No New Fossil Fuel Leasing:

The Only Path to Maximizing Social Welfare in the Climate Change Era

Comment on

Federal Lands and Fossil Fuels:
Maximizing Social Welfare in Energy Leasing

A presentation by:

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Outline of Argument

- Professor Hein:
  - DOI has a duty to consider public welfare in its federal energy leasing program
  - DOI can meet this duty by increasing royalty rates, bonus bids, rental rates for federal fossil fuel leasing, etc.

- Our Response:
  - The current climate crisis requires much more than marginal changes to royalty rates and the leasing process.
  - If DOI was to truly consider public welfare and account for the current climate crisis in its decisions, it would recognize that no new fossil fuel leasing could be allowed on federal lands.

Professor Hein's Proposed Reforms

- Programmatic review of federal fossil fuel leasing
  - Last one done on coal in the 1980s
  - Never been done for onshore oil and gas
- Royalty rate adjustments w. SCC
- NEPA alternatives
- Eliminate royalty rate reductions and loopholes
- Reform leasing to promote competition

The Realities of the Current Climate Crisis

US GHG Emissions in 2013	Federal Public Lands GHG Emissions in 2014	Future Federal Public Lands GHG Emissions
6.67 Gt CO_2e	1.33 Gt CO_2e (20%)	30 to 43 Gt CO_2e

Sources: EcoShift Report
USGS, Federal Lands Greenhouse Gas Emissions and Sequestration in the United States: Estimates for 2005-14

GHG Emissions from Federal Public Lands Are Significant

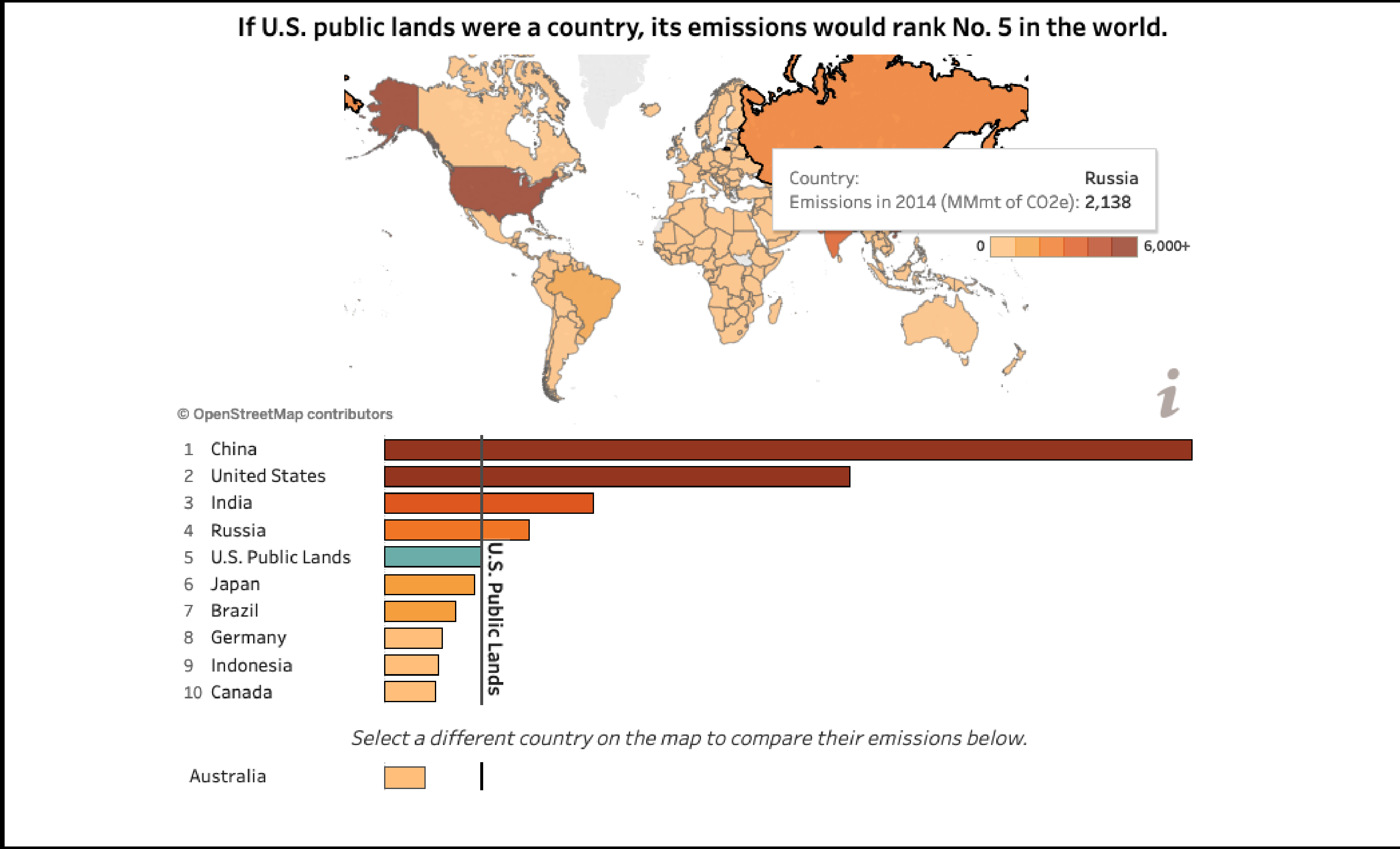
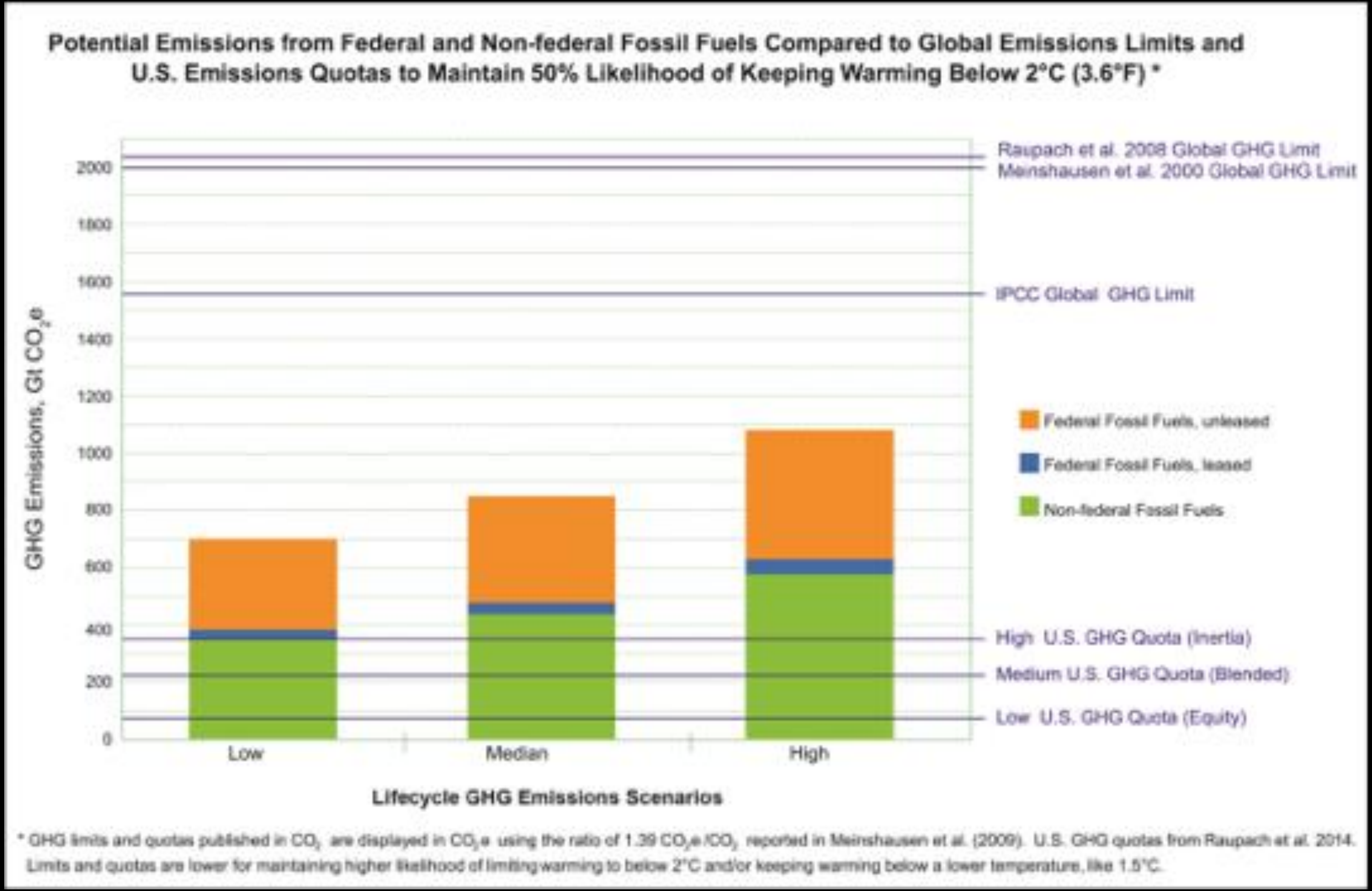


Image credit: The Wilderness Society

The Concept of Carbon Budgeting

- IPCC Fourth Assessment sets global carbon limit
- From this, we can extrapolate a US carbon budget

- NOTE: this is out of date now that warming must be limited to 1.5°C



Source: EcoShift Report

The More We Delay, the Smaller the World's Carbon Budget Gets

Table 1: Global Carbon Budgets for Likely Chance of 2°C and Medium Chance of 1.5°C

($GtCO_2$)	2°C	1.5°C
Post-2011 Budget (from IPCC)[14]	1,000	550
Emissions 2012 to 2015[15]	157	157
Post-2015 Budget	843	393

Sources: IPCC, Global Carbon Project

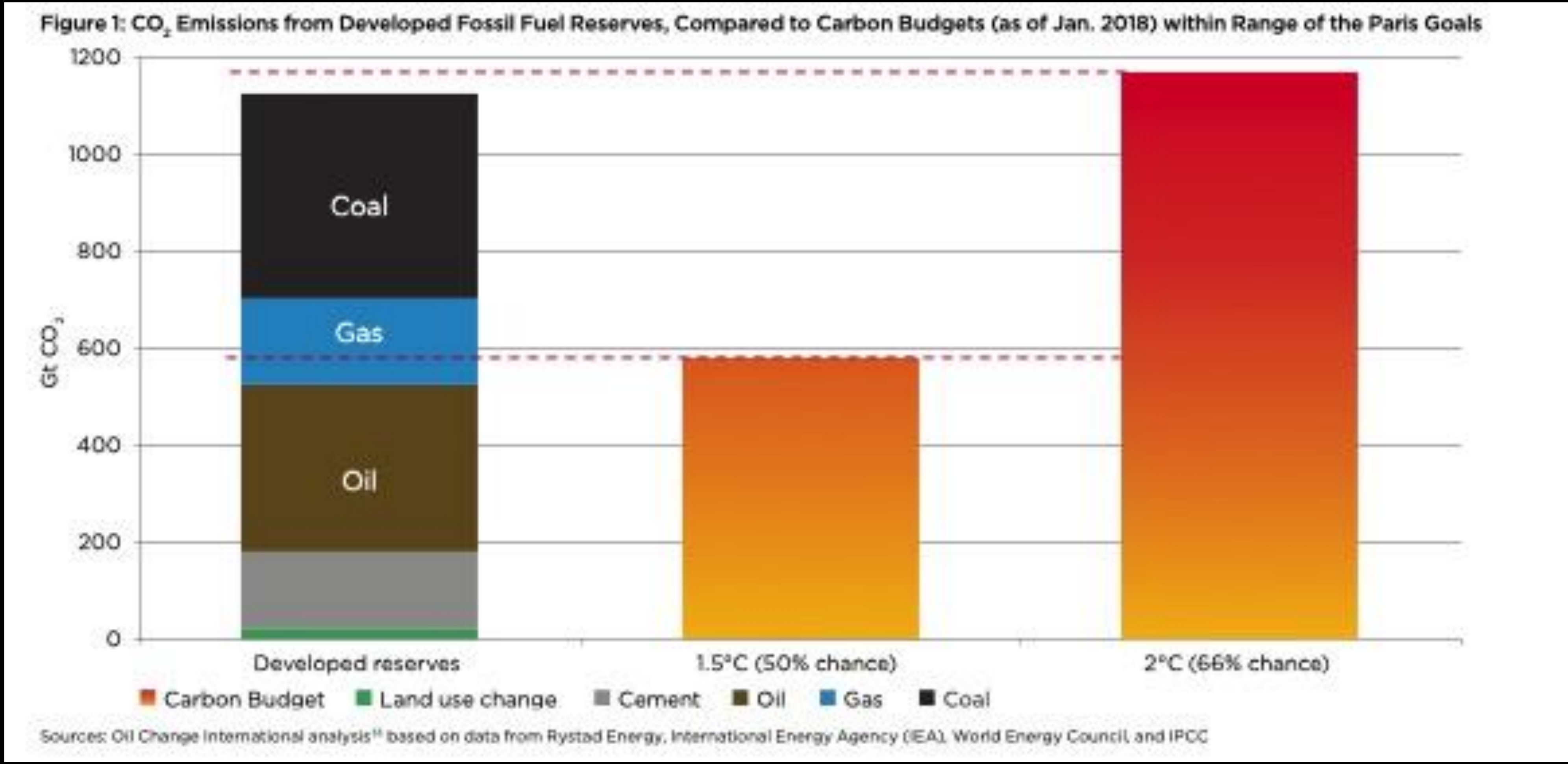
Source: 2016 Oil Change International Report

2018 IPCC Special Report : We Must Limit Warming to 1.5°C

- Big differences in the impacts between 1.5° and 2°C of warming
  - 10 million people more exposed to flooding from sea level rise
  - Several million more people susceptible to poverty
  - Death of 99% of coral reefs

- Must limit warming to 1.5C°
  - “The world has 12 years to cut global greenhouse gas emissions by 45% from 2010 levels and *must zero out emissions by 2050 in order to limit warming to 1.5°C*.”
- Note: already experienced approx. warming of 1°C above pre-industrial levels

Under Revised Carbon Budget, Existing World Reserves Far Exceed Limits



Source: 2019 Oil Change International Report

What Does this Mean for the US?

- To conform to a 1.5°C target, the estimated U.S. carbon budget is 57 GtCO_2eq on average.

- Already leased federal fossil fuels if fully extracted and burned = 30 to 43 GtCO_2e (50-75% of the budget).

- NOTE: this does not account for state/private development

Sources: Robiou du Pont et al.
EcoShift Report

Need for an Honest Accounting

- Premise 1: Global environmental, economic, and social catastrophe projected at warming above 1.5 C;
- Premise 2: Already committed fossil fuel resources exceed total U.S. carbon budget;
- Conclusion: All future federal fossil fuel leasing must end to meet 1.5 C

- *Therefore, the social cost of any new federal fossil fuel leasing must exceed the economic value of extracted fossil fuels (or at least be set high enough to pay for 100% carbon offset elsewhere).*

Accounting for the Social Costs of Carbon

- Interagency Working Group: $11 - $105 per ton; $42 per ton median value
- BLM's September 2018 lease sale in New Mexico's Permian Basin generated nearly a billion dollars in bid payments

  - Social cost of carbon from downstream emissions ranges from <u>$2.5 billion to $23.6 billion; median value of $13.1 billion</u>

But Can Interior Do the Math?

- Past Practice Shows Pattern of Ignoring Costs of Carbon
- Agency Consistently Views Lease Sales and Drilling Permits in Isolation
- Regulatory Capture by Oil and Gas Industry

- *Can we really trust Interior staff to finally take an honest, hard look at the social costs of its oil and gas program without a top-down mandate?*

Conclusion