



POTSDAM INSTITUTE FOR
CLIMATE IMPACT RESEARCH

ESCAPE FROM THE CLIMATE PRISON!

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LET'S RECALL...

CO₂



POPULAR METAPHER FOR CONFLICTS: THE „PRISONERS' DILEMMA“



SEPARATE GRILLING, NO CONTACT!



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both confess → no leniency → shit happens!

PRISONERS' DILEMMA

*„cooperative“
behaviour*

remain silent

*„non-
cooperative“
behaviour*

confess

*strategic
equilibrium*

CLIMATE PROBLEM = PRISONERS' DILEMMA ??

emit less GHG

*„cooperative“
behaviour*

remain silent

business as usual

*„non-
cooperative“
behaviour*

confess

CLIMATE PROBLEM \neq PRISONERS' DILEMMA !!



*binding agreements
are possible!*

emit less GHG

*„cooperative“
behaviour*

remain silent

business as usual

*„non-
cooperative“
behaviour*

confess



ESCAPE! BUT WHO WILL GO FIRST?



The threatening climate change



The Prisoners (Selection)



ASSUME TWO SUFFICE TO OVERPOWER HIM...



*A possible (but inefficient)
coalition*

*Let the
others solve
the problem
for me...*



THEN IT'S UNCLEAR WHO WILL DO IT...

Let the others solve the problem for me...



Another, more efficient, possible coalition



EACH WILL TRY TO MAKE THE OTHERS GO FIRST...

Let's roll!



*When two people agree,
a third rejoices*



THIS IS CALLED „FREE RIDING“!



*When two people agree,
a third rejoices*



BUT THE BEST COALITION WOULD BE ALL THREE!



COALITION FORMATION

= A DYNAMIC PROCESS WITH UNCERTAINTIES

