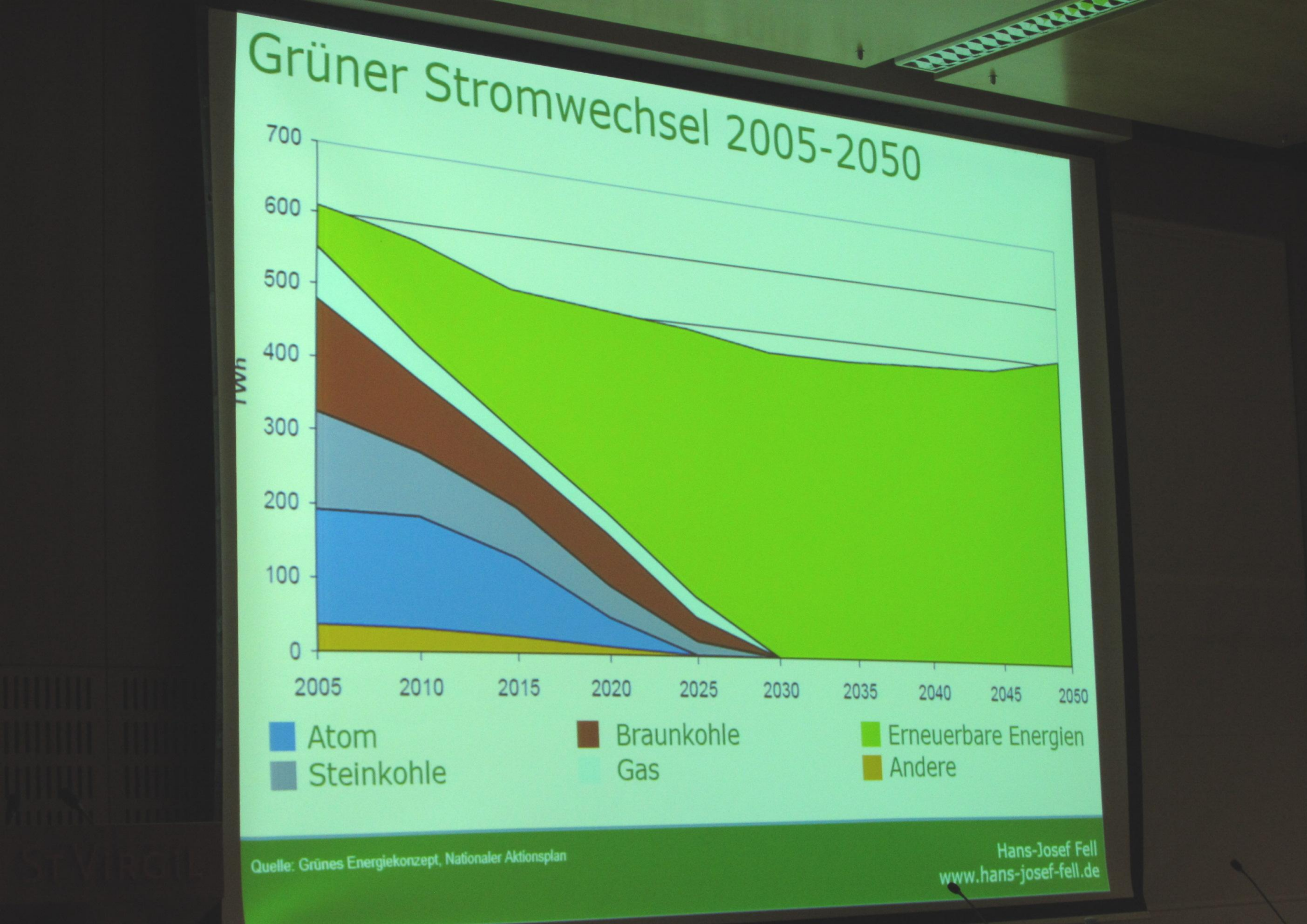
With all the action as PEGE Tax Transition Concept, land for energy, the 10 points program, the wall on which we race towards, can be mitigated to a gentle hill.

What to do with 1200 GW photovoltaic in Germany? There's even extreme solar architecture too little. Thereto Professor Adolf Goetzberger has the answer: Agro Photovoltaics - Agriculture under photovoltaic systems: light shading increased crop yields.

	Installation	Yield/year	Price
Photovoltaic	1200 GW	1100 TWh	1000 G-EUR
Wind energy	150 GW	300 TWh	200 G-EUR
Other renewables		100 TWh	100 G-EUR
Battery storage	4 TWh		800 G-EUR
Electricity to methane	300 GW		150 G-EUR
Gas storage	300 TWh		25 G-EUR
CCPP power plants	150 GW		100 G-EUR



Hans Josef Fell at the meeting of the Austrian-Bavarian solar initiatives in Salzburg on February 14, 2014.


Grüner Stromwechsel 2005-2050
700
600
500
400
300
200
100
0
TWh
2005
2010
2015
2020
2025
2030
2035
2040
2045
2050
Atom
Steinkohle
Braunkohle
Gas
Erneuerbare Energien
Andere
Quelle: Grünes Energiekonzept, Nationaler Aktionsplan
Hans-Josef Fell
www.hans-josef-fell.de

January 2015, Prof. Volker Quaschning posts on Facebook:

"I call for 200 GW of photovoltaic expansion in Germany."

This is significantly more than the ridiculous 70 GW expansion target of the BSW - Bundesverband Solarwirtschaft, but still far too little.

January 22, 2015 almost 20 minute phone call:

“Mr. Mösl, you're right, but I don't dare go that far out on a limb.”

20 January 2016 an event of the "green economy" Salzburg.

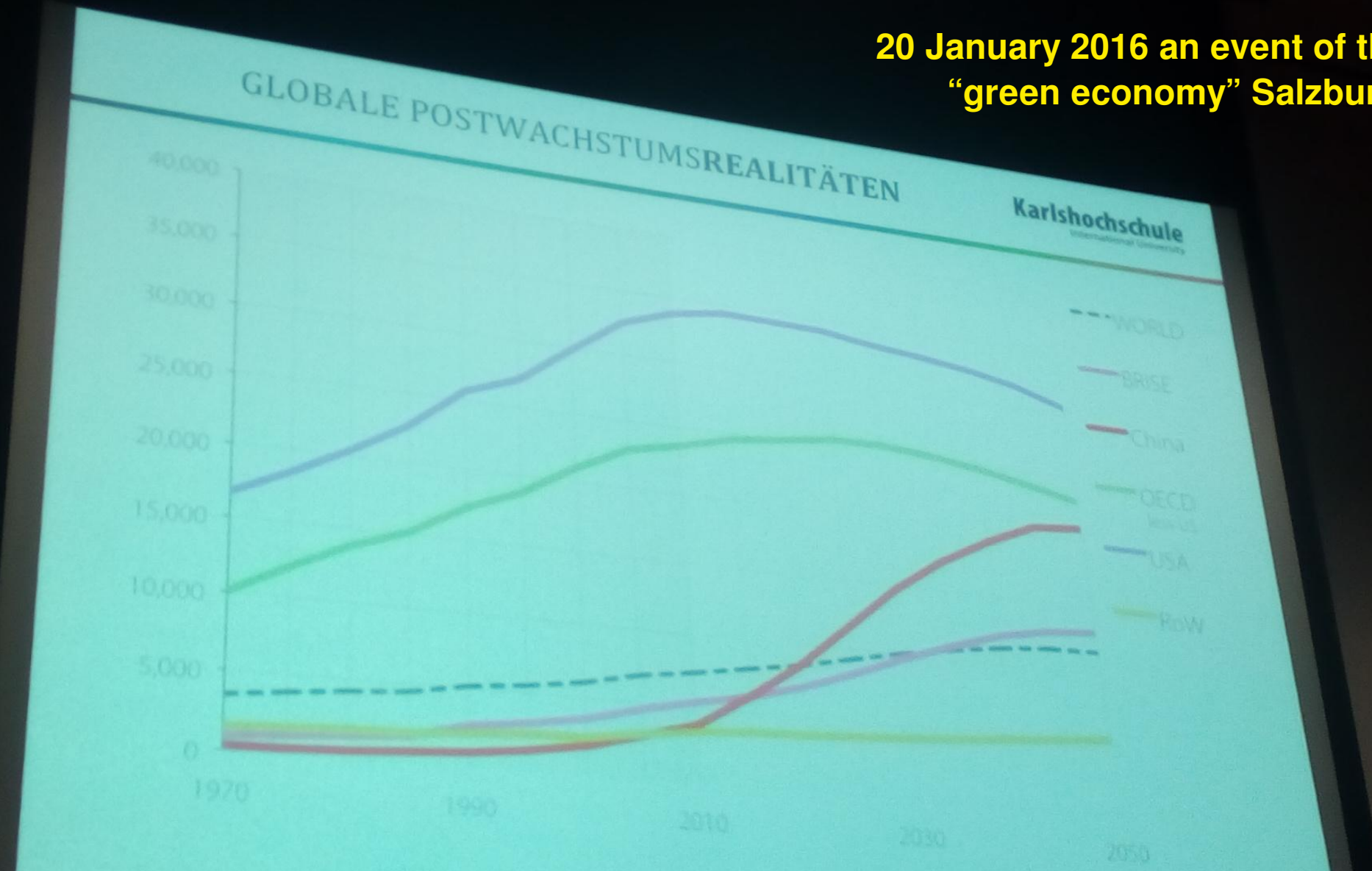
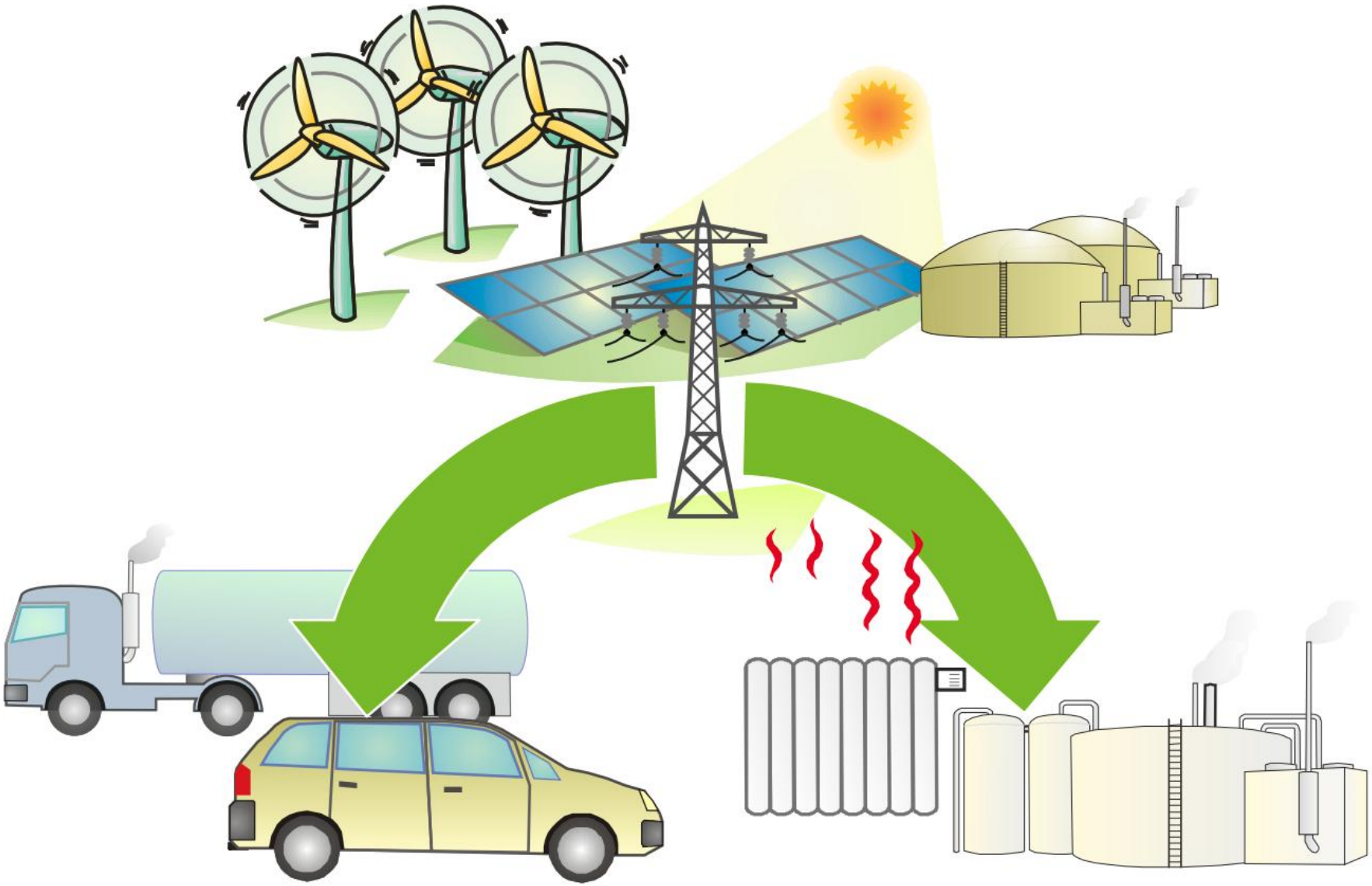


Figure 13: Consumption per person, 1970–2050 (in 2005 US$ purchasing power parity per person-year).

Randers, J. (2012): 2052 – A global forecast for the next forty years. S. 13

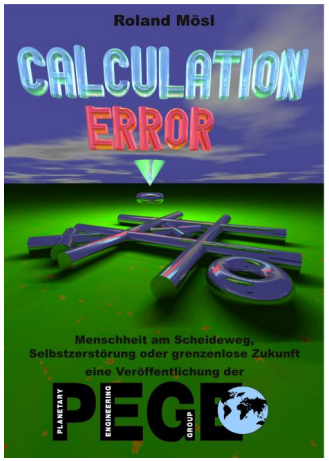


June 20, 2016 Professor Volker Quaschning publishes the study “Sector coupling through the energy transition”.

1200 TWh/a Electricity demand

900 GW photovoltaics turned after the sun

20 GW wind



1500 TWh/a Electricity demand

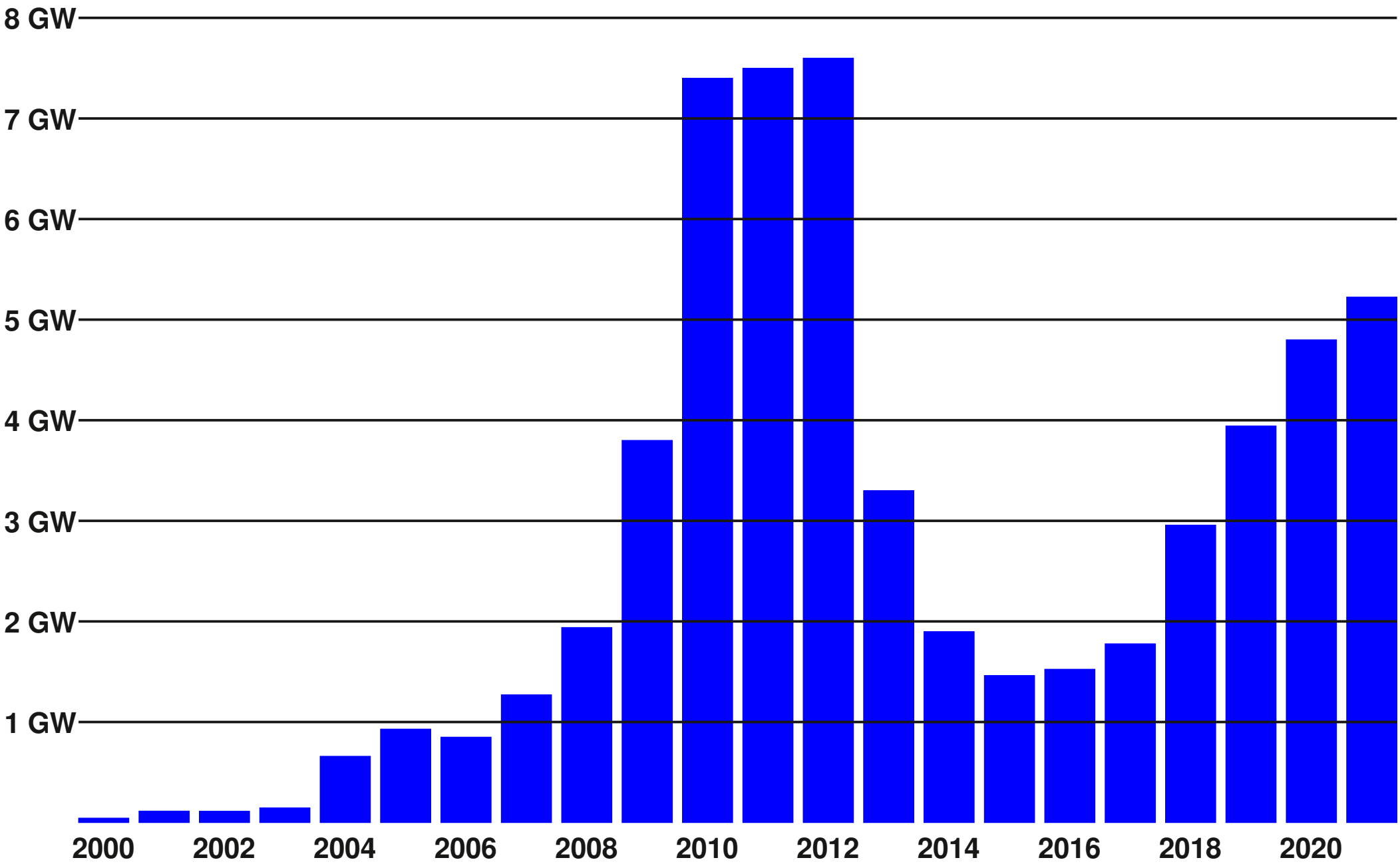
1200 GW photovoltaics

150 GW wind

1320 TWh/a Electricity demand

415 GW photovoltaics

275 GW wind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4 GW
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2 GW
1 GW
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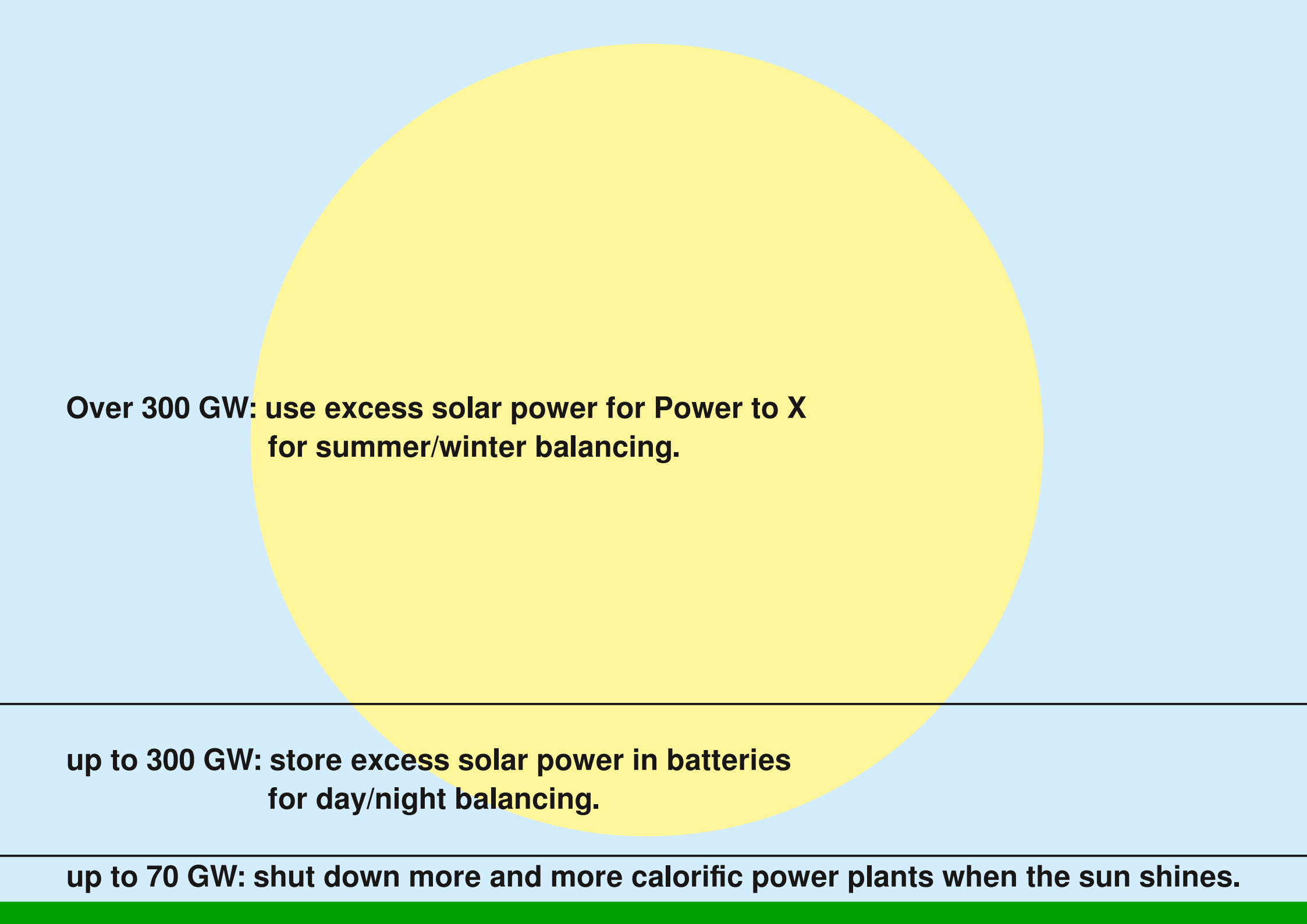
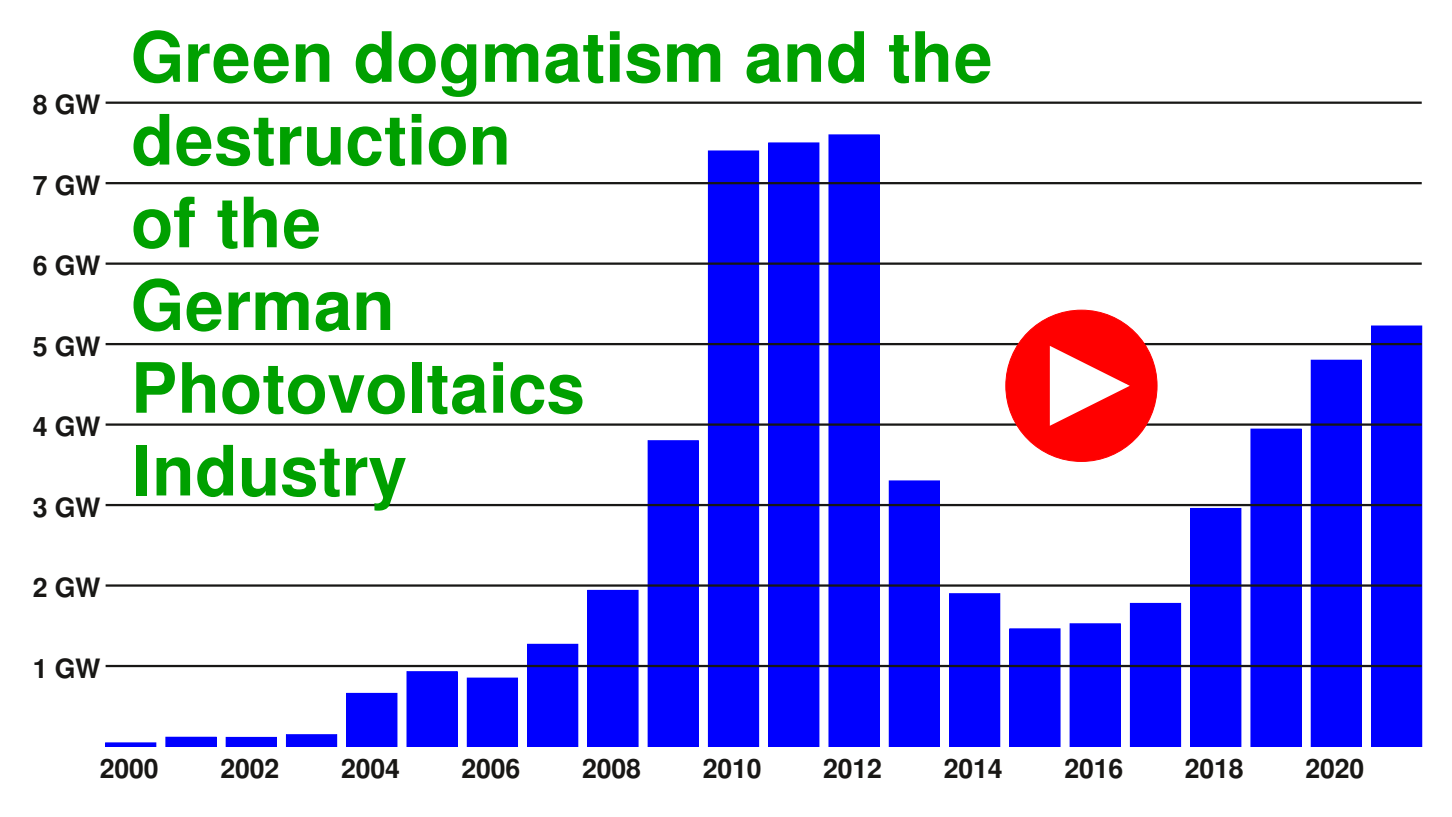

Over 300 GW: use excess solar power for Power to X
for summer/winter balancing.
up to 300 GW: store excess solar power in batteries
for day/night balancing.
up to 70 GW: shut down more and more calorific power plants when the sun shines.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