

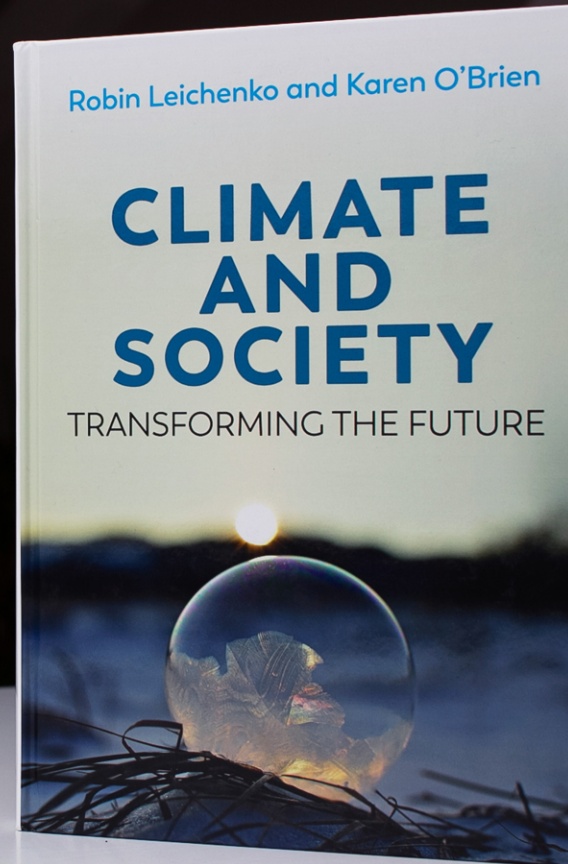


Investing in climate action: *The power of perspectives*

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Driva - Climate investment 2019
May 28, 2019

What is the challenge?

- To reduce greenhouse gas emissions?
- To meet the Sustainable Development Goals?
- To stay within «planetary boundaries»
- To shift our perspective?



The Future is an Investment

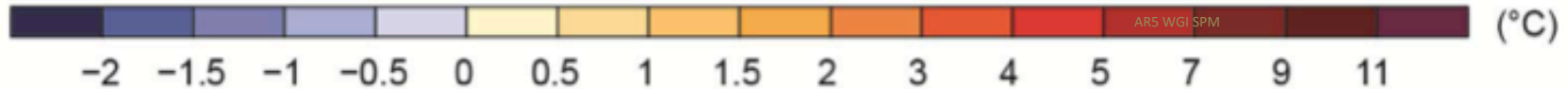
With substantial
mitigation

32

Without additional
mitigation

39

Without additional mitigation efforts beyond those in place today, and even with adaptation, warming by the end of the 21st century will lead to high to very high risk of severe, widespread, and irreversible impacts globally (*high confidence*).

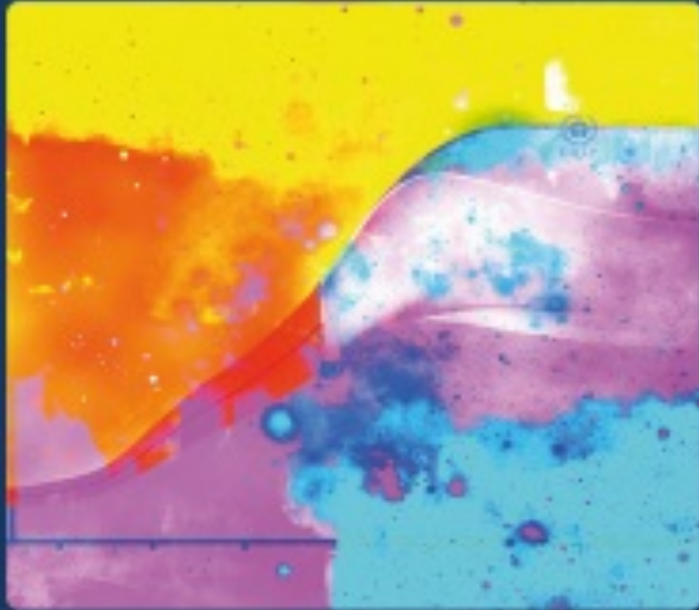


Change in average surface temperature (1986–2005 to 2081–2100)

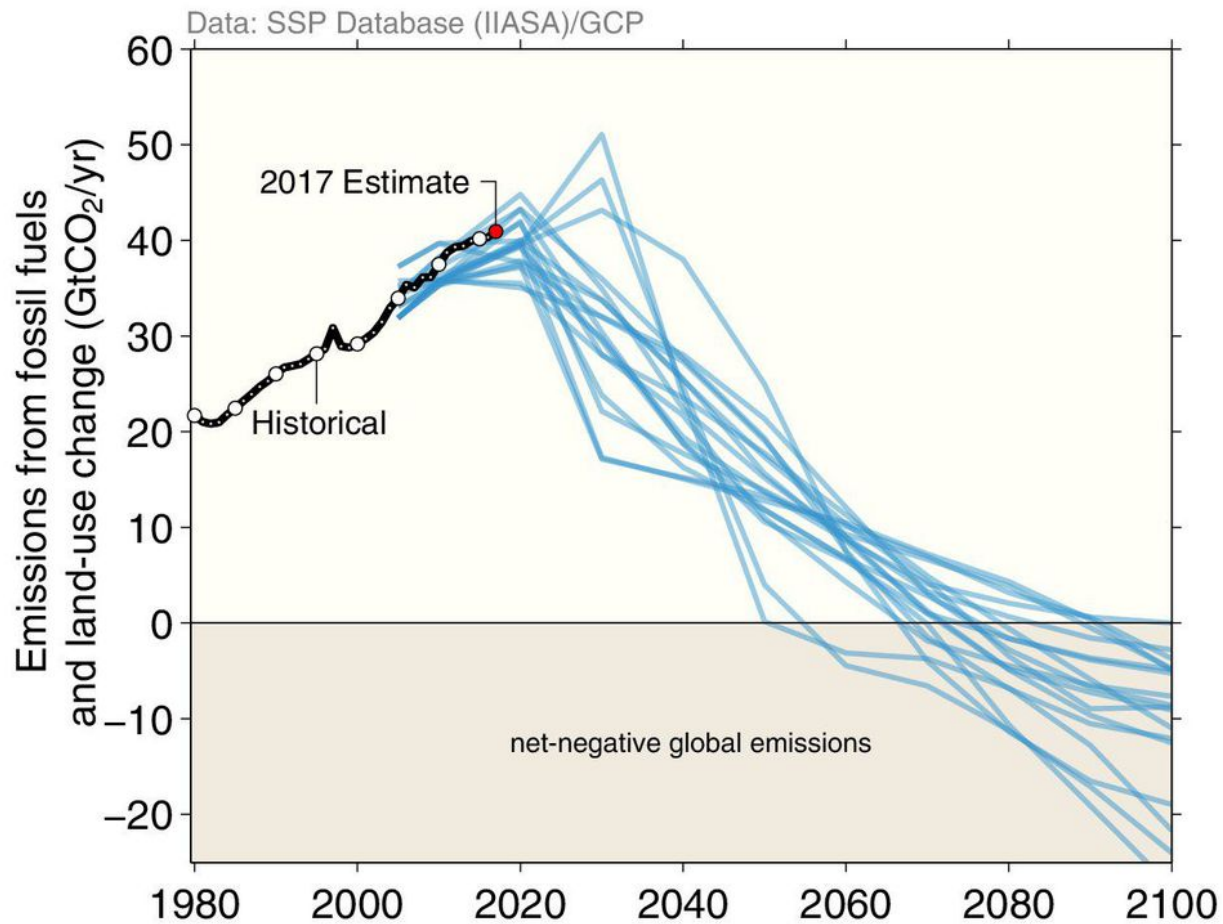
Source: IPCC 2014 (AR5 Synthesis Report)

Global Warming of 1.5°C

An IPCC special report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty.

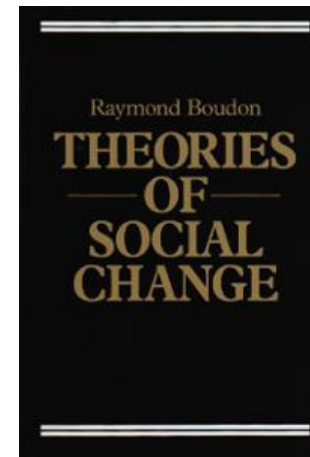
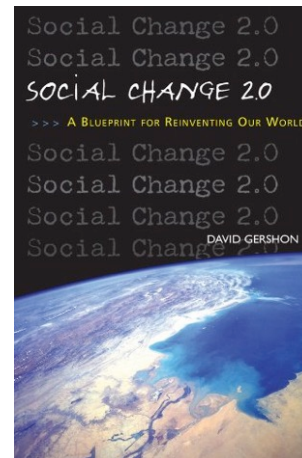
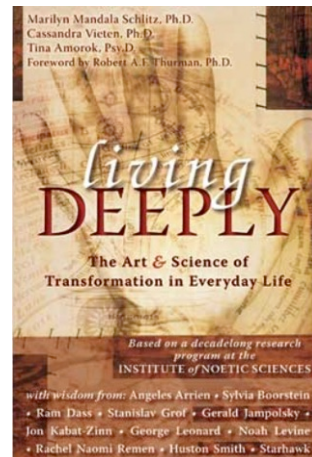
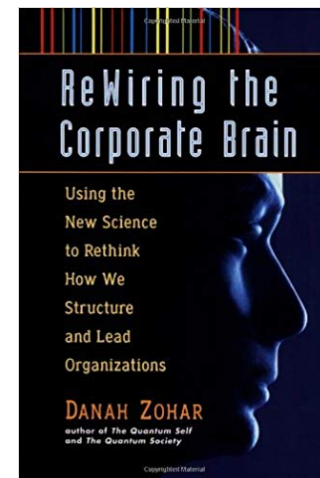
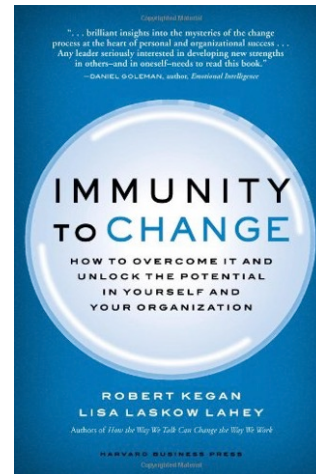
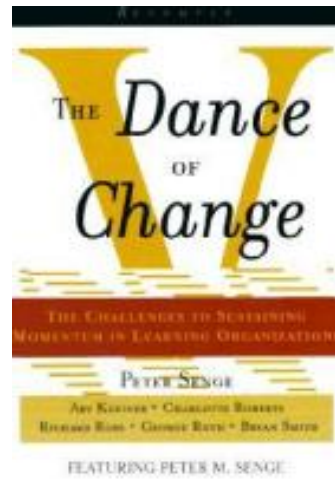
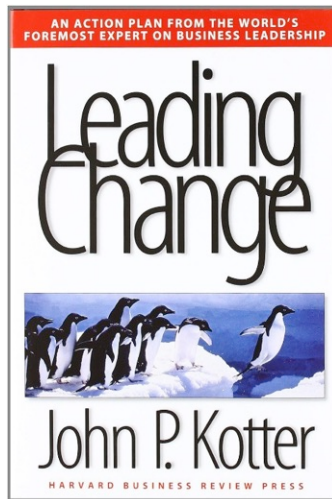


“Limiting the risks from global warming of 1.5°C in the context of sustainable development and poverty eradication implies system transitions that **can be enabled by an increase of adaptation and mitigation investments**, policy instruments, the acceleration of technological innovation and behaviour changes (high confidence).” (IPCC 2014, p. 23)





How do we
transform at the
scope, scale, speed
and depth that is
called for by global
change science?



Technical problems:

Those that can be diagnosed and solved by applying or improving established knowledge, know-how and expertise.

Adaptive problems:

Draw attention to individual and collective beliefs, values, worldviews, and paradigms.

Cambridge University Press
(2015)

The Adaptive Challenge of Climate Change

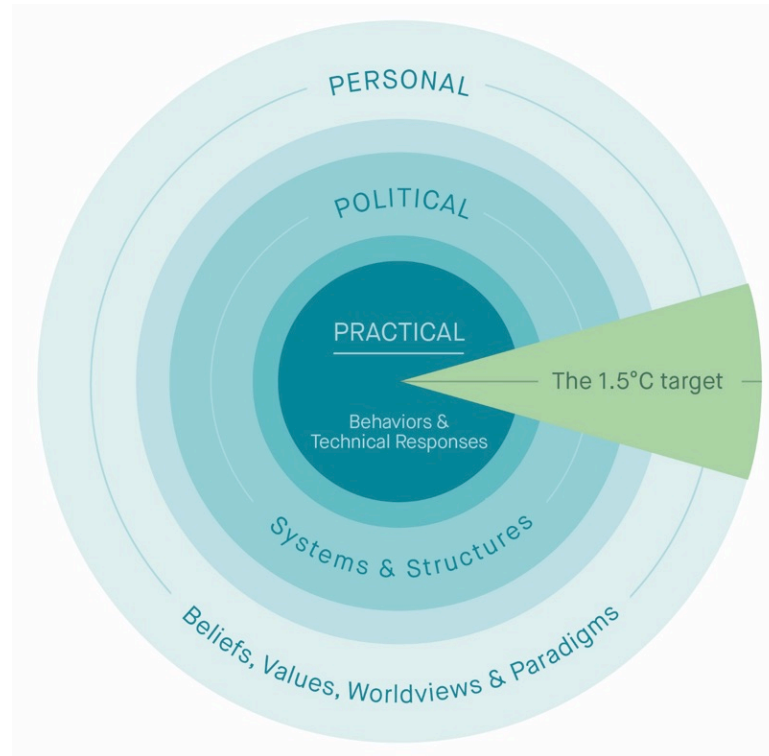
Edited by Karen O'Brien and Elin Selboe



*Addressing an adaptive challenge
as if it were only a technical
problem **will lead to failure.***



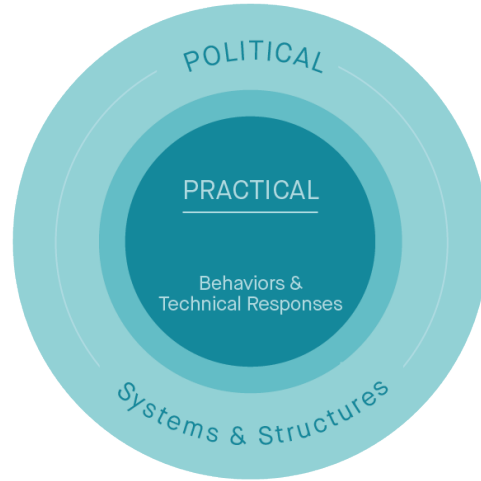
The Three Spheres of Transformation

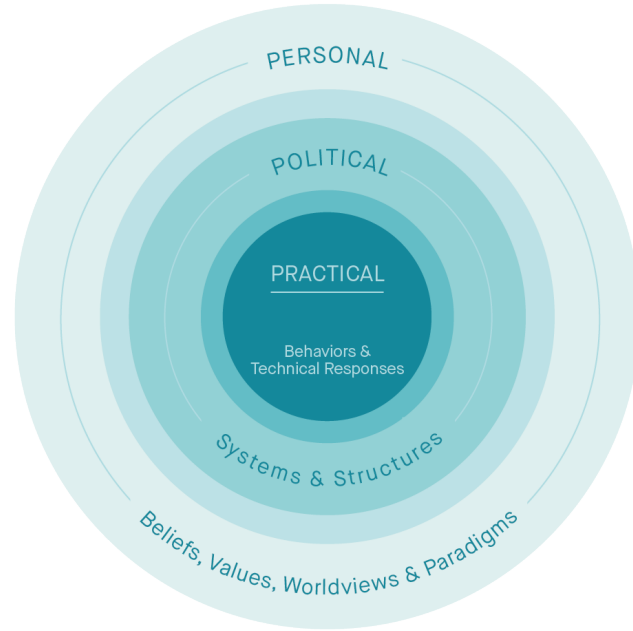


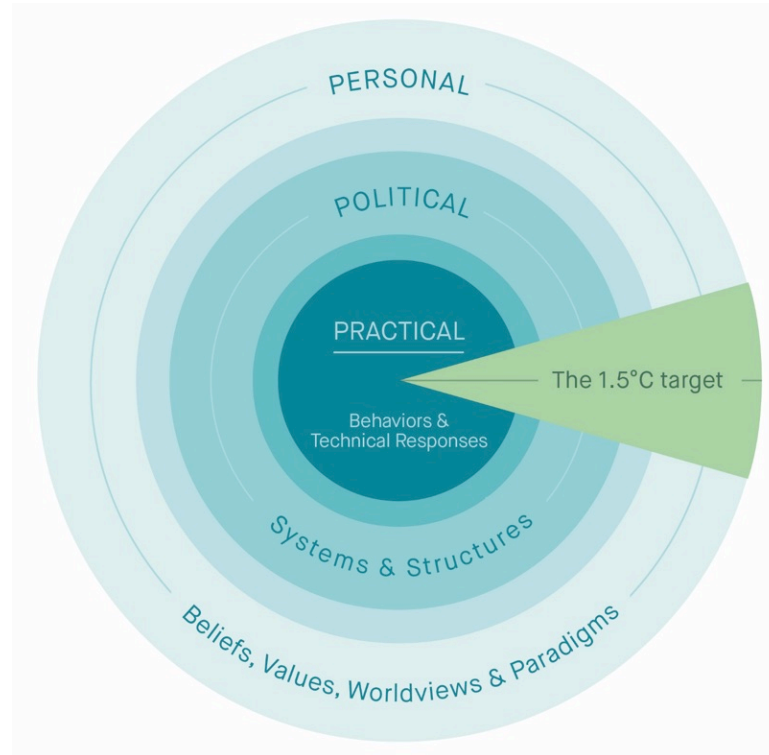


PRACTICAL

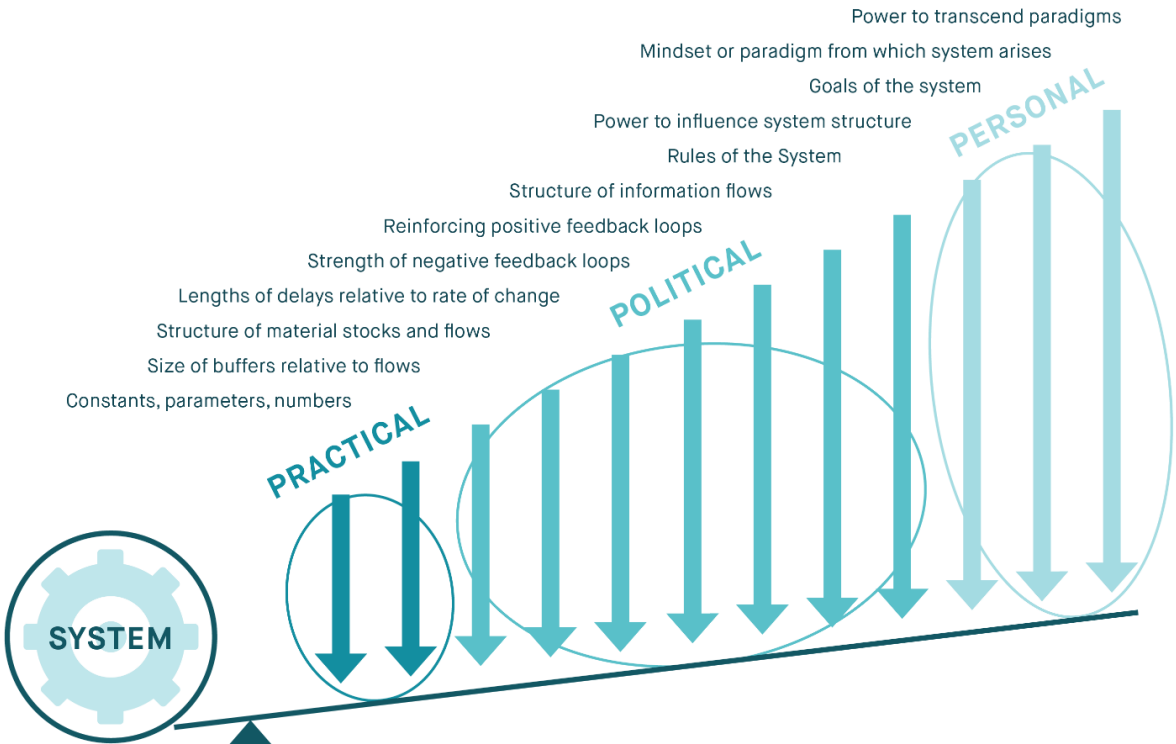
Behaviors &
Technical Responses







Leverage Points for Systems Change

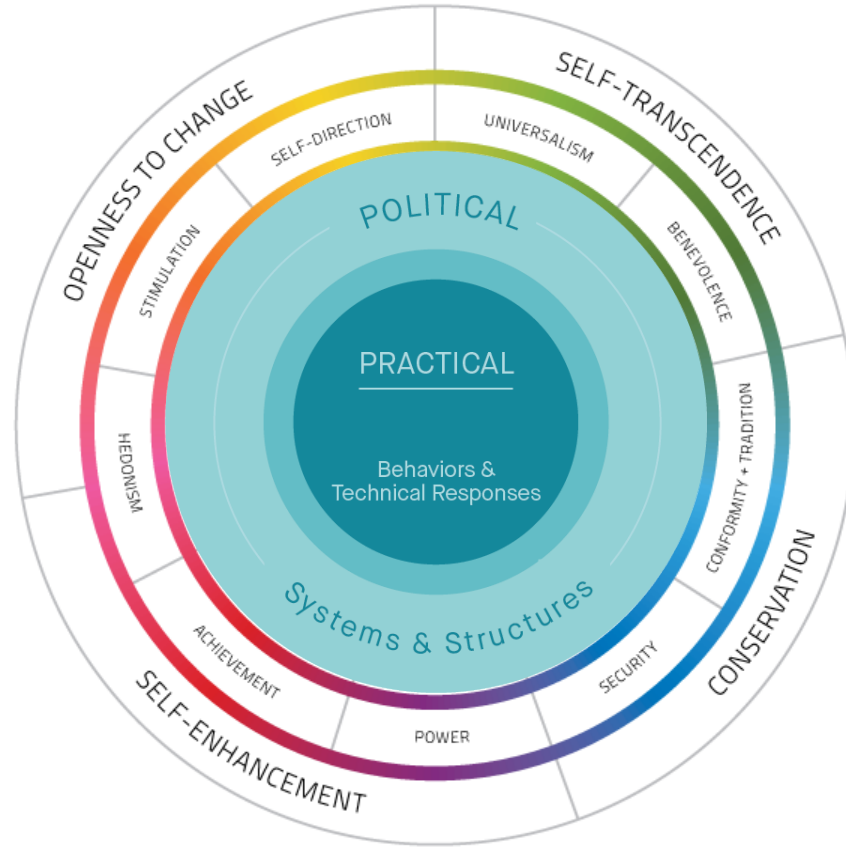


Based on: Meadows, D. H. 1999. "Leverage Points: Places to Intervene in a System." The Sustainability Institute.



People. The most powerful solution to climate change that exists.

Values



Worldviews



Planet has just 5% chance of reaching Paris climate goal, study says

Researchers find that economic, emissions and population trends point to very small chance Earth will avoid warming more than 2°C by century's end



▲ Environmental activists protest Donald Trump's decision to exit the Paris climate accords, which set a goal of avoiding warming beyond 2°C. Photograph: Scott Olson/Getty Images

The Guardian, July 31, 2017

Less than 2 °C warming by 2100 unlikely

Adrian E. Raftery^{1*}, Alec Zimmer², Dargan M. W. Frierson³, Richard Startz⁴ and Peiran Liu¹

«Our forecasting model **does not explicitly incorporate future legislation** that could change future emissions. It is based on past emissions ...

We have also **not accounted for the possibility that decreasing prices for alternative energy could cause a sudden massive shift to alternative energy.** This would be speculative....» (p. 4)

It's already too late!

*Of course! In fact,
we can **reverse**
global warming...*

*People will
never
change.*

We can limit climate change to 1.5°C.

*Investments
in fossil fuels
are just too
profitable.*

*The models say it is
impossible, and the
models are always
right!*

*It's all just
natural
variability*

*We don't need to
– we can adapt to
anything.*

DRAWDOWN

THE MOST COMPREHENSIVE
PLAN EVER PROPOSED TO
REVERSE GLOBAL WARMING
EDITED BY PAUL HAWKEN



«Drawdown is based on meticulous research that maps, measures, models, and describes the most substantive solutions to global warming that already exist. It is the most important goal for humanity to undertake.»

GEO THERMAL

#18

RANK BY 2050

16.6 GT

REDUCED CO₂

(\$155B)
NET COST

\$1.02T
NET SAVINGS

GEOTHERMAL

#18

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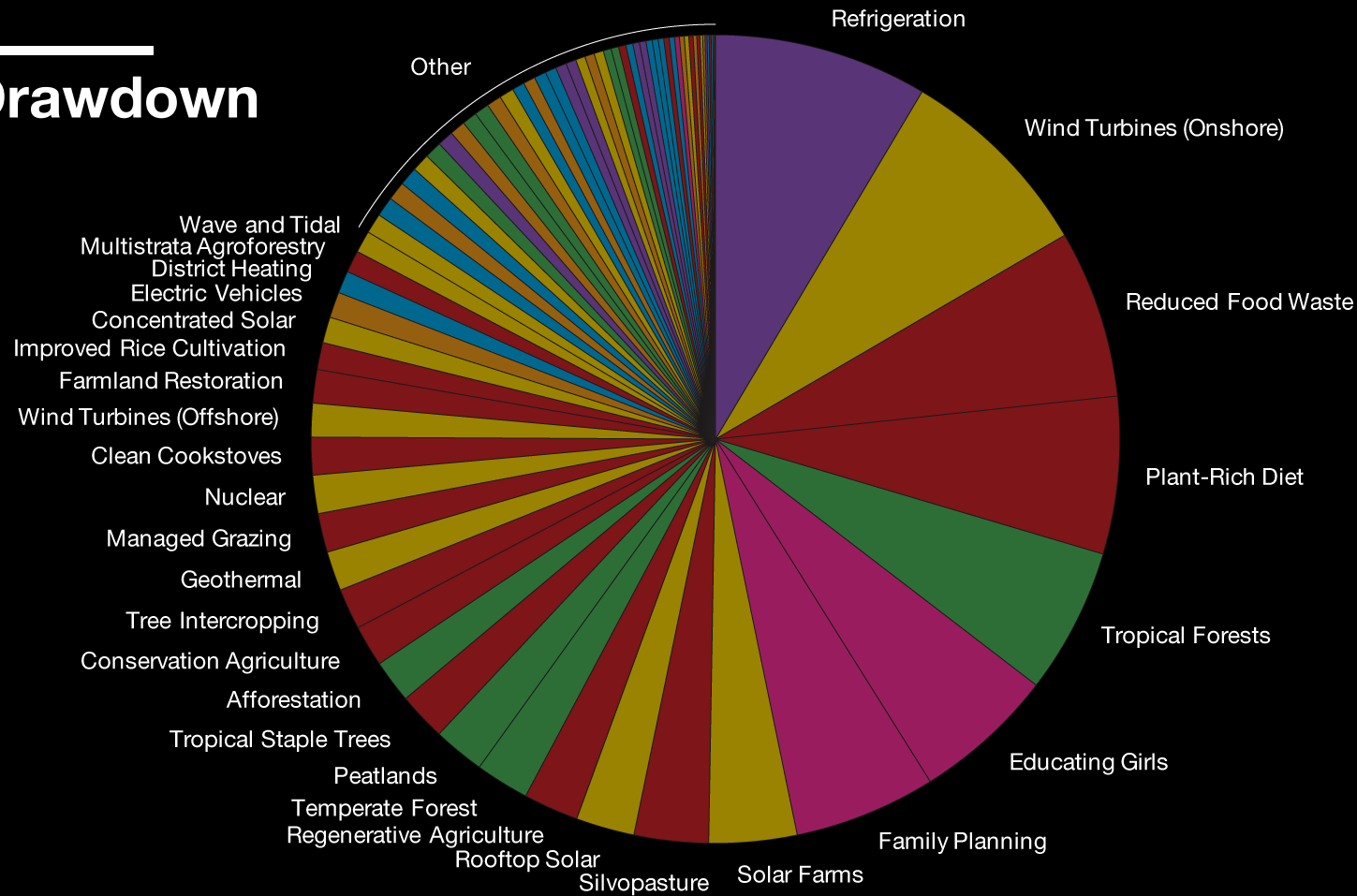
REDUCED CO2

(\$155B) \$1.02T

NET COST

NET SAVINGS

Drawdown





A Conference Focused on Climate Solutions

September 16–18, 2019

The Penn Stater Hotel and Conference Center, State College, PA

Shifting perspectives *changes the story*



*It's time to
invest in a
new story!*



Department of
Sociology and Human
Geography, University
of Oslo

c
— CHANGE

Transformation in a
changing climate,
cCHANGE.no