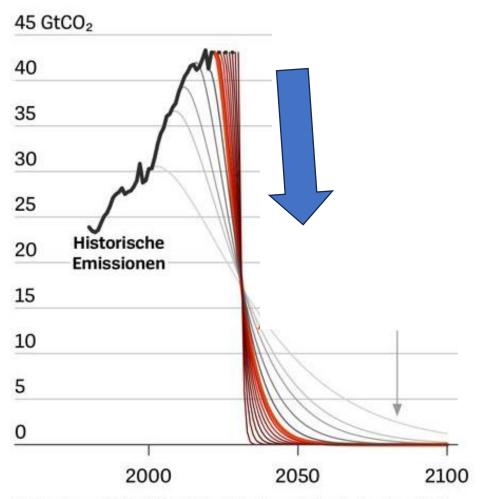


"1.5 degrees still within reach"

to avoid catastrophic climate tipping points tipping



5 - Quellen: IPCC 2021, Global Carbon Project, Carbon Brief

If we cut CO₂ emissions in half

by 2030 = **22 Gigatons**



Dr Sultan Al Jaber, COP president

Note: carbon

emissions still rising



Cars? Home insulation? Coal plants?

- Can we switch 1 billion cars to EVs by 2030?
- Can we insulate **1 billion homes** by 2030?
- Can we switch "only" 2,500 coal plants 1:1 to wind-solar-battery systems by 2030?



Therefore, we conducted our **climate solutions study** "Switch Coal"

Not possible. Not possible.

Yes. We can.



Switch Coal

10 Gigatons less by 2030



Zero Emission Think Tank, DIW, Oxford University & Goodfuture Berlin conducted this Climate **Solutions Study** www.ZeroEmissionThinkTank.com

Foto: NASA CO2 emissions

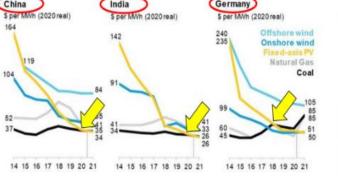
RESULTS

RENEWABLES CHEAPER

- Bloomberg has shown new wind and solar energy cheaper than existing coal plants



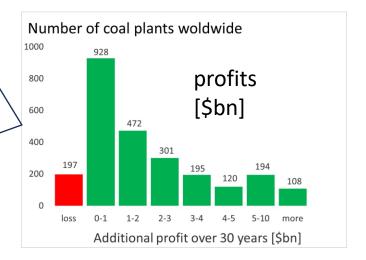
Figure 1: Levelized cost of electricity for new solar and wind versus running costs of existing coal- and



Source: BloombergNEF. Note: LCOE exclude subsidies or tax-credits and reflect utility-scale power plants.

SWITCH COAL = BUSINESS CASE

- 90% of the worlds` 2,500 coal plants can be profitably switched to cheaper wind-solar-battery systems
- \$5 trillion \$ profits
- 10 Gigatons less by 2030





www.ZeroEmissionThinkTank.com

Dubai COP28

Politics too slow

- Switch Coal study published on opening day
- presented to COP president Dr Sultan Al Jaber
- talked to 60 country delegations

STORYLINE

- first time COP delegates can **bring home billion \$ profits**, with politics to decide, **lower electricity prices** or boost returns?!
- switch coal is a business case now.

BUT

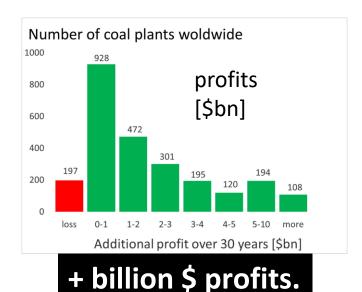
- no delegation willing to pledge add`l coal plant retirements,
 despite billion dollar profits, country by country!
- politics too slow

RISK

- global **climate tipping points** tipping beyond 1.5 degrees, resulting in uncontrollable climate change

"On Highway to Climate Hell" (UN secretary general Antonio Guterres)

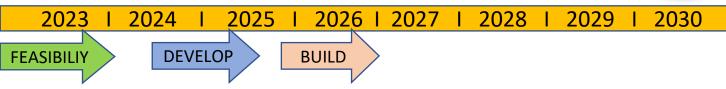




Next? Private sector has to do it

1) Project Developers to Plan

- 1:1 Wind-Solar-Battery Systems @ coal plant sites
- use existing grid connection (faster)

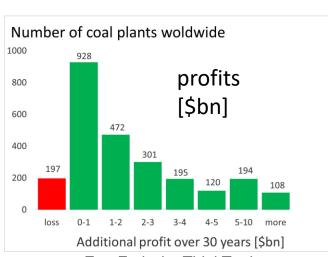


2) Enable Financing

- Government / World Bank / IMF guarantees

3) Joint Venture

- Solar assembly lines @ coal plant sites (1:1 jobs right there)
- implementation prior to 2030
- = distribute billion dollar profits



SwitchCoal

profitably to

renewable

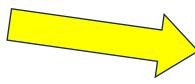
energy

www.ZeroEmissionThinkTank.com

Politics?

Enable Financing

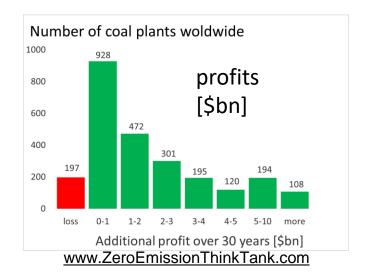
Government guarantees Bridgetown proposal



- 1) Project Developers to Plan
 - 1:1 Wind-Solar-Battery System @ coal plant site
 - use existing grid connection
- 2) Enable Financing
 - Government / World Bank / IMF guarantees
- 3) Joint Venture
 - Solar assembly lines @ coal plant sites (1:1 jobs right there)
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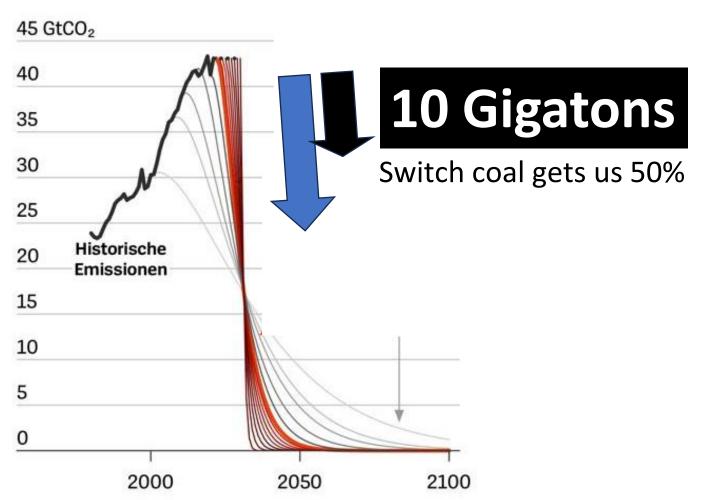






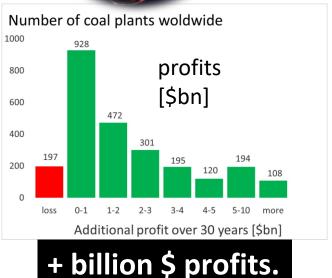
"1.5 degrees still within reach?"

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5 • Quellen: IPCC 2021, Global Carbon Project, Carbon Brief



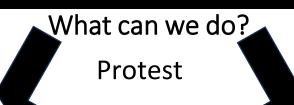


Next?

Climate movement

"1.5 degrees still within reach?"

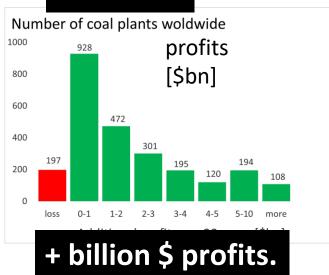
to avoid catastrophic climate tipping points tipping



Wind&Solar Developers Headquarters

- Pick a Country
- Switch coal

Just do it.



Analena Baerbock
Gezielte KlimaAußenpolitik.

- 1) Invite Developers to every trip
- Sign Switch Coal Joint Ventures
- 3) Enable financing



Start your *own*Climate *solutions* movement

Climate solutions movement.

Just DIM. (do it myself)

Everybody profits.

- 1) Convince your neighbor
- Solutions Plakate "I helped my neighbor"
 - 2 tons CO2 gone
 - \$2,000 saved!
 - payback: 2 years



Next?

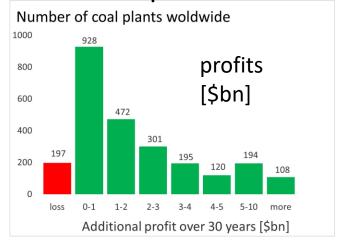
Analena Baerbock

What can we do?

pledge & profit

from coal plant retirements.

Talk



- talk to all Countriesto switch coal @COP29
- + billion \$ profits.

"1.5 degrees still within reach?"

to avoid catastrophic climate tipping points tipping



Gezielte Klima-Außenpolitik.

- 1) Invite Developers to **every trip**
- 2) Sign Switch CoalJoint Ventures
- 3) Enable financing
 - KfW, Hermes
 - IMF guarantees (Bridgetown)

SOLVING THE CRISIS

The key thing to **solve** the **climate crisis** is to understand that it is actually more profitable to switch to **cheap** renewable energy. To illustrate this, we have created a **climate medal**. It says "**act on climate**" the official UN motto. And we know this for decades. However, the key thing is what's on the **other side** of the medal, what does it **cost** to solve the climate crisis?!

Well, **Bloomberg** and others have published data since 2017 showing that renewable energy is actually **cheaper** now, than even old, depreciated coal plants, so this is the wrong question. It is not about costs anymore, that nobody wants to pay, no, it's all about **investing** into cheap renewable energy now and **profiting** from it. Whether it is the energy from your solar roof, or, your EV driving with cheap renewable energy. **Solving** the climate crisis is a **buisness case** now.

That's why the other side of the climate medal says "wind and solar at half the price – that is so nice!"

And, if we understand this, we have basically solved the climate crisis! In our head at least. And, everybody who understands this, has won the climate medal.

If everybody knew it, everybody would do it.

COP28: KEEP 1.5 DEGREES WITHIN REACH

However, because of decades of miscommunications and doubts, time is not on our side anymore. Science tells us that beyond 1.5 degrees, global climate tipping points are at risk of tipping, leading to irreversible catastrophic climate change. UN Secretary General Antonio Guterres puts it in simple words, we are "on the Highway to climate hell". So, it is imperative to stabilize global heating at 1.5 degrees.

At the recent world climate conference COP28 in Dubai, the president Dr. Sultan Al Jaber called for reducing carbon emissions by 50% or 22 Gigatons by 2030 to "keep 1.5 degrees within reach".

On the other hand, emissions are still rising.

How can we cut emissions in half by 2030? Is this an impossible task?

We looked through all the options, and, came up with a relatively simple way to cut 10 Gigatons by 2030, leading to our climate solutions study "Switch Coal to cheap renewable energy".

SWITCH COAL

Our solutions study show that **90**% of the world 2,500 **coal plants** can be profitably switched to **Wind-Solar-Battery** systems with billion dollar **profits** ontop, country – by – country billion dollar profits!

That's 10 Gigatons of the 22 we need.

PRIVATE SECTOR

And, because politics is too slow, we think that the private sector should step up and develop these wind-solar-battery systems, helping to shut down one coal plant after the other.

So, where do we go from here? What's the most critical things that need to happen? 3 things

- 1) Switch Coal and COP29: let all countries know ahead of COP29
 - TCFP (targetted climate foreign policy / geziehlte Klima-Auenpolit)
 - Climate Movement to push for TCFP
 - Climate Movement to push "renewable energy developers" to switch coal
- 2) Triple renewable energy
- 3) Power market disign: Renewable Energy pricing signal

goal is for countries to "pledge & profit!

www.ZeroEmissionThinkTank.com