

Two weeks ago UW and 'townees' participated in a joint, two-day symposium on “**The Environment and Nuclear War: Making The Link – What Madison Can Do To Save Our Planet.**” Today's flier draws those links even closer exposing how little time there is left to “**Save Our Planet**”. (See: Women's International League for Peace and Freedom-Madison website for past fliers <https://wilpf-madison.org/>).



IPCC authors present their report on limiting global warming to 1.5°C at a press conference in Incheon, South Korea. IPCC

The report was commissioned by the United Nations to see what would happen if global average temperatures rose by 1.5°C above preindustrial levels, and what it would take to cap warming at that level. Under the Paris climate agreement, **nations agreed** in 2015 that they would take actions to limit global warming to 2°C while striving for the even tougher target of 1.5°C.

The new report is meant to build on that agreement, and it is exhaustive, with 132 authors, drawing on more than 6,000 peer-reviewed research articles. The overarching conclusion is that every fraction of a degree of warming matters. Letting temperatures rise will exact a huge toll on lives, natural

systems, and the economy. Fighting to keep warming in check — which will include radically and rapidly reducing coal and oil consumption, among other things — will save lives, the food supply, and homes.

The findings are dense and dispiriting, so I don't blame you if you don't want to pore over the 700-plus pages of the actual report or the 34-page **summary for policymakers**.

But climate change is something that impacts the whole planet. We and future generations are all in this together. So here are four key takeaways from the latest reminder by the world's top climate scientists that we need to get much more ambitious about the challenge before us. (Excerpted.)

The new report from the **Intergovernmental Panel on Climate Change** on limiting global warming to **1.5 degrees Celsius**, or 2.7 degrees Fahrenheit, is out. Its prognosis for the planet is grim: We may have as little as **12 years to act on climate change** — to slash global emissions 45 percent — to reach this target. (Excerpted.)

“1.5 degrees Celsius of warming will be much worse than the 1 degree Celsius we're experiencing now.”

By **Umair Irfan** ~ Oct 9, 2018

Vox Sentences: UMAIR IRFAN Is a journalist in Washington, D.C. working for **Vox Sentences**. He covers climate change, energy and policy. Previously, he wrote about the health fallout from the warming planet and political wrangling on Capitol Hill for E&E News. (<https://www.vox.com/2018/10/9/17951924/climate-change-global-warming-un-ipcc-report-takeaways>) (Article greatly excerpted for flier purposes.)

“We need every trick in the book to fight climate change, and we need to get much better at removing carbon from the atmosphere.”

The report goes into quite a bit of detail laying out **pathways** to limiting warming to 1.5°C. In short, these paths require drastic cuts in greenhouse gas emissions at an extraordinarily fast pace.

As my Vox colleague **David Roberts** **pointed out** on Twitter: Basically, stopping warming at 1.5C would involve an immediate, coordinated crash program of re-industrialization, involving every major country in the world. It would be like the US mobilizing for WWII, only across the globe, sustained for the rest of the century. (Please see over.)

Nothing like that has ever happened. Nothing even remotely similar has ever happened. There are currently no indications that any such effort is getting underway, and indeed the US is vigorously moving the other direction. Yet we have the tools to do it: namely, conventional methods like energy efficiency measures, replacing fossil fuel-fired generators with renewables, [electrification](#), renewable fuels, switching to electric vehicles, and so on. However, some of the paths anticipate an “overshoot.” The means the world’s greenhouse gas emissions would exceed the amount needed to warm the planet by 1.5°C, so some method is needed to pull carbon dioxide out of the air.

[Carbon dioxide removal \(CDR\)](#) encompasses a suite of different tactics. This includes planting more forests, which take in and store carbon dioxide as they grow. Bioenergy coupled to carbon capture and sequestration ([BECCS](#)) is another option. So is [direct air capture](#) of carbon dioxide.

Though a handful of companies are working on these latter technologies, they are still in their early stages. There are only a handful of direct air capture plants, and we’ll need vastly more of them since upward of 1,000 gigatons of carbon dioxide will have to be removed from the atmosphere by 2100, according to the IPCC. Currently, we emit about 53 gigatons of greenhouse gases each year, according to the [World Bank](#), so in the extreme case, the world would need to deploy enough CDR to offset more than 18 years of total global carbon emissions.

But even if we don’t overshoot our [carbon budget](#), we will still need CDR to compensate for other sectors of the economy that are harder to decarbonize, like air travel or agriculture. The IPCC puts it thusly:

All analysed 1.5°C-consistent pathways use CDR to some extent to neutralize emissions from sources for which no mitigation measures have been identified and, in most cases, also to achieve net-negative emissions that allow temperature to return to 1.5°C following an overshoot (high confidence). The longer the delay in reducing CO2 emissions towards zero, the larger the likelihood of exceeding 1.5°C, and the heavier the implied reliance on net-negative emissions after mid-century to return warming to 1.5°C

And CDR is not a get-out-of-climate-change-free card: Limiting warming to 1.5°C still demands the rapid scale-up of technologies the world has never deployed at any appreciable scale. We’re in uncharted territory, and the longer we wait, the more we’ll need them. Policies and economics weren’t addressed in the IPCC report, but they’re impossible to ignore.

IN CONCLUSION:

Bringing greenhouse gas emissions low enough to meet the 1.5°C target would require an unprecedented global effort. *Javier Zarracina/Vox* It’s possible to do this, even with technology as it stands now, but it would require a level of coordinated effort the world has never seen before. It’s also a level of effort no country seems to be willing to endure. All this adds up to a situation with no easy way out. There is no room left for [wishful thinking](#) that a perfect solution will emerge without trade-offs, that we’ll dodge any grievous consequences of warming, and that we won’t have to pay for this, either today or decades down the line with interest.

Everything we do to mitigate warming will have some benefit, and it’s worth fighting to control every fraction of a degree, but even the best-case scenario involves drastic changes to the world as we know it. And we’re rapidly closing the window to achieve it. *THE END* **SEE “TO DO” FILM BELOW:**

Everyone's Earth: River To The Heart ~ Film Screening And Discussion

Eddy Harris, writer and producer. Free Public Lecture Event Dates: Repeats every 2 days until Thu Nov. 1, 2018. Tuesday | October 30 @ 6:00 P.M. Marquee Theater, Union South, 1308 W. Dayton St. Thursday | November 1 @ 6:00 P.M. U South Madison Partnership, Atrium, Villager Mall, 2300 South Park St. [The Nelson Institute - UW-Madison](#)

For more information go to: <https://nelson.wisc.edu/events/everyones-earth/>

