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BRINKMANSHIP

Summary for Policymakers of IPCC Special Report on Global Warming of 1.5°C Approved by Governments

Intergovernmental Panel on Climate Change, IPCC Press Release, October 8, 2018

Incheon, Republic of Korea, October 8 – Limiting global warming to 1.5°C would require rapid, far-reaching and unprecedented changes in all aspects of society, the IPCC said in a new assessment. With clear benefits to people and natural ecosystems, limiting global warming to 1.5°C compared to 2°C could go hand in hand with ensuring a more sustainable and equitable society, the Intergovernmental Panel on Climate Change (IPCC) said on Monday.

The "Special Report on Global Warming of 1.5°C" was approved by the IPCC on Saturday in Incheon, Republic of Korea. It will be a key scientific input into the Katowice Climate Change Conference in Poland in December, when governments review the Paris Agreement to tackle climate change.

"With more than 6,000 scientific references cited and the dedicated contribution of thousands of expert and government reviewers worldwide, this important report testifies to the breadth and policy relevance of the IPCC," said Hoesung Lee, Chair of the IPCC.

Ninety-one authors and review editors from 40 countries prepared the IPCC report in response to an invitation from the United Nations Framework Convention on Climate Change (UNFCCC) when it adopted the Paris Agreement in 2015.

The report's full name is "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."

"One of the key messages that comes out very strongly from this report is that we are already seeing the consequences of 1°C of global warming through more extreme weather, rising sea levels and diminishing Arctic sea ice, among other changes," said Panmao Zhai, Co-Chair of IPCC Working Group I.

The report highlights a number of climate change impacts that could be avoided by limiting global warming to 1.5°C compared to 2°C, or more. For instance, by 2100, global sea level rise would be 10 cm lower with global warming of 1.5°C compared with 2°C. The likelihood of an Arctic Ocean free of sea ice in summer would be once per century with global warming of 1.5°C, compared with at least once per decade with 2°C. Coral reefs would decline by 70-90 percent with global warming of 1.5°C, whereas virtually all (>99 percent) would be lost with 2°C.

"Every extra bit of warming matters, especially since warming of 1.5°C or higher increases the risk associated with long-lasting or irreversible changes, such as the loss of some ecosystems," said Hans-Otto Pörtner, Co-Chair of IPCC Working Group II.

Limiting global warming would also give people and ecosystems more room to adapt and remain below relevant risk thresholds, added Pörtner. The report also examines

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IPCC *from page 1*

pathways available to limit warming to 1.5°C, what it would take to achieve them and what the consequences could be. "The good news is that some of the kinds of actions that would be needed to limit global warming to 1.5°C are already underway around the world, but they would need to accelerate," said Valerie Masson-Delmotte, Co-Chair of Working Group I.

The report finds that limiting global warming to 1.5°C would require "rapid and far-reaching" transitions in land, energy, industry, buildings, transport, and cities. Global net human-caused emissions of carbon dioxide (CO_2) would need to fall by about 45 percent from 2010 levels by 2030, reaching 'net zero' around 2050. This means that any remaining emissions would need to be balanced by removing CO_2 from the air.

"Limiting warming to 1.5°C is possible within the laws of chemistry and physics but doing so would require unprecedented changes," said Jim Skea, Co-Chair of IPCC Working Group III.

Allowing the global temperature to temporarily exceed or 'overshoot' 1.5°C would mean a greater reliance on techniques that remove CO_2 from the air to return global temperature to below 1.5°C by 2100. The effectiveness of such techniques are unproven at large scale and some may carry significant risks for sustainable development, the report notes.

"Limiting global warming to 1.5°C compared with 2°C would reduce challenging impacts on ecosystems, human health and well-being, making it easier to achieve the United Nations Sustainable Development Goals," said Priyardarshi Shukla, Co-Chair of IPCC Working Group III.

The decisions we make today are critical in ensuring a safe and sustainable world for everyone, both now and in the future, said Debra Roberts, Co-Chair of IPCC Working Group II.

"This report gives policymakers and practitioners the information they need to make decisions that tackle climate change while considering local context and people's needs. The next few years are probably the most important in our history," she said.

The IPCC is the leading world body for assessing the science related to climate change, its impacts and potential future risks, and possible response options.

The report was prepared under the scientific leadership of all three IPCC working groups. Working Group I assesses the physical science basis of climate change; Working Group II addresses impacts, adaptation and vulnerability; and Working Group III deals with the mitigation of climate change.

The Paris Agreement adopted by 195 nations at the 21st Conference of the Parties to the UNFCCC in December 2015 included the aim of strengthening the global response to the threat of climate change by "holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels."

As part of the decision to adopt the Paris Agreement, the IPCC was invited to produce, in 2018, a Special Report on global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways. The IPCC accepted the invitation, adding that the Special Report would look at these issues in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty.

Global Warming of 1.5°C is the first in a series of Special Reports to be produced in the IPCC's Sixth Assessment Cycle. Next year the IPCC will release the Special Report on the Ocean and Cryosphere in a Changing Climate, and Climate Change and Land, which looks at how climate change affects land use.

The Summary for Policymakers (SPM) presents the key findings of the Special Report, based on the assessment of the available scientific, technical and socio-economic literature relevant to global warming of 1.5°C.

The Summary for Policymakers of the Special Report on Global Warming of 1.5°C (SR15) is available at https://www.ipcc.ch/report/sr15 or www.ipcc.ch.

Key Statistics of the Special Report on Global Warming of Global Warming of 1.5°C

91 authors from 44 citizenships and 40 countries of residence

- 14 Coordinating Lead Authors (CLAs)
- 60 Lead Authors (LAs)
- 17 Review Editors (REs)
- 133 Contributing authors (CAs)
- Over 6,000 cited references
- A total of 42,001 expert and government review comments

For more information, contact the IPCC Press Office at ipcc-media@wmo.int.

Notes for Editors

The "Special Report on Global Warm-

ing of 1.5 °C," known as SR15, is being prepared in response to an invitation from the 21st Conference of the Parties (COP21) to the United Nations Framework Convention on Climate Change in December 2015, when they reached the Paris Agreement, and will inform the Talanoa Dialogue at the 24th Conference of the Parties (COP24). The Talanoa Dialogue will take stock of the collective efforts of Parties in relation to progress towards the long-term goal of the Paris Agreement, and to inform the preparation of nationally determined contributions. Details of the report, including the approved outline, can be found on the report page. The report was prepared under the joint scientific leadership of all three IPCC Working Groups, with support from the Working Group I Technical Support Unit.

What is the IPCC?

The Intergovernmental Panel on Climate Change (IPCC) is the UN body for assessing the science related to climate change. It was established by the United Nations Environment Programme (UN Environment) and the World Meteorological Organization (WMO) in 1988 to provide policymakers with regular scientific assessments concerning climate change, its implications and potential future risks, as well as to put forward adaptation and mitigation strategies. It has 195 member states.

IPCC assessments provide governments, at all levels, with scientific information that they can use to develop climate policies. IPCC assessments are a key input into the international negotiations to tackle climate change. IPCC reports are drafted and reviewed in several stages, thus guaranteeing objectivity and transparency.

The IPCC assesses the thousands of scientific papers published each year to tell policymakers what we know and don't know about the risks related to climate change. The IPCC identifies where there is agreement in the scientific community, where there are differences of opinion, and where further research is needed. It does not conduct its own research.

To produce its reports, the IPCC mobilizes hundreds of scientists. These scientists and officials are drawn from diverse backgrounds. Only a dozen permanent staff work in the IPCC's Secretariat.

The IPCC has three working groups: Working Group I, dealing with the physical science basis of climate change; Working Group II, dealing with impacts, adaptation and vulnerability; and Working Group III, dealing with the mitigation of climate change. It also has a Task Force on National Greenhouse Gas Inventories that develops methodologies for measuring emissions and removals.

IPCC Assessment Reports consist of contributions from each of the three working groups and a Synthesis Report. Special Reports undertake an assessment of cross-disciplinary issues that span more than one working group and are shorter and more focused than the main assessments.

Sixth Assessment Cycle

At its 41st Session in February 2015, the IPCC decided to produce a Sixth Assessment Report (AR6). At its 42nd Session in October 2015 it elected a new Bureau that would oversee the work on this report and Special Reports to be produced in the assessment cycle. At its 43rd Session in April 2016, it decided to produce three Special Reports, a Methodology Report and AR6.

The Methodology Report to refine the 2006 IPCC Guidelines for National Greenhouse Gas Inventories will be delivered in 2019. Besides "Global Warming of 1.5°C," the IPCC will finalize two further special reports in 2019: the "Special Report on the Ocean and Cryosphere in a Changing Climate and Climate Change and Land," an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems. The AR6 Synthesis Report will be finalized in the first half of 2022, following the three working group contributions to AR6 in 2021.

For more information, including links to the IPCC reports, go to www.ipcc.ch.

Our Comment

This authoritative report should convince any responsible policymaker of average intelligence and a healthy conscience, of the moral imperative to *act* – in the best interests of "a more sustainable and *equitable* society" – on the "threat of climate change, sustainable development, and efforts to eradicate poverty."

The challenge, though daunting, is presented as a viable alternative to the probable outcome of our present course. The prospect of "long-lasting or irreversible changes" is an incentive that policymakers need to take seriously if they are to do their part in promoting whatever effort and sacrifice it will take to avoid greater risk, "such as the loss of some ecosystems."

People and ecosystems both will *need* all the room they can get "to adapt and remain below relevant risk thresholds," given our failure to heed the concerns about climate change at an earlier stage in the crisis.

Luckily, this report is not a mere update on how crucial the situation is! The study is an impressive analysis of ways and means to deal with climate change, and their possible outcomes.

Specific, reliable information about what is required to deal with climate change, while formidable, is positive. *But, time is short!*

While the report "gives policymakers the information they need to make decisions that tackle climate change while considering local context and people's needs," the record of their response since 1988, and evidence of their contemporary level of concern and resolve, makes it clear that we cannot leave it up to them!

COP24 will further fortify us to mobilize against recalcitrant representatives.

Canada *should* be among those nations moving *forward*.

We need to rally to this cause as Canada so nobly met the crisis of World War II, in 1939.

At that time, Graham Towers, founding Governor of the Bank of Canada, appeared before Parliament's Banking and Commerce Committee to explain what he had done and proposed to do. The following extracts from his testimony, are included in *A Power Unto Itself, The Bank of Canada:*

Q: But there is no question about it that banks do create that medium of exchange?

A: That is right. That is what they are there for…. That is banking business, just in the same way that a steel plant makes steel.

Q: Ninety-five percent of all our volume of business is being done with what we call exchange of bank deposits – that is, simply bookkeeping entries in banks against which people write cheques?

A: I think that is a fair statement.

Q: When the government delivers a $1,000 bond to the bank, what does the bank use to purchase it with? Is it the creation of additional money?

A; it is the creation of additional money.

Q: Would you admit that anything physically possible and desirable can be made financially possible?

A: Certainly.

Q: Will you tell me why a government with power to create money should give that power away to a private monopoly [that is, the chartered banks] and then borrow that

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Time to Use Our Fear as Fuel: Three Takeaways from the IPCC's New Report

By Avi Lewis, published by The Leap: System Change on a Deadline, October 10, 2018

More and more people are coming to the conclusion that this escalating crisis, ever-harder to deny, can galvanize change on the scale that is really needed. Nothing less will do.

The new Intergovernmental Panel on Climate Change report is out, and it is a dramatic development. The threat advisory from the world's scientific climate community just went from orange to flashing red.

But here's the key takeaway: limiting warming to 1.5 degrees Celsius is still possible, and will require a rapid transformation of our economy. The great news is that this need for fundamental change is now recognized by the world's leading climate scientists, who advise the United Nations. And as we've been arguing for years, the wider opportunities and benefits of that unprecedented transition are vast: a global green new deal, millions of new jobs, deep change anchored in justice.

The call to action in this report is why we started The Leap. Transforming our economy and society on the scale this crisis requires is the most powerful opportunity we've ever had to build a more caring, liveable planet.

So don't look away. While the understandable reaction is to avoid, avoid, avoid (hey, we have this feeling too!) we find relief in engaging with the facts. Here are three takeaways from The Leap on this unprecedented UN report.

1. Don't doubt what your senses are telling you.

Yes, the climate crisis is unfolding even faster and more furiously than expected. At current emissions rates, we could hit 1.5°C of global warming as soon as 2030 – and we're on track for far more. If that happens, the worst impacts of climate change – previously predicted to take place closer to the end of the century – will likely begin within our lifetime. Food and water shortages across the globe. The death of all coral reefs. Hundreds of millions of people impacted by deadly heat or rising waters. And a predicted economic cost counted in tens of trillions of dollars. Trillions. Overall, the more than 6,000 scientific papers behind this report are telling us that 1.5°C is more dangerous than previously predicted, and it's all happening sooner than we thought. We have less than a decade to turn our global emissions trends around.

2. Beware of doom merchants.

After this report, get ready to start hearing two new angles from pundits and deniers. First, that we're doomed anyways, so…let's not do anything at all. We got a first glimpse of this tactic in August, from the Trump administration. In a draft environmental impact statement, it argued that warming of 4°C is indeed on its way – so the fact that the administration was axing fuel efficiency standards for cars and light trucks didn't really matter.

The second take we can expect to hear more of is the idea of the "moonshot." That things are so dire that it's time to start radical climate experiments, or "geo-engineering" to counteract global warming. These sci-fi schemes include terrifying ideas like dimming the sun by releasing sulfur into the upper atmosphere.

The good news is: this report doesn't back such doomsday approaches. It warns against the substantial risks of untested geoengineering strategies. And it is up front about the fact that while the situation is dire – *responses based on hopelessness are not what we need.*

3. We can still turn this around. And it's going to take a leap.

With this report, the UN has suddenly reached the very realization that gave rise to The Leap Manifesto in 2015: the only thing that can save us now is the total transformation of our political and economic system. Of course, there's a clear implication of this fact that the UN is not yet ready to admit: system change requires taking power away from the people most responsible for this crisis, from bringing about a managed decline of the fossil fuel industry to bringing the high-emitting billionaire class down to earth.

Consider, for some perspective, this take from climate and energy expert Kevin Anderson: "almost 50% of global carbon emissions arise from the activities of around 10% of the global population…. Impose a limit on the per-capita carbon footprint of the top 10% of global emitters, equivalent to that of an average European citizen, and global emissions could be reduced by one third in a matter of a year or two."

Of course, cracking down on the emissions of the high-carbon global class would not be that simple – but instead of wasting another decade on market-friendly tweaks and silver bullet technologies, we certainly can mobilize for real, democratic control over every part of our economies.

This is the most hopeful note: more and more people are coming to the conclusion that this escalating crisis, ever-harder to deny, can galvanize change on the scale that is really needed. Nothing less will do. The idea of a "Green New Deal" is gaining momentum around the world.

This is white-knuckle terrifying stuff, but don't turn away: the report makes clear that the worst effects of global warming can still be prevented, and the urgency of transformative change should excite and empower all of us who are fighting for justice anyway.

This is a time to use our fear as fuel, and ratchet up our determination. Let's take a good, hard, clear-eyed look at the fucked-up future we are headed for, and decide – collectively – to leap to a safer, better place.

Avi Lewis is an award winning documentary filmmaker and long-time television journalist. His films include The Take *and* This Changes Everything. *He is one of the co-authors of the Leap Manifesto and is the Strategic Director and Co-Founder of The Leap.*

Our Comment

If we do not fear climate change, it's because we don't know enough about it. So, the first step is to learn the truth about it, and to share that information with others.

We are lucky in organizations like The Leap, that have contributed so much to the growing level of awareness on the issue.

Fear, of course, can freeze you in your tracks, or it can inspire you to life-saving action. What makes the difference, is *hope.* As Avi Lewis has pointed out, the IPCC report incites both fear and hope.

Lewis' call to action is an invitation. Anyone not yet involved might find The Leap a great way to begin.

Élan

Climate Scientists are Struggling to Find the Right Words for Very Bad News

By Chris Mooney and Brady Dennis, The Washington Post, October 3, 2018

A much-awaited report from the UN's top climate science panel will show an enormous gap between where we are and where we need to be to prevent dangerous levels of warming.

In Incheon, South Korea, this week, representatives of over 130 countries and about 50 scientists have packed into a large conference center going over every line of an all-important report: What chance does the planet have of keeping climate change to a moderate, controllable level?

When they can't agree, they form "contact groups" outside the hall, trying to strike an agreement and move the process along. They are trying to reach consensus on what it would mean – and what it would take – to limit the warming of the planet to just 1.5 degrees Celsius, or 2.7 degrees Fahrenheit, when 1 degree Celsius has already occurred and greenhouse gas emissions remain at record highs.

"It's the biggest peer-review exercise there is," said Jonathan Lynn, head of communications for the United Nations' Intergovernmental Panel on Climate Change. "It involves hundreds or even thousands of people looking at it."

The IPCC, the world's definitive scientific body when it comes to climate change, was awarded the Nobel Peace Prize a decade ago and has been given what may rank as its hardest task yet.

It must not only tell governments what we know about climate change – but how close they have brought us to the edge. And by implication, how much those governments are failing to live up to their goals for the planet, set in the 2015 Paris climate agreement.

1.5 degrees is the most stringent and ambitious goal in that agreement, originally put there at the behest of small island nations and other highly vulnerable countries. But it is increasingly being regarded by all as a key guardrail, as severe climate change effects have been felt in just the past five years – raising concerns about what a little bit more warming would bring.

"Half a degree doesn't sound like much til you put it in the right context," said Durwood Zaelke, president of the Institute for Governance and Sustainable Development. "It's 50 percent more than we have now."

The idea of letting warming approach 2 degrees Celsius increasingly seems disastrous in this context.

Parts of the planet, like the Arctic, have already warmed beyond 1.5 degrees and are seeing alarming changes. Antarctica and Greenland, containing many feet of sea-level rise, are wobbling. Major die-offs have hit coral reefs around the globe, suggesting an irreplaceable planetary feature could soon be lost.

It is universally recognized that the pledges made in Paris would lead to a warming far beyond 1.5 degrees – more like 2.5 or 3 degrees Celsius, or even more. And that was before the United States, the world's second-largest emitter, decided to try to back out.

"The pledges countries made during the Paris climate accord don't get us anywhere close to what we have to do," said Drew Shindell, a climate expert at Duke University and one of the authors of the IPCC report. "They haven't really followed through with actions to reduce their emissions in any way commensurate with what they profess to be aiming for."

The new 1.5°C report will feed into a process called the "Talanoa Dialogue," in which parties to the Paris agreement begin to consider the large gap between what they say they want to achieve and what they are actually doing. The dialogue will unfold in December at an annual United Nations climate meeting in Katowice, Poland.

But it is unclear what concrete commitments may result.

At issue is what scientists call the "carbon budget": because carbon dioxide lives in the atmosphere for so long, there's only a limited amount that can be emitted before it becomes impossible to avoid a given temperature, like 1.5 degrees Celsius. And since the world emits about 41 billion tons of carbon dioxide per year, if the remaining budget is 410 billion tons (for example), then scientists can say we have 10 years until the budget is gone and 1.5°C is locked in.

Unless emissions start to decline – which gives more time. This is why scenarios for holding warming to 1.5 degrees C require rapid and deep changes to how we get energy.

The window may now be as narrow as around 15 years of current emissions, but since we don't know for sure, according to the researchers, that really depends on how much of a margin of error we're willing to give ourselves.

And if we can't cut other gases – such as methane – or if the Arctic permafrost starts emitting large volumes of additional gases, then the budget gets even narrower.

"It would be an enormous challenge to keep warming below a threshold " of 1.5 degrees Celsius, said Shindell, bluntly. "This would be a really enormous lift."

So enormous, he said, that it would require a monumental shift toward decarbonization. By 2030 – barely a decade away – the world's emissions would need to drop by about 40 percent. By the middle of the century, societies would need to have zero net emissions. What might that look like? In part, it would include things such as no more gas-powered vehicles, a phaseout of coal-fired power plants and airplanes running on biofuels, he said.

"It's a drastic change," he said. "These are huge, huge shifts…. This would really be an unprecedented rate and magnitude of change."

And that's just the point – 1.5 degrees is still possible, but only if the world goes through a staggering transformation.

An early draft (leaked and published by the website Climate Home News) suggests that future scenarios of a 1.5°C warming limit would require the massive deployment of technologies to remove carbon dioxide from the air and bury it below the ground. Such technologies do not exist at anything close to the scale that would be required.

"There are now very small number of pathways [to 1.5°C] that don't involve carbon removal," said Jim Skea, chair of the IPCC's Working Group III and a professor at Imperial College London.

It's not clear how scientists can best give the world's governments this message – or to what extent governments are up for hearing it.

An early leaked draft of the report said there was a "very high risk" that the world would warm more than 1.5 degrees. But a later draft, also leaked to Climate Home News, appeared to back off, instead saying that "there is no simple answer to the

question of whether it is feasible to limit warming to 1.5°C…feasibility has multiple dimensions that need to be considered simultaneously and systematically."

None of this language is final. That's what this week in Incheon – intended to get the report ready for an official release on Monday – is all about.

"I think many people would be happy if we were further along than we are," the IPCC's Lynn said Wednesday morning in Incheon. "But in all the approval sessions that I've seen, I've seen five of them now, that has always been the case. It sort of gets there in the end."

Our Comment

Anyone who has ever been involved in the process of decision-making based on consensus – by however small a group – will wonder at the chances of success when "it involves hundreds or even thousands of people"! That their approval sessions "sort of [get] there in the end," might account for the IPCC's winning the Nobel Peace Prize"!

What the representatives at Incheon had going for them was what they *know* about climate change, and a common goal. They were looking for an *authoritative* analysis of the planet's chances "of keeping climate change to a moderate, controllable level." And they were committed to, informing governments not only on the situation, but also on "how close they have brought us to the edge."

Obviously, we can't depend on dialogue alone, and, clearly, we can't depend on governments as they are currently constituted.

Governments, apparently, are more afraid of the power of money and influence, than of "alarming changes" like those in Antarctica and Greenland!

The task has fallen to the rest of us to do what *must* be done to save the planet.

We can start by looking into how well informed *our* representatives went to the Talanoa Dialogue and how conscious they are of the growing demand for responsible policies to address the crisis!

And we can follow up by monitoring our government's response.

The record of governments' response to the issue should frighten us more than the scientific *facts* on climate change!

The people behind governments are in no way willing to *pay* what it will cost to change our exploitative ways. They have too much "invested" in things as they are.

We can *afford* to save the planet.

We *cannot* afford to go on trashing it!

Élan

Author of New IPCC Report Says She Still Has Hope

The REAL News Network, October 11, 2018

Series Content

The IPCC's new report says we could face irreversible consequences of climate change by as soon as 2030, but a coordinating lead author of the report says policymakers, businesses, and individuals can still make big changes to protect our future

Story Transcript

DHARNA NOOR: It's The Real News, I'm Dharna Noor.

A new report from the Intergovernmental Panel on Climate Change says governments, businesses, policy-makers and individuals must take "rapid, far-reaching and unprecedented action in all aspects of society to avoid climate disaster." Three years ago, under the Paris climate accord, countries agreed to aim to limit global warming to 2 degrees Celsius above pre-industrial levels and set 1.5 degrees Celsius as an aspirational target. But this new report says 1.5 degrees of warming could be catastrophic, and we might get there as soon as 2030.

Now joining me to talk about this is one of the contributors to the report, Heleen de Coninck is associate professor in Innovation Studies at the Environmental Science Department at Radboud University's Faculty of Science. She was a coordinating lead author on this special IPCC report. Thanks for coming on today.

HELEEN DE CONINCK: My pleasure.

DHARNA NOOR: So Helen, this report was written at the request of countries that signed 2015's Paris Climate Accord, which again, set 1.5 degrees of warming as a safe target to stay under 2 degrees. Talk about what happens when we hit that 1.5 degrees Celsius, and is the question if or when? Is it an inevitability?

HELEEN DE CONINCK: So, the parties in the Paris Indeed have asked for these reports to answer that question whether they can still make the 1.5 degree targets or limits, and how that would compare to limiting global warming to 2 degrees. The Paris agreement says that we, as a world, should stay well below 2 degrees temperature rise compared to pre-industrial, and strive for 1.5 degree temperature rise. In terms of the difference in impacts, this report really has added lot to the understanding of that. For instance, we know now that under a 2-degree limit, pretty much all coral reefs in the world will just die. Under a 1.5-degree limit, some of them would still be left.

Another example is sea level rise, which is very important for my own country. I'm from the Netherlands, and a large part of the Netherlands is below sea level. So, sea level rise is a big risk. At the end of this century, by the 2100s, sea level rise will be 10 centimeters less under a 1.5-degree scenario than under a two degree scenario. Globally, that would mean that at least 10 million people fewer would be affected by sea level rise, so this is a really significant reduction in the impacts. As for whether it's still possible, the report concludes that it's still possible. We're not geophysically committed to exceeding the 1.5-degree limits. So, that's the good news. This, by the way, includes potential scenarios that would slightly overshoot 1.5 degrees and then go back down, but would be under 1.5 degrees by the end of the century, so by 2100.

The bad news is that it would really take a tremendous effort, pretty much everyone in the world, including every business, every country, every financial institution and every community to help us stay below that target. The issue is that our economic activities are so intertwined with greenhouse gas emissions and energy use, particularly fossil energy use, that it's very difficult to change all those activities at such short notice, as would be required for the one-and-a-half-degree limits. So it's a bit of a mixed message. We need a lot of effort to remain below 1.5 degrees. It's still possible, and if you look at the impacts, it's up for the politicians to decide, of course, but we are basically presenting a case in this IPCC report that it might be worth going for a 1.5 degree targets relative to a 2 degrees target.

DHARNA NOOR: To that point, this report is being called the IPCC's most political report yet, and you are one of the lead authors of the report's chapter on emission control measures. What kinds of measures do policymakers need to take in order to curb emissions?

HELEEN DE CONINCK: Sure. So, my chapter, chapter four, is about strengthening and implementing the global response. So we're assessing which mitigation and adap-

tation options are there, and how feasible they are, and what we could do as a global community to make that happen. It's also important to realize as not just policy makers or politicians that should act. They're definitely one of the groups that should act, but they cannot do it alone. Because if businesses keep on resisting change, then they will have a hard time following things through as well. And it's a very interconnected world that we have now. So what we're saying is, basically we're looking at our measures in four, maybe five big groups. And one set is related to the energy systems transition. So that's everything related to the supply of our energy.

We should very rapidly shift from a predominantly fossil fuel based system to a predominantly renewables based system that is also very efficient with energy. As an example, this means that by 2050, the world would basically not use any coal anymore for electricity generation. At the moment, this is 40 percent of the electricity generation in the world, which is a big change. The second transition that we look at is the land and ecosystems transition, and this relates very much both to the energy system and how we deal with nature and our forests and the emissions that entails. And it relates also to agriculture and how we produce our food. Now, one of the options there is, for instance, we would all eat much less meat. A lot of the surface area now used for agriculture to produce the fodder for our cattle would be freed up to supply, for instance, renewable energy.

Third transition is in industry. It's also a very big sector, which produces all our goods that are also transported around the world to produce, for instance, steel and cement and plastics. And this also will need to go, basically, to almost zero emissions in the next 35 years show. And the fourth one is the urban and infrastructure transition. And we're looking at urban systems as sort of places where you should start with big changes, because a lot of things come together there. And it's not enough just to look at energy use in buildings or energy use in transportation. It all relates to each other. If you plan your city in a way that you can you reduce your transport needs and make your houses more efficient, you could do that in one go through urban planning policies, for instance. So those are sort of the four sets of measures.

And then there's a fifth one which is fairly new, and this is called carbon dioxide removal technologies. These are technologies that make sure that the CO_2 concentration in the atmosphere is reduced. And not just reducing the emissions, so how much are we putting into the atmosphere, but reducing the concentrations of CO_2 in the atmosphere. You can do that, for instance, with large-scale tree plantings, with large-scale forestation, but also by using biomass for producing energy, and then capturing the CO_2 from that by ways of electricity plans and storing it in geological formations in the deep underground. And that way, you would also reduce CO_2 concentrations in the atmosphere. And we'd probably need those removal options in order to lower concentrations and reduce temperatures towards the end of the century if there's a slight overshoot.

DHARNA NOOR: It's interesting, the report deals with what could be called the need for lifestyle changes, but it sounds like you're outlining sort of bigger picture changes that would impact lifestyle changes. But can individual changes really make a difference when it comes to a problem as huge as climate change? Some are saying, if you're concerned about the IPCC's new report, individually eat less meat or individually drive in your car less. Can those sorts of things really make an impact?

HELEEN DE CONINCK: I think absolutely. So I think underlying the existent transitions that I just laid out are all kinds of other processes, including how people decide to live their lives and what lifestyles they'll have. But I also don't think it's fair to place the responsibility on the individual fully. I mean, people can do what they can, but if in their cities there is no bike lanes or there's no urban transport provided, no public transport provided because the cities are planned in such a way that it's basically infeasible or inviable to have public transport, then of course the individual is sort of trapped in a high carbon lifestyle. And I think that's why it's incredibly important for realizing this 1.5°C limit that all actors in the system start collaborating.

So individuals would indicate what are the barriers to that changing lifestyles, governments and companies should respond by enabling them to do better, basically, and to abandon their high carbon and find the way to lead a low carbon lifestyle. The same goes for meat. I mean, you need to have your nutrition, and if you're low carbon products in the supermarkets are more expensive or harder to get by or just don't taste as good as meat based products or animal waste products, then it's still very hard for individuals to make that difference. And it's not really made very easy for them. So it has to be a collaboration between the different actors, and they have to work in synergy. And that's one of the biggest challenges that we also lay out in the chapter that I contributed to.

DHARNA NOOR: You also mentioned that the report calls for the use of carbon capture, or carbon capture and storage. But critics of carbon capture and storage, or CCS, have said that the method is high-risk, it's very expensive, and that it could actually increase emissions due to the greater demand for things like coal. Could you respond to some of these critiques and talk about why, despite them, you're advocating for CCS?

HELEEN DE CONINCK: So I think in the report we do have a few scenarios that don't use CCS at all. They would demand very, very stringent lifestyle changes early on. Otherwise, you just need it in order to bring emissions down. CCS, carbon capture and storage, has been on the agenda since maybe 15 years or so and hasn't really taken off so far. There's about 40 megatons of CO_2 capture and storage globally. Some projects suffer from public resistance, indeed related to the risks of geological storage, some from just poor economics, because it's more expensive than coal fired or any kind of plan without CCS. I think governments have the role to get the economics right, by rebates or carbon pricing or subsidies or another standard.

In terms of the risks of geological storage, if you listen to the experts on this, they say that these risks are fully manageable, and it can be done safely if regulated well and if the right reservoirs are selected for geological storage. As for the rise in coal use if we use carbon capture and storage, I think that would be true if you would have limited the mitigation of emissions elsewhere. But if you would go to basically coal-free electricity and industrial system by 2050, you would use renewable electricity to capture your CO_2, so it would not be such an issue anymore. Now, I see also in the scenarios, that we would be using carbon capture and storage basically for three reasons.

One is to reduce the emissions from industry, which are otherwise very hard to reduce. For instance, cement has, just inherent in its process, a CO_2 emission that cannot be replaced by anything else. So you would have to do something with that CO_2. The second reason is to use it on gas-fired power plants, and that's also

what the report outlines. And this gas-fired electricity you would still need in order to balance the intermittent renewable sources, which sometimes depend on the weather or whether it's dark or light outside. And the third reason is for carbon dioxide removal, as I outlined earlier, in combination with either bioenergy or chemical capture of CO_2 directly from the atmosphere. I don't think, at least that's not why the pathways are saying, that CCS would be used a lot on coal fired electricity, because as some of the critics are saying as well, the emissions basically would still be too high for a 1.5 degree pathway, and coal would be surpassed in attractiveness by other electricity options.

DHARNA NOOR: I actually recently spoke with climate scientist, Michael Mann, he's the author of *The Hockey Stick and the Climate Wars*, about this report. Let's take a listen to a clip from that interview.

MICHAEL MANN: That the IPCC made a number of extremely conservative, I would argue overly conservative, decisions in how they measure the warming that has already happened. And by doing that, they underestimate how close we are to these 1.5 degree Celsius and 2 degree Celsius thresholds. And they overestimate how much carbon we have left to burn. If you look, for example, at the northern hemisphere, which is where most of us live, and you ask the question, "When do we cross the 2 degree Celsius warming threshold for the northern hemisphere if we continue with business as usual, burning of fossil fuels?" I showed in an article several years ago, in Scientific American, we cross that threshold before 2040, in the late 2030s.

DHARNA NOOR: What's your response to Michael Mann saying that this report is too conservative, that it understates the possibilities of climate disaster?

HELEEN DE CONINCK: Well first of all, I deeply respect Michael Mann and I don't even dare to take issue with him on this topic, which is much more an issue of the mind. But the way I understand we did this in the IPCC report, is by looking at the real temperature developments so far and look at what has actually been the warming up to now and then since and derived the climate sensitivity to CO_2 and other greenhouse gases from that relation. And that's actually a novelty, which was basically not done yet in earlier IPCC reports as far as I know, not in the other literature. It's based on a few very recent papers, and we had big debate within the IPCC author team, like what sort of approach should we take and decide for this, because this is the latest state of literature.

But I really should emphasize that these temperature predictions, whichever you take, are surrounded by huge uncertainties. And even the 1.5 degree pathways that you will see in this IPCC report, give you between 50 and 66 percent chance of staying below 1.5°C at the end of the century. So if you want 100 percent chance, that basically means that we should reduce emissions very, very quickly, and in that sense Professor Mann is certainly right. I think it depends a bit on which kind of probability you take for the 1.5 degrees, and also what type of temperature and climate sensitivity you would assume for this. I hope this clarifies.

DHARNA NOOR: Sure. And again, in the report you wrote, by 2050 the world's net CO_2 emissions should be zero. Talk a little bit more about the political and economic implications of this. This would essentially require decarbonizing every sector of the global economy. And here in the US, Trump has cast doubt on this report. He said, "I can give you reports that are fabulous and I can give you reports that aren't so good." Just last year, he pulled the US out of the Paris climate agreement. So given this political climate, you could say, is it even possible to try to curb climate change through emissions reduction?

HELEEN DE CONINCK: So of course, the political situation varies over the years, and the IPCC report looks at things on a global level and doesn't go into the politics of individual countries. We just trying to outline the evidence that we see and also try to outline what enabling conditions we see for making the 1.5-degree limits. And as for whether is possible from a political point of view, we have the sense that what we have looks at, because it's based on literature, we have to rely on the peer-reviewed literature for this. What we see at the moment is that some countries are really urging ahead on this. Some countries have adopted greenhouse gas emission reduction targets which are almost in line with net zero and in 2050, and those countries tend to be thriving, and might be the technological leaders in the decades to come because they're really investing in it.

There's also literature that says that even without climate targets, you would see a huge reduction in renewable energy supply costs which could even be so much that it would price other fossil fuel options out of the markets. That would help, if that scenario would play out. And we're not sure, I mean the IPCC doesn't have a crystal ball. Then it would actually become in countries' interests to invest in the new technologies rather than the old fossil ones. It would still help to have climate policy, of course, which would speed things up, but it's potentially not even a pure necessity.

DHARNA NOOR: So Heleen, given that you did say that there are countries, governments, nations, who are setting the stage for climate leadership and who are implementing the right kinds of policies, do you have hope that we could stay under that 1.5 degrees Celsius, could stay under that 2 degrees Celsius, that we could avoid the kinds of climate disaster that are outlined in the IPCC's latest report?

HELEEN DE CONINCK: Personally, I think the IPCC report and the results therein, they give me hope, yes. I think it shows that we can still change our future, and I think it also shows that some cities and some regions and even countries are at least pretty much on track to give a good example to the rest of the world. So personally, I think this is a hopeful report. And of course, there are many barriers to overcome, there's many issues that we need to deal with, but I just hope that this report gives some tools and some actionable information for policymakers to start dealing with those big questions that are coming their way.

I have heard a lot of their responses to this report, and some of them are very positive, and also basically leads people and communities and countries to get into the action, to get into gear. Of course, there are also always responses that indicate, "No, we're not going to change things." It's part of the game that will eventually have to play in order to get further along. But we will really see, I think, more depends on what will happen at COP24, in the next climate conference where an internal dialogue, which is a dialogue between the parties of the Paris Agreement about a way forward. I think that will give us a lot of information about how this report will be taken forward and whether the 1.5 degree target will remain in sight.

DHARNA NOOR: Well, as we continue to see how individuals and governments and policy makers respond to this report, and leading up to COP24 in Poland, we would love to talk to you again. So please stay in the loop, and thanks for coming on today.

HELEEN DE CONINCK: My pleasure.

DHARNA NOOR: And thank you for joining us on The Real News Network.

Our Comment

When such an extensive and reputable report as this acknowledges that "we could face irreversible consequences of climate change by as soon as 2030," what could possibly justify risking that to prolong what is already a failed political-economic system that is itself on life support?!

However comfortable some of us may still feel about our political economy, how can *we* – especially those among us who have progeny who will bear the brunt of what *we* choose to *do* today – live with a selfish, irresponsible decision to carry on and hope for the best?! Bad enough that we have let it come to this.

We *owe* them better than that!

When, with all she must know, the author of the report can have hope, we can hardly use hopelessness as an excuse to just "go with the flow." This is especially true, given what, today, we have going for us.

1. Not everyone has ignored the crisis! People globally have been "fighting the

It's Your Post Office. Keep It.

By Julie Bates, Otherwords.org. October 8, 2018 https://inequality.org/research/your-post-office/?source=newsletter

Take it from a postal worker: If the US sells its public mail service, consumers will lose big time

This summer, the White House proposed selling off the United States Postal Service to private corporations.

As a 22-year postal worker, I'll be joining my coworkers, our families, and neighbors across the country on October 8, rallying in support of our public Postal Service. Our message to those who want to sell off our national treasure to the highest bidder: US mail is not for sale.

Many may think that in the internet age, the Postal Service has outlived its usefulness, and that the decline of letter mail is the cause of the Postal Service's financial troubles. But the Postal Service actually turns a profit on its deliveries.

The truth is that the USPS's problems were largely created by Congress. A bipartisan 2006 law, the *Postal Accountability and Enhancement Act*, law mandated that the USPS pre-fund future retiree health benefits *75 years* into the future. That means we have to fund retirement benefits for postal employees who *haven't even been born yet.*

It's a crushing burden that no other agency or company – public or private – is required to meet, or could even survive.

The mandate drained $5.5 billion a year out of Postal Service funds and accounts for more than 90 percent of its losses. In fact, if it weren't for this manufactured pre-funding crisis, the USPS would have reported profits in four of the last five years – all without receiving a dime of taxpayer money.

While it's true that the way people use the mail is changing, the Postal Service is still a vital part of the country's infrastructure.

Package volumes have exploded with the e-commerce boom. Companies as large as Amazon and as small as a one-room Etsy vendor rely on the Postal Service. USPS delivers 30 percent of FedEx Ground packages and 40 percent of all of Amazon's many shipments. Vitally, the USPS is at the heart of a $1.7 trillion mailing industry that employs more than 7.5 million people.

The people of this country love the Postal Service. A recent Pew survey showed 88 percent of Americans view the USPS favorably.

One reason for this success is our commitment to serve 157 million homes and businesses six – and sometimes seven – days per week at affordable, uniform prices. Our public Postal Service reaches everyone, everywhere, no matter one's health, wealth, age, or race. We should never lose sight that it's veterans, seniors, and people in rural areas who rely most on the Postal Service for essential goods and life-saving medications.

What could the public expect if the Postal Service were sold to off to private interests? Higher prices, slower delivery, and an end to universal, uniform, and affordable service to every corner of the country.

And who would pay the price? All of us.

Postal services that have been privatized abroad provide a cautionary tale: In the UK, postage is up nearly 80 percent since 2007. The privatized Portuguese post has closed nearly a third of their post offices.

Our postal system is older than the country itself. It was a vital component of our country's public good then. It still is today. And along the way, one fundamental fact has always been true: Our postal system has never belonged to any president, any political party, or any company. It's belonged to the people of this country.

Postal workers are rallying to urge lawmakers to stop the selling off of the public postal service for private profit – and to remind everyone the Postal Service is yours. Keep it.

Julie Bates is a 22-year postal worker at the Des Moines, Iowa, post office.

Our Comment

The *Postal Accountability and Enhancement Act* is yet another example of a creative move designed to make something regressive *seem* responsible and progressive. How could *accountability* and *enhancement* be anything but good?!

It depends entirely on how one defines accountability and enhancement. When those terms translate into "a crushing burden that no other agency or company – public or private – is required to meet or even survive" – and problems thus created are then used as an excuse to privatize a valuable and profitable public service, the terms "accountable," and "enhanced" become suspect.

Julie Bates' analysis is a timely cautionary tale for Canadians undergoing a postal strike at a particularly busy time of the year.

Canada Post has been under siege for some time. Aside from the neoliberal 'principles' of union-busting and privatization, might another incentive for that be its potential to serve as a public banking service?

The right to strike is a right denied when the government can legislate to end a strike, after letting it proceed long enough to impoverish workers and incite public impatience with strikers. And, why negotiate when you know that if you stall long enough, the government will save you the trouble?

We are not victims of postal workers 'holding us up for ransom'; we are victims of an increasingly unfair system that fosters cooperative actions by the corporate sector, but comes down hard on a workers' "collective."

We owe it to *ourselves* to explore this bias, and to support workers struggling for social justice in the work place.

(This point is developed in Harry Glasbeek's recently published, *Capitalism: A Crime Story.*)

Élan

good fight" to honour and protect the environment that, to begin with, belongs in *trust* to us all. These guardians have become outstanding resources that we can turn to for help in contributing our share of *what must be done.*

2. We have been made aware, as never before, of the folly in ignoring the signs – that are becoming more and more alarming – that the threat is *real!*

3. We have been updated on the record of our costly procrastination.

4. The "parties in Paris" have "requested these reports."

5. The report has provided new and specific information, like that of the difference to coral reefs between a 2-degree limit and a 1.5-degree limit.

6. The assurance that a 1.5-degree limit is still possible, coming from them, is encouraging.

7. The "tremendous effort" that saving the planet will take, reminds me of the odds against our winning World War II and of the hasty response to that challenge!

8. It's amazing what *can* be done when human beings recognize their interdependence and commit to a common cause.

9. If Heleen De Coninck is correct and "it's up to the politicians to decide," our chances are dim. But the politicians, in the end, depend on us! We put them in charge, one way or another. And we *do* outnumber them. Resources today, enable us to understand power and how better to deal with it.

10. As De Coninck points out, there are options and strategies that can improve our chances, and that are being considered – even already being acted upon.

11. The emphasis placed on synergy is an incentive to maximize individual contributions but to work also on other levels to support, reinforcing collaboration.

12. The recognition that some projects suffer "from just poor economics" is a welcome insight.

13. The response to the charge that "the report is too conservative" – that reference to the role of very recent papers – enhances her case for hope, yet also stresses the need to act "very, very quickly."

14. That some countries are "really surging ahead on this" and "thriving" coupled with the fillip that those countries "might be the technological leaders in the decades to come because they're really investing in it," as a result, is heartening.

15. The potential for renewable energy's "[pricing] other fossil fuel options out of the

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Public Ownership for Energy Democracy

By Johanna Bozuwa, Environment, Public Goods, socialistproject.ca, October 2, 2018

Opportunities for Public-run Energy Utilities to Revolutionize Generation and the Grit

Energy democracy – a new idea from the ranks of community organizers, labour, and renewable energy advocates who see our current energy system as broken and destructive – seeks to take on the political and economic change needed to tackle the energy transition holistically. A democratic energy system powered by renewables (*and free of fossil fuels*) would distribute wealth, power, and decision-making equitably. But, practically speaking: how can we redesign our energy system with energy democracy at its core?

A first step is to stop exploiting fossil fuel reserves, as Quantitative Easing for the Planet proposes. Another imperative is to shift ownership of the generation, transportation, and distribution of energy. Restructuring and democratizing our electric systems through public ownership – whether government or cooperative – can help transition the United States away from fossil fuel production and toward a renewable future built with communities in mind instead of profits.[1]

Public ownership of utilities can accelerate the renewable energy transition at the scale needed to meet our closing climate deadline for action. It's simply too late to provide piecemeal incentives and then wait expectantly for a market controlled by fossil fuel interests to voluntarily deploy more renewables. Energy utilities' control over so much of the energy supply chain make these entities a strategic platform for bringing energy democracy tactics to scale. Harnessing energy utilities for the people could fuel projects from expansive low-income housing efficiency projects (such as PUSH Buffalo),[2] to community solar programs (such as the solar gardens of Cooperative Energy Futures in Minnesota),[3] to stopping gas pipelines (such as the resistance to Dominion Power's Mountain Valley Pipeline in Virginia).[4]

Public ownership of energy is nothing new in the United States. American communities have exercised the right to own and operate a municipal utility since the 1880s. In the 1930s, a federal loan fund for rural electrification started, and farmers ignored by for-profit utilities banded together to create rural electric cooperatives to serve their communities.[5] Publicly-owned utilities now serve cities as small as Hammond, Wisconsin and as big as Los Angeles and Nashville. In Nebraska, *only* publicly-owned utilities are allowed to operate.[6] Still, some of these utilities lack the ample democratic oversight or access to investment needed to become effective envoys for energy democracy.

Centering Public Ownership on Energy Democracy. Public ownership is poised to subvert the current energy paradigm, but the institution must first transform to center on a rapid transition to renewables, deep democratic governance, and equitable distribution of wealth – both embodying and promoting energy democracy.

Electricity generation makes up about 40 percent of all energy use and currently relies heavily on fossil fuels. Both investor-owned and publicly-owned utilities have vested interests in fossil fuels. For example, rural electric cooperatives still rely on coal, oil, and gas for 90 percent of their generation.[7] They have also similarly made dubious decisions on where to dump toxic byproducts from the extractive process, like coal ash.[8] However, publicly-owned utilities don't have the same motivations and incentives to continually expand energy production since they don't have to generate a profit for shareholders. This freedom gives them more flexibility to respond to their customer-owners' needs, as their charters require (either directly or through elected representatives). Therefore, a publicly-owned utility is more likely to yield to public pressure to eliminate fossil fuels than investor-owned utilities. Furthermore, if a publicly-owned utility shift came at the same time as a sweeping buyout of the fossil fuel industry (see "QE for the Planet"), it could help catalyze the shift.

Given their purpose and lack of any imperative for growth, publicly-owned utilities could be major players in the rapid expansion of decentralized energy – from individual solar to community wind farms. What's more, renewable-energy projects financed by local municipal utilities could be deployed on a larger scale since municipal bonds afford them cheaper access to

capital than companies or individuals enjoy. Tax-exempt municipal bonds have financed $96 billion in new public utility investments over the past decade. By involving the community in the process of renewable energy projects and sourcing related jobs locally, utility-financed projects could build community wealth. In other words, economic development would localize investment and provide broad-based ownership. Considering publicly owned utilities' sunk investments in infrastructure like natural gas plants, transitioning toward a renewable energy system will still take time and require active community participation, investments to alleviate the burden of stranded assets, and increased investments in renewables.

Democratic Governance. Right now oligarchic for-profit utilities make decisions about most of the power grid, based on their vested interest in the energy status quo and the need for shareholder profits – not the common good. Frequently, such decisions are made far from the communities where their repercussions play out.

Regulators across the country also bend to the powerful influence of the wealthy industry they regulate. For instance, a burst gas pipeline in California in 2010 exposed an all-too snug relationship that allowed lax implementation of safety standards between California for-profit utility, PG&E, and its regulator – with devastating results both for neighborhoods along the spill's path and for climate generally.[9] In Texas, the Association of Electric Companies of Texas met privately with state regulators to revise pollution permits that nullified the *Clean Air Act* for their coal plants. Documents later revealed that regulators implemented new environmentally devastating regulation lifted verbatim from trade group proposals. This type of corporate capture has left people feeling unheard and unprotected.

In contrast, community members served by a publicly-owned utility act as owners and decision makers. Instead of controlling large swaths of the country that may not even be contiguous, publicly-owned utilities are rooted to place – owned and operated by their community. Although publicly-owned utilities reflect democratic principles, in practice some still suffer from a lack of community representation. For instance, a 2016 survey of over 300 rural electric cooperatives in Southern states showed that only 90 of more than 3,000 board members were Black residents. Structural problems like racism and sexism, in turn, can destroy community spirit and create power imbalances. In contrast, reorienting utilities toward democratic governance for the 21st century would redistribute power by giving communities more energy decision-making opportunities.

One such mechanism is the multi-stakeholder board where elected workers, community members, and local officials make decisions together. Switched On London, a campaign for a municipal utility, proposes a governing Board of Directors composed of one third London public officials, one third energy company employees elected by the company workforce, and one third ordinary London residents – regardless of citizenship – elected by peers. Half of all positions must be held by women.

Participation should go beyond representative systems of democracy. Opportunities for direct engagement should span such institutions as public forums, neighborhood assemblies, and online engagement. For example, the municipal utility in Cadiz, Spain set up a bimonthly roundtable where it invites environmental advocates, community members, experts, and businesses to discuss milestones toward 100 percent renewable energy.[10]

To substantiate opportunities for direct engagement and rid the publicly-owned system of vestigial self-serving interests or elitism, utilities need to make decision-making and operations transparent and accessible. Since the energy sector tends to be technocratic, eliminating communication barriers and using straightforward language are crucial for equipping community members to engage in decision making. Accessible information is not enough though. Communities will have to grapple with their specific barriers to participation – from lack of accessible public forums to exclusive decision-making structures. For instance, attending public forums during the day can be highly prohibitive to those community members who work in inflexible circumstances.

Equitable Distribution of Wealth. Currently, low-income neighborhoods and communities of color without political or economic influence shoulder the burden of energy infrastructures' negative consequences and pay more for energy because their housing stock is old and inefficient. These people and places will be hurt the most by climate change's extreme weather events. To make such inequitable burdens things of the past, we need to de-consolidate power, make extraction unprofitable, and redistribute wealth and ownership in the energy economy while providing a just transition for workers in the current energy industry. Investor-owned utilities' prime motivator is consolidating wealth as a for-profit company, whereas those owned by the public are designed to serve the public. Below describes some of the important ways to distribute wealth equitably in a new energy era, investigating how publicly-owned utilities may already give back to their communities as well as additional strategies to better deliver.

Renewables Ownership. Although publicly-owned utilities don't have to worry about turning profits, like for-profits, they historically rely on centralized energy systems and therefore are reticent to have their investments eroded by self-sufficiency through decentralized renewable energy use. In contrast, a strategy based on energy democracy should deliver renewable energy locally to the extent possible and insist on broad ownership – both individual or community-owned decentralized renewable energy and larger, utility-scale projects run by and within the municipality. Publicly-owned utilities will need to identify ways to balance centralized energy with a more decentralized grid.

When renewable energy is kept local, the economic returns to the community grow apace. Every megawatt of locally installed solar can add $2.5 million and 20 construction jobs to the local economy. Locally *owned* projects can redirect an additional $5.4 million of electricity spending locally over the project's 25-year lifetime. More particularly, the utility should get low-income residents' and communities of color's input and participation in rate design, financing, local job training and hiring, capacity-building, and the like for renewables projects. These energy consumers have customarily had the most to gain from, but the least access to, energy ownership's benefits. Strategies could also involve anchor institutions – such large-scale nonprofit entities as hospitals and universities, which are both big energy users and major recipients of substantial public resources. This approach would meet these institutions' energy needs, build jobs, and help finance and provide space for community renewable projects.[11]

Distribution of Wealth. Investor-owned utilities put the wealth of their stockholders and executives first. The CEO of FirstEnergy, for instance, makes 131 times the average lineman's salary.[12] In contrast, money made by a publicly-owned utility

doesn't make the rich richer. Revenues are instead reinvested in such public goods as lowered costs and increased service quality for consumers, in efficiency upgrades for low-income households, or (for municipally-owned) in local schools and bridges through the city's General Fund. Publicly-owned utilities contributed around 6 percent of their revenues to local government in 2016, according to an American Public Power Association study – 27 percent more than investor-owned utilities often paid in taxes. Some such city-bound revenues could be taken to the next level and even fund, say, a city Green Bank that could in turn support energy-efficiency upgrades for low-income housing or finance decentralized renewable energy within the community.

Energy Poverty. In some areas of the United States, low-income households pay around 35 percent of their income for energy, forcing painful choices between a heated home and food on the table. Multiple utilities have become known for increasing their rates to make more profits.[13] Overall, publicly-owned energy has been proven to be cheaper than for-profit power across the United States. While a positive trend, however, lower rates don't always mean less energy poverty. Instead, fair rates should come alongside robust and low-cost opportunities for energy efficiency projects and renewable ownership opportunities to cut the energy burden, disproportionately felt by Black or Latino residents. A public utility could also cap the percentage of anyone's income spent on their bills and eliminate energy cutoffs altogether. For example, Ohio, which has the nation's largest and oldest Percentage Income Payment Plan (PIPP), limits any one person's bill to 10 percent of their household income. Access to energy is a human right, and nobody should be forced to choose between risking heat stroke or hypothermia or staying hungry.

A Just Transition. In the fight against fossil fuel infrastructure, unions and utilities have often been on the same side. Unions fear that their members will be left jobless if the industry declines. In fact, they – not executives and shareholders – *will* bear the brunt if strategies are not implemented now to make the transition ahead work for them. Although imperiled by a mid-2018 Supreme Court decision making unions' "agency fees" optional for public union members, the tradition of stronger unionization within the public sector[14] opens the possibility of working with unions to phase out current fossil fuel jobs and provide better, long term jobs in the reinvented energy sector. Adding participatory structures that give workers' more say can ensure that workers shape the transition, not get left behind.

Job creation is also on the energy democracy horizon. The massive investment needed for a new energy system could create huge numbers of jobs over the short and long terms. Publicly-owned utilities should establish robust labour practices as major players building and installing renewable energy and set the standard for job quality. They can also bridge the inequality gap by training and empowering the low-income and racial minority populations most harmed by climate impacts and underemployment.

A Two-pronged Strategy. A two-pronged strategy for public ownership could simultaneously harness the opportunity of public utilities to champion and accelerate energy democracy, while also taking for-profit utilities into community hands to reorient their focus toward the public good.

Today, publicly-owned, democratically governed electrical utilities serve 28 percent of all US customers.[15] More agile and accountable, communities have more leverage to prompt wider shifts toward equitable renewables at these municipal utilities and rural electric cooperatives faster than what it possible with investor-owned utilities. To do so means transforming the institutions so they better deliver on the values of energy democracy – such as better democratic procedures and equitable access to services.

A vibrant movement is already under way to reshape these publicly-owned energy utilities so that they operate for the people, by the people. Groups like Nebraskans for Solar have campaigned hard to shift the largest utility in Nebraska's publicly-owned electricity system toward larger renewable uptake. Running campaigns on green platforms, community organizers ousted incumbents, put teeth in sustainability directives, and, by tapping local wind farms, renewable energy is forecasted to provide over 40 percent of total use by 2019.[16] One Voice Electric Cooperative Leadership (ECLI) in Mississippi has worked for greater participatory democracy in rural electric cooperatives, supporting Southern Black and minority owner-members in historically racially segregated cooperatives and reversing miseducation.

At the same time, through municipalization we need to take back those large swaths of our energy system captured by investor-owned utilities. These for-profits have employed many tactics to derail municipalization campaigns, particularly by discrediting publicly-owned power as inefficient or costly and spending millions of dollars to bankroll anti-municipalization efforts. Often, these scare tactics lack any factual basis. For instance, publicly-owned utilities consistently provide lower – not higher, as claimed – rates today than their for-profit counterparts.

This onslaught can be beaten back. Xcel Energy spent $1.7 million in local Boulder elections to stop the city's energy-municipalization campaign between 2011 and 2013 – ten times what citizen advocates spent.[17] Even with all that cash, Xcel Energy is losing the local political battle, and Boulder has a clear path toward municipalization. A small but growing movement is fighting these utility Goliaths for public ownership.[18] In the process of ousting their unresponsive, and destructive, for-profit utility, communities can design their utility from the ground up with energy democracy as the taproot.

Conclusion: Realizing Public Ownership's Full Potential. Public ownership could usher in a foundational part of the next energy system and support energy democracy at a large scale in the United States through decentralized renewable energy adoption, deep democracy, and re-distributed wealth. The power we already have could be better leveraged, public ownership of utilities could be expanded, and our energy future could be removed from for-profit hands. Energy generation and distribution are key pressure points in wresting control of energy supplies from fossil fuels and backing renewables – and public ownership could make that transition a reality.

This article first published on the Thenextsystem.org website.

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Our Comment

The trouble with brinkmanship is the difficulty in knowing when to stop.

Our chances of pulling out of environmental brinkmanship might improve enormously were we to replace private owners and their priorities with public owners and their priorities.

Mainstream economics is not attracted to a holistic approach. It rejects from its sphere of responsibility, what it labels "externalities." The environment, it would seem falls into the latter category.

The "ranks of government organizers, labour, and renewable energy advocates" recognize the potential for "[distributing] wealth, power, and decision-making equitably" through a democratic energy system, and can appreciate the critical need for energy transition *now*. They are able to put communities and environmental preservation ahead of profits. Public ownership of utilities can thus *free* decision-making to pursue positive alternative goals like solar programs, and end destructive projects like pipelines.

The massive bailout of 2008 to those responsible for the meltdown, exposed the false argument against the possibility of government-created money, and more than justified the policy of "QE for the Planet."

Direct involvement in meaningful opportunities to participate in decision-making would do much to encourage and empower citizens to function in a democracy. Transparent and accessible decision-making would hold policymaking and its execution responsible to an unprecedented degree.

Special attention must be paid to those who must bear the cost of change. Where it will cost workers their jobs, or local economies will suffer, appropriate alternatives must be democratically determined.

This is a particularly acute need, given, especially, "the predicted end of work," and reflected in, for example, changes in education.

This article reflects a vastly different paradigm from the one that has inspired the neoliberal domination of the past four to five decades.

It inspires *hope*, and invites involvement.

Thank you, Johanna Bozuwa.

Élan

How Big Does the Fire Need to Be?

By J. D. Alt, ERA Review, v. 10, n. 6, November-December 2018

I have written about this before, but it bears repeating now – and perhaps it bears repeating every week until somebody with more leverage than me picks the message up and carries it a step further: The USA and the rest of the world have the resources needed to limit and mitigate the vast damage and dislocations that climate-change is now beginning to impose. The "resources" I'm referring to are not dollars. They are materiel, labour and human ingenuity. The only question is how and when we'll stop simply raising warning flags and marshal those real resources to take real action against the growing challenges.

To date, virtually nothing concrete has been done, or even started. The reason is because – to date – we have insisted on imagining that the "money" needed to pay for serious planning and to begin real actions must come, directly or indirectly, from tax-payer's pockets. Virtually by definition, this means the "money" is not available – nor, we should admit, will it ever be. Therefore, since we insist on believing that this is where the money must come from, we cannot even begin. There are a multitude of scientists and informed advocates who are now sounding alarm bells about what's coming down the road, but not a single one of them, unfortunately, can tell an audience how their local, state, or national governments are going to pay for the actions that need to be planned and implemented. Until that changes, we are like the proverbial deer frozen in the headlights of an on-coming tractor-trailer.

Fortunately, history has shown us how to get unfrozen. History has shown us that, when necessary, we can easily imagine a money-reality different than what we habitually insist is true: that money can be newly "created" to buy whatever is needed – labour, materiel, human ingenuity – to undertake and accomplish something we all recognize needs to be done for our collective benefit. Whether we "see" this alternative money-reality simply depends, apparently, on how big the fire is.

The history lesson that I'm specifically referring to is America's mobilization out of the Great Depression and into World War II. As documented in the books *American Default*, by Sebastian Edwards, and *A Call to Arms*, by Maury Klein, in 1933 America was facing its own frozen-in-the-headlights-how-can-we-pay-for-it predicament: the economy then had essentially collapsed into the Great Depression. The banking system was in a death-spiral as panicking families and businesses were withdrawing their deposits for cash – then redeeming their cash for the gold the dollars promised, forcing the banks into insolvency. Family savings had been wiped out, farmers had abandoned their land, businesses closed their doors, a fourth of the working population lost their jobs, and breadlines formed in every major city.

At the same time, wild-fires of armed fas-

cism were destabilizing Europe and southeast Asia. Hitler gained dictatorial control of Germany and soon began mobilizing and arming the war machine of the Third Reich. Paralyzed by its myopic political insistence on maintaining the "sound-money" (gold backed) foundations of the US monetary system – even though it had rendered the system itself virtually useless – the US was ill-prepared, either to climb out of the Depression or to defend itself against the growing conflagrations of fascism.

Half the US army in 1933 could be seated in Chicago's Soldier Field stadium – with the other half standing at attention on the football field. The US Navy consisted of a few hundred leftover World War I rustheaps, mostly in mothballs. As Germany's Luftwaffe began demonstrating its newly minted warplanes, the US Air Force did not even exist. Nor did the currency that would be necessary build it: Where could the dollars possibly come from when America's families had lost their savings, when America's businesses had closed their doors, when America's banks had declared insolvency? Sell War Bonds? Who had the dollars to buy them? Declare an income tax? Who had the income to pay it?

The American mobilization – and the transformation of the understanding of money – began with the election of Franklin Roosevelt. Almost immediately, the federal government began to spend money (that no one thought existed) to pay US citizens to undertake and accomplish what needed to be done. Here is a brief, but astonishing, list (annotated from the website *The Living New Deal*) of the concrete actions that were paid for in US dollars during the first year of Roosevelt's presidency:

March 4, 1933: Franklin Roosevelt is sworn in as President.

March 31, 1933: The Civilian Conservation Corps (CCC) is created by the *Emergency Conservation Work Act*, putting unemployed young men to work in the nation's forests and parks.

May 12, 1933: The Federal Emergency Relief Administration (FERA) is created, via the *Federal Emergency Relief Act* of 1933, to provide work and cash relief for Americans struggling to get through the Great Depression.

May 18, 1933: The Tennessee Valley Authority (TVA) is created with the passage of the *Tennessee Valley Authority Act* to provide affordable power and flood control, which it still does to this day.

June 13, 1933: President Roosevelt signs the *Home Owners' Loan Act* of 1933. The law assists mortgage lenders and individual home owners by issuing bonds and loans for troubled mortgages, back taxes, home owners' insurance, and necessary home repairs.

June 16, 1933: President Roosevelt signs the *Farm Credit Act*, making credit more accessible to farmers, and with fairer terms than private sector lending (e.g., lower interest rates).

June 16, 1933: President Roosevelt creates the Federal Emergency Administration of Public Works, which eventually becomes known as the Public Works Administration (PWA). During the next 10 years the PWA contributes billions of dollars towards tens of thousands of infrastructure projects all across the nation.

June 16, 1933: With Executive Order No. 6174, President Roosevelt authorizes up to $238 million in Public Works Administration (PWA) funds for the Navy. From these funds, 32 naval vessels are built.

October 23, 1933: The Army Corps of Engineers begins the construction of the Fort Peck Dam, one of the many large Corps projects made possible with New Deal funding.

November 9, 1933: The Civil Works Administration (CWA) is created with Executive Order No. 6420B, under the power granted to President Roosevelt by the *National Industrial Recovery Act*. By January 1934, more than 4 million formerly-jobless Americans are employed by the CWA. to build 44,000 miles of new roads, install 1,000 miles of new water mains, construct or improve 4,000 schools, and much more.

December 8, 1933: The Public Works of Art Project (PWAP) is created by an allocation of funds from the Civil Works Administration. Unemployed artists are hired to create works of art for public buildings and parks. They will create nearly 16,000 works of art.

Where did the money come from to make all this happen? Were they tax dollars collected from the American people? Were they dollars borrowed from the banking industry and titans of finance? No. They were dollars issued by the federal government out of thin air – fiat dollars. As described by President Roosevelt's Secretary of the Treasury, William H. Woodin, the new dollars were "money that looked like money." And so, as demonstrated by what the spending of it accomplished, it was money. (What Woodin meant by this was that the "Federal Reserve Bank Notes" which the central bank was authorized to issue – as needed – by the *Emergency Banking Act* of 1933 looked exactly like the old "Federal Reserve Notes" they replaced, except for one tiny detail: they could not be redeemed for gold.)

This course of action was vehemently opposed by certain interests and forces outraged at the idea of having to trade their gold for fiat currency. They did everything in their power to shut down Roosevelt's presidency and his gradual and experimental shifts toward a fiat money system. From the perspective of the financial titans – who were, in one form or another, creditors – being repaid in gold was the only thing of importance. The country could be damned. Roosevelt called them out in a speech a few days before he was elected, in a landslide, to his second term as President: "We had to struggle with the old enemies of peace – business and financial monopoly, speculation, reckless banking, class antagonism, sectionalism, and war profiteering. They had begun to consider the Government of the United States as a mere appendage to their own affairs. And we know now that Government by organized money is just as dangerous as Government by an organized mob. Never before in all our history have these forces been so united against one candidate as they stand today. They are unanimous in their hate for me, and I welcome their hatred."

By 1941, fiat money – and all the things it had paid American's to accomplish – had begun to pull the country out of the abyss. And just in time. For it turned out the New Deal had only been a warm-up exercise in the creative use of sovereign money to accomplish collective goals. Europe was in the flames of war. Germany was threatening England from a French country-side it had already invaded and occupied – and was stalking American shipping off the US Eastern seaboard with its submarine "wolfpacks." Then December 7 happened.

Over the next four years, miraculously, America built – and paid for with fiat money – the largest and most technologically advanced war machine that had ever existed on Earth. The scale of the spending was staggering. The most astonishing thing is what the unprecedented spending accomplished in the long run: it transformed an entire society to confront a new reality and created, for all practical purposes, a new "America" to thrive in that reality. The American people had "paid themselves" – through the fiat monetary actions of their sovereign government – to invent an array of new technologies and apparatuses origi-

nally conceived for waging war, but which, after the war, were clearly seen to have useful applications to peaceful life as well – and they had paid themselves to build a great many factories, research and production facilities capable of adapting and producing these useful things to civilian life – and they had paid themselves to train a very large workforce of engineers, technicians and skilled workers who knew how to make it all work. This was a powerful economic brew – and it was spiced by the fact that the returning GIs were getting paid to go to college to explore how to make the whole thing run even better. America never looked back. Until now.

We could ask what has happened. We could ask why, today, we cannot seem to marshal enough resources to rebuild the Puerto Rican electric grid and the Virgin Islands hurricane devastation.

We could ask why there isn't a national engineering effort to begin planning for sea-level rise. We could ask why the US forestry service doesn't have the budget it needs to pay US workers to clear deadfalls and underbrush from its most vulnerable tree-stands. Or why we cannot imagine deploying a fleet of tanker planes to California large enough to deluge any wild-fire before it has a chance to become a conflagration.

The only question we really need to ask, though, is this: How big does the fire need to be before we "understand," once again, how we can pay ourselves to put it out?

Source: New Economic Perspectives, August 13, 2018 http://neweconomicperspectives.org/2018/08/how-big-does-the-fire-need-tobe.html

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Our Comment

Alas, there are those who seem unable to appreciate the crisis until it singes their eyebrows. But they are few. Most of us can at least smell smoke, and too many are already experiencing a personal sense of urgency.

The biggest barricade to meaningful action is the mistaken idea that we can't afford to move forward to a sustainable future.

Understanding that, in fact, we can, is our most urgent need. History is proof that, to quote a famous wartime song; "we did it before, and we can do it again!

The "old enemies of peace" will never admit it, but we *can buy* a 21st-century political economy that will serve society and maintain a sustainable environment.

Money should be recognized as a public utility, and fiat money put to work to fund a political economy appropriate to the 21st century.

"Anything physically possible and desirable can be made financially possible." – *Graham Towers, first Governor of the Bank of Canada.*

Élan

Review of the Renegotiated NAFTA: Benefits and Drawbacks to Canada

By John Ryan, Globalization, Canadian Dimension, October 9, 2018

There is something strange about this. Other than Maude Barlow and of Sujata Dey of the Council of Canadians, it appears that no other journalists or columnists from the mainstream media have mentioned two significant features in NAFTA 2.0 that are of considerable benefit to Canada. These two factors may compensate for the flaws and drawbacks of the renegotiated deal. Yet nowhere is this mentioned in the mainstream media.

The text of NAFTA 2.0, now to be known as USMCA (United States-Mexico-Canada Agreement), leaves out in their entirety Chapters 6 and 11 of NAFTA 1.0. Both of these chapters do not appear in the new agreement. By not being in the new agreement the provisions of these chapters are simply no longer applicable. This is a fact of major consequence, yet this has received no media coverage whatsoever.

Chapter 6 in the original NAFTA deals with energy and has the infamous energy proportionality rule (NAFTA 605 a), which gives the USA the right to import the same proportion of any type of energy that it has imported over the previous three years, even if Canada itself needs this energy product. Article 605(b) prevents Canada from imposing a higher price for exports than its domestic price.

NAFTA's Chapter 11 contains a dispute settlement provision that allows American and Mexican corporations to sue Canada for any law or regulation which they think causes them "loss or damage" and which they feel breaches the spirit of NAFTA.

To fully appreciate the significance of the omission of these two chapters in the new agreement, it is important to review the nature of their provisions.

In a recent publication Gordon Laxer pointed out that in NAFTA's Chapter 6 the proportionality rule is unique in the world's treaties. No other trade agreements worldwide have NAFTA-like proportionality clauses. Obviously no other country would subject itself to this type of sovereignty limitation. Actually, the energy proportionality provision came into effect in the 1989 Canada-US Free Trade Agreement; in 1994, NAFTA built upon and superseded the FTA, but its energy proportionality rule remained. As Laxer points out, "Putting this policy, or any policy, into an international trade agreement is like constitutionalizing it. It's hard for the next government to undo it no matter how much it and the voters may wish to do so."

Knowledgeable Canadians sometimes wonder why it is that Canada currently exports three-quarters of its oil production to the USA but then proceeds to import 40 percent of its oil largely for Quebec and the Atlantic provinces. Canada is compelled to do this because of the "proportionality clause" in the NAFTA document. The proportionality clause stipulates that Canada must continue to export the same proportion of total "supply" that it has over the previous three years. Supply includes domestic output as well as Canada's imports, and this applies to all forms of energy – oil, natural gas and electricity. If Canada should reduce the amount of energy it exports to the USA, it must also reduce the supply of that energy domestically to the same extent. It should be noted that although Mexico is a member of NAFTA, it refused to agree to the proportionality clause.

With this NAFTA provision it was not possible for Canada to ever cut off exports to the USA for purposes of conservation or in order to supply eastern Canada with our own oil and to stop foreign imports. According to Laxer, at present Canada is committed to export 74 percent of its daily oil production, 52 percent of its natural gas, and 11 percent of its electricity. With NAFTA in force, Canada could never reduce these amounts of exports to the US, and furthermore, our exports would keep increasing. And as Laxer said, "That's true even if it leaves eastern Canadians freezing in the dark."

To compound the problem, Canada has

allowed most of its oil and gas industries to be foreign owned. No other country in the world has signed away to another country first access to its energy resources.

So to suddenly have NAFTA's energy chapter, including its horrendous proportionality rule, eliminated in the new trade agreement is of monumental importance.

As for NAFTA's Chapter 11, which allows US and Mexican corporations to sue Canada for any law or regulation that they considered would cause them "loss or damage" or restrict their profits, this was almost as bad as the energy proportionality rule. These disputes were not heard by Canadian judges in Canadian courts, but by special tribunals operating behind closed doors, using not Canadian law, but NAFTA rules. There was no right of appeal. Since 1994, Canada had been sued 42 times by US corporations under NAFTA. These tribunals reversed several of Canada's laws, forced Canada to pay $314 million, $219 million in NAFTA fines plus $95 million in unrecoverable legal fees, and Canada was faced with additional claims of $6 billion more. In the meantime, the USA had not lost a single case. Almost two-thirds of the claims against Canada have targeted our environmental regulations or resource management policies.

To have this perverse provision suddenly removed from the new trade agreement is cause for celebration by Canadians.

Although it's in order to celebrate the successful renegotiation of this matter, the reality is that this deal must be approved by the legislatures of all three countries before it comes into force. Until then, NAFTA will stay in effect. Because of the nature of American politics, the ratification of the USMCA is not a certainty.

With respect to other beneficial parts of the deal, Maude Barlow and Sujata Dey point out that in addition to the elimination of these two harmful provisions, Canada has been able to retain the cultural exemption clause from NAFTA 1.0. This means that Canada can keep cultural protection policies that shield culture from the marketplace and the US mega cultural industries. However, the flaws of the original agreement are still there and prevent Canada from enacting future policies that would protect culture in the digital world.

The removal of both the energy proportionality rule and chapter 11 in the renegotiation of NAFTA did not come about in some happenstance manner. It occurred because of concerted public pressure and this is proof that public input works. The Canadian government was made aware that these two NAFTA issues were of concern to millions of Canadians, and hence the government could not afford to alienate such a large portion of the public.

This awareness occurred largely as a result of a campaign by several groups and a number of individual researchers. The campaigns by the Council of Canadians and the Canadian Centre for Policy Alternatives were crucial in this matter. They kept these two critical NAFTA issues at the forefront throughout the renegotiations. The Council of Canadians maintained a national public education and engagement campaign that reached more than 1 million people. This included their hard-hitting TV ad that ran on CBC's *The National*, a series of informational videos breaking down key problem areas, and their NAFTA Toolkit that helped ordinary people take the NAFTA fight directly to their own MPs. In addition they mobilized more than 35,000 people to make individual submissions to the federal government's public consultations on what they wanted to see in any new NAFTA deal, especially the elimination of both Chapter 11 and energy proportionality. They also organized numerous public forums and rallies in communities across Canada to help people better understand what's at stake and how to get involved.

The Council of Canadians produced hard-hitting research and timely reports on why energy proportionality should be out of NAFTA, and what was needed to make NAFTA a good deal for people and the planet. As well there were a number of individual researchers, especially Gordon Laxer, who presented well-researched material to alert the public to the problems that had been created by NAFTA.

With regard to other features in the new agreement, almost everything else is downhill for Canada. What has correctly made the news is that some Canadian farmers will take a hit. NAFTA 2.0 opens Canada's market to more US dairy products, including products that contain bovine growth hormone (BGH), a genetically modified hormone that is injected in cows to make them produce more milk. BGH has been banned in Canada due to its link to serious health concerns. However, more than 90 percent of our dairy market is still protected for Canadian producers.

Patents on pharmaceuticals, such as biologic drugs, have been extended from 8 years to 10 years – the US had insisted on 12 years, so this was a compromise. This means that it will take longer for generic drugs to get to the market. And of course this will make drug prices even higher, and it could have an impact on Canada's attempt to implement a national pharmacare plan.

Although the agreement makes some reference to environmental protection, marine pollution, endangered animals, and measures to protect the ozone layer, because of US insistence there is no reference to global warming or climate change. Also, as in the original, it could still leave our water vulnerable to corporate interests that want to buy and sell it. It also does not include provisions on gender equality or Indigenous rights, although these are mentioned in the agreement.

The chapters on labour and the environment both suffer from weak enforcement. However, with reference to Mexico, there are provisions to reinforce collective bargaining and increase auto wages. Hence this is an improvement over the original NAFTA. In the case of the auto industry at least 40 percent of the car will have to be made by workers earning at least $16 (US) per hour, much higher than the average Mexican autoworker makes. As such this is of particular importance to Mexican workers. There is no such wage provision in NAFTA.

It should also be noted with respect to Mexico that in the new agreement, Article 8.1, entitled, "Recognition of the Mexican State's Direct, Inalienable, and Imprescriptible Ownership of Hydrocarbons" states as follows: "The Mexican State has the direct, inalienable and imprescriptible ownership of all hydrocarbons in the subsoil of the national territory, including the continental shelf and the exclusive economic zone located outside the territorial sea and adjacent thereto, in strata or deposits, regardless of their physical conditions pursuant to Mexico's Constitution."

So according to this provision, Mexico will continue to have control over its hydrocarbons. But what about Canada? Probably the reason why Canada is not included is because the horses are already out of the barn. The USA already owns or has part ownership of all kinds of oil and gas fields in Canada, especially in the tar sands area. So how could such a provision be made applicable to Canada?

Because of the technical/legalese language involved it is difficult to determine the full ramifications of a number of chapters in the text. However, in at least two chapters there are provisions that would appear to interfere with Canada's economic independence. These are chapters 22 and 33.

Chapter 22 deals with "state-owned enterprises" which in Canada are called Crown corporations, owned by federal or provincial governments. It appears that by the terms of this deal such government owned entities would be restricted to non-competition with private sector companies. Crown corporations had been very important in the past in Canada but not many now remain. It seems that this new provision is intended to restrain Canada from creating new Crown corporations. At present a number of provinces have publicly owned hydro corporations, but this new provision does not seem to affect them. Nevertheless, how could Canadian negotiators have ever agreed with the provisions of this chapter?

Chapter 33, entitled "Macroeconomic Policies and Exchange Rate Matters," would appear to interfere with Canada's right to determine the value of its currency and its Bank of Canada policies. With this agreement in effect it appears that we may now have to consult with the USA to determine the value of our dollar. If true, this would be outrageous!

Inserted near the end of NAFTA 2.0 is a provision that is an outright affront to Canada's independence. It has received considerable comment in the media. This provision restricts Canada's ability to strike free trade agreements with China and other "non-market" countries. It states that a USMCA party would have to inform the others before it began negotiations and it would have to allow them to review the final text before signing. It then states "entry by any party into a free trade agreement with a non-market country shall allow the other parties to terminate this agreement on six-month notice."

How Canada agreed to such an obvious American diktat is almost unbelievable. This was certainly meant to control Canada's trade relationship with China. Actually however this can be used to Canada's advantage. This would be a good way for Canada to get out of the new USMCA. If we could strike a truly good deal with China – let the Americans kick us out! The case can be made that in almost all respects, Canada would have been better off not being in NAFTA or now being in the USMCA.

It should be recalled that before Canada signed the FTA and NAFTA, it traded with the US and the rest of the world under the General Agreement on Tariffs and Trade (GATT), now the World Trade Organization (WTO). If the new USMCA were terminated, Canada would automatically return to trading with the US under the WTO, under whose terms we did far better than under the FTA and NAFTA.

To put this in further context, it's worthy to quote from David Orchard on this matter: "In fact, Canada does not need NAFTA or the FTA, and never did. It could profitably withdraw from both with a simple six months notice. Canada, along with the USA and Mexico, is a member of the world's largest free trade agreement and has been for many decades, something those begging for NAFTA blithely ignore or downplay. Formerly called the GATT, the World Trade Organization (WTO) is a multilateral organization with 164 member states in which Canada has more allies and much more clout than trying to negotiate one-on-one bilateral trade agreements with the United States. This forum and its rules have served Canada well over the years. Canada's access to the US market and record of solving disputes has been far better under the WTO than under the FTA or NAFTA, and Canada was able to protect its institutions and pass its own sovereign laws in a way it has not been able to under our two so-called free trade agreements."

To add to this, a number of years back, Lloyd Axworthy, former president of the University of Winnipeg and former Liberal minister of foreign affairs had put forward a powerful critique of NAFTA that deserves citation: "Let's begin by seriously considering an end to NAFTA and reliance instead upon the World Trade Organization to regulate the terms and provisions of free trade. Not only would this offer us the protection of a trade body that has some teeth in its regulations ones not rooted in US domestic procedures and laws–it would also free us to engage in a much more innovative and active global strategy. The emergence of new economic powers like China, India, Brazil and South Africa provides markets hungry for the resources and know-how that Canada possesses. Our NAFTA connection impedes our ability to take advantage of this potential…. It's time for new policies and tough action to shift our trade and security strategies away from a preoccupation with continental matters to a more global footing."

If Axworthy, a previous Liberal cabinet minister, can advocate Canada's withdrawal from NAFTA, why can't the media or our political parties see the logic of this? Because of NAFTA, Canada did not have the right or the independence to determine many of its policies, especially on matters of energy.

Such a conclusion however seems to be beyond the mental capacities of not only the "learned media" but also of all three of our major political parties. They view leaving NAFTA or the now USMCA with totally unjustified gloom and doom anxiety.

In renegotiating NAFTA there was a matter that had never been discussed. As has already been stated, in 1989 Canada and the US signed the Canada-US Free Trade Agreement (FTA) and in 1994 NAFTA was built upon the FTA and superseded it. As such, it appears that the FTA was never abrogated, so it must be still on record. It should be recalled that the energy proportionality rule was first formed in the FTA. Hence if the energy proportionality provision has been deleted in NAFTA 2.0, could it still be maintained through the provision in the FTA? If so, and if Canada wanted to get rid of this nightmare, all it would have to do is give a six month notice and the FTA would be abrogated. So this need not be a serious issue.

Strangely, the NDP has never taken an enlightened stand on NAFTA, has never examined its negative impact on our country, and has never advocated its abolition. Given this, what has been the NDP's response to the new agreement? On October 1 Jagmeet Singh and the NDP's trade and deputy trade critics, Tracy Ramsey and Karine Trudel, made a statement, entitled "NDP: Trade with US and Mexico – New Name, Worse Deal." They correctly assess that the new deal will hurt dairy, poultry and egg farmers and will adversely affect pharmacare, but like all the other news media they make no mention of the elimination of both the energy proportionality rule and Chapter 11 with its provision allowing corporations to sue Canada. This indicates that they either haven't read the text of the new agreement or that they simply don't understand the significance of what has happened. What a hopeless political alternative.

One can't help wondering what Tommy Douglas and the CCF-NDP of a previous era would do at a time such as this. In all likelihood, they might assess that because

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About Our Commenter

Élan is a pseudonym representing two of the original members of COMER, one of whom is now deceased. The surviving member could never do the work she is now engaged in were it not for their work together over many years. This signature is a way of acknowledging that indebtedness.

The United States-Mexico-Canada Agreement Represents a Failure of Ambition

By Mark Milke, Maclean's Magazine, October 4, 2018

Opinion: free trade agreements have long been fuelled by grand visions of a better tomorrow. But by keeping managed trade – which isn't truly free – the USMCA fails.

When faced with an erratic president who wakes up in the middle of the night to tweet his irritations – recall Donald Trump's past impulse tweets that have called into question the NATO alliance and the American presence in South Korea, as just two examples – perhaps Canadians should be happy the newest United States-Mexico-Canada Agreement treaty on trade (USMCA as it is now called) salvaged anything at all from 1994's original North America Free Trade Agreement.

It's akin to a recovery effort when one's computer crashes: Find a whiz-bang technician and hope that some of the original data can be found when the repair effort starts.

And unlike its predecessors, it's a document born out of desperation that puts forward no bold vision of a shining-city-on-a-hill, or a better tomorrow.

Before delving into the USMCA, some background on past free-trade deals and why free trade in general matters might be instructive. The original free-trade agreement between Canada and the United States was not NAFTA, but the 1987 Canada-United States Free Trade Agreement (CUSFTA), effective in 1989. That agreement resulted from the efforts of Canadian Prime Minister Brian Mulroney and US President Ronald Reagan to promote free enterprise at home and abroad.

The deal was controversial only to nativists who defined their nationalism in both anti-capitalist and anti-American terms. At the time, that included the federal Liberal party under its then leader John Turner, and the reflexive anti-free trade NDP under Ed Broadbent. That deal ended up being the main issue in the 1988 federal election, which Mulroney's Progressive Conservative government handily won; that original free-trade agreement came into effect as of January 1, 1989. In that sense, creating NAFTA by adding Mexico five years later (effective New Year's Day, 1994) was a follow-up to free-trade initiatives that started in the 1980s.

Those later bilateral and then trilateral free trade initiatives were themselves an addition to postwar movements towards free trade that began, for example, in 1948, with the General Agreement on Trade and Tariffs (GATT), which later became the World Trade Organization. And all that came out of a single one-page memo agreed to in 1941 by British Prime Minister Winston Churchill and US President Franklin D. Roosevelt aboard the HMS Prince of Wales, stationed in Placentia Bay, NL.

Somehow, in the deepest, darkest hours of the Second World War, the two leaders looked ahead and added economic free trade to the agreed-to Atlantic Charter. As author Hunter Nottage points out, two clauses (4 and 5) from that Charter were economic. "They refer to the importance of bringing about 'the fullest collaboration between all nations in the economic field' and 'to further the enjoyment by all States, great or small, victor or vanquished, of access, on equal terms to the trade…of the world which are needed for their economic prosperity,' " Nottage wrote. In other words, the two leaders looked ahead to how to free the world in every sense – militarily, but also, critically, if the war was won, economically.

The benefits from all this free trade have been splendid, despite the protestations of those 1980s-era protectionists. In North America, since NAFTA came into effect, employment is higher by 40 million new jobs. Not all of those are due to the original free-trade agreement or NAFTA, but as the US Chamber of Commerce pointed out to trade skeptics down south, that country has 5 million new jobs that *are* attributable to NAFTA. In Canada, which has long been trade-dependent, 3.4 million jobs are dependent on exports to the United States (with or without a free-trade agreement). More broadly, increased trade worldwide since just the 1980s – expanded liberalization with more countries pursuing free-enterprise-friendly policies including freer trade – has resulted in a significant drop in absolute poverty worldwide (defined as about two dollars a day in income), from 44 percent in 1981 to just 11 percent by 2013.

In 2015, economists Pablo Fajgelbaum and Amit Khandelwal found that moving from more restricted trade to more open trade can help all consumers, but some more than others. For example, the effect of free trade for the bottom one-tenth of consumers has been stunning: a 63-percent increase in real purchasing power. As the authors note, this is because "poor consumers spend relatively more on sectors that are more traded, while high-income individuals consume relatively more services, which are among the least traded." As the authors wrote three years ago in why free trade matters, this is because there can be a "pro-poor bias of trade in every country."

So what does the new trade deal get wrong? It does little to eliminate taxpayer-financed subsidies to businesses among the three signatories. Such subsidies – whether to the aerospace, automotive, traditional and green energy, or agriculture industries – are costly. They number in the hundreds of billions of dollars over the decades. A superior free-trade agreement would have worked to ratchet those down over the years in all three countries, and preserve public tax dollars for actual public uses.

Likewise – and perhaps illustrative of the lack of a grand vision for expanded free trade rather than managed trade – even

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which Parliament can create itself, back at interest?

A: Now, if Parliament wants to change the form of operating the bank system, then certainly that is within the power of Parliament (pages 56-57).

The author, William Krehm, goes on to point out that "without the low-rate financing provided by their central banks, the Allied powers could not have won the war. Nor could they have won the subsequent peace."

Join! Act! Change!

Élan

the much-ballyhooed changes to supply management under the proposed USMCA are minor compared to what could have been accomplished: completely unhooking Canada's dairy and poultry sectors from their government-granted cartel status, paying them out over time as Australia did with its formerly protected agriculture sectors, and freeing up trade for that sector, which would have allowed it to grow in export potential over time. By focusing on what might be "lost" in domestic sales, the dairy and poultry industries have always focused on the trees and missed the free-trade forest – that is, the possibility to become a massive export industry for Canada.

Yes, the new free-trade deal is better than no treaty on trade. The lack of a deal would have completely exposed Canada to protectionist American sentiment from the White House on down. But the USMCA and those who negotiated it lacked the grand vision on the potential for free trade to further prosperity, peaceable relations between diverse peoples, and poverty reduction, which were all elements in past free-trade treaties envisioned from 1941 onwards, from Churchill and Roosevelt to Mulroney and Reagan.

Mark Milke is a Calgary author and public policy analyst who has authored multiple studies on government subsidies to business. His newest book, Ralph vs. Rachel: A Tale of Two Premiers*, will be released in November.*

Our Comment

"Free trade" agreements, by virtue of their title alone, have always been misleading in their promise of a better tomorrow.

NAFTA, and its successors, have always been *less* than free, and *more* than trade.

What they have freed is the corporate power to shuffle capital around the world in their own best interest. What they have traded is national sovereignty for global hegemony.

Élan

Hope *from page 10*

markets," is a realistic boost to hope.

Canada *should* be among those moving forward.

"Could anything be more insane than for the human race to die out because, we couldn't afford to save ourselves?" – *The late Dr. John Hotson, formerly Professor of Economics, Waterloo University, and co-founder of COMER.*

Élan

NAFTA *from page 17*

of the elimination of chapter 11 and the energy proportionality rule, this is a somewhat better deal for Canada, but nevertheless, they would advocate that we give a six-month notice and simply get out of our current partial economic straitjacket. Is there any prospect of the NDP ever being revived in the way the British Labour Party under Jeremy Corbyn suddenly became aware of its original socialist roots?

John Ryan, Ph.D., is Retired Professor of Geography and Senior Scholar at the University of Winnipeg.

Our Comment

All things considered, who needs chapters 6 and 11?

The greatest feature of the latest round of NAFTA negotiations was the drama it generated. The hype over the looming threat of losing NAFTA – the ruptured relationship between President Trump and Prime Minister Trudeau – the desperate, drawn-out buildup of suspense right up to the nail-biting climax, might well have lulled us all into a well-earned sense of relief at the outcome. Whew!

Before we "celebrate" the exemption of two costly concessions made in NAFTA 01, we would do well to attempt a rational cost/benefit analysis of NAFTA 02. We are immensely lucky to have enabling resources like this report to help us do that.

What did we give? What did we get?

Basically, we escaped two clauses from NAFTA 01 that should never have been agreed to in the first place, and whose elimination may not significantly spare us what they formerly ensured.

Righting a wrong that shouldn't have happened in the first place shouldn't have *cost* us anything.

It is comforting to attribute concessions to public pressure, but one might suspect other incentives. This is not to dismiss the value of the contributions by the Council of Canadians and the CCPA! More of the same may someday free us from the *fraud* that "free trade" is and promote "fair trade" instead.

That, nevertheless, this is to cost us only a mere "everything else, should not come as a surprise,"

We should be grateful that it's only *farmers* who, "will take a hit"? Is a Canadian market for BGH a "fair trade" for even ten percent of our dairy market?

The extension or pharmaceutical patents is a license to soak the sick and compromise Canada's national pharmacare plan, – and a stroke against socialized health care – a precious feature in Canada that is much vilified south of the border.

The deliberate refusal to recognize the need to meaningfully address planetary survival, and the continued commodification of water, expose "free trade" for the fraud that it is.

Some comfort to know that gender equality and indigenous rights were fought worthy of mention!

It might be helpful to understand "the full ramifications of a [number] of chapters in the text."

Chapter 22 is the antithesis of what should be policy in a democratic country, in a formidable barrier to our recovery of the commons. Chapter 33 alone should have been seen as *total* capitulation.

Real trade is important to both parties, and should *benefit* both parties.

Is there anyone better versed in the history or better acquainted with the truth about NAFTA, than David Orchard?!

The USMCA is not an international agreement. It is a continental coup. And it is anything but "free" trade.

In *Building A Win-Win World: Life Beyond Global Economic Warfare,* Hazel Henderson speaks of "the unleashed forces of free trade" (page 2), and argues that "free trade" can be seen as a belief system rather than a scientific principle" (page 174).

The forces unleashed in the USMCA should alert us to a choice Canadians must make. It is a choice profound, and long delayed. It is the choice between sovereignty and a 21st century political economy of our own – and a feudal role in the comfortable dependancy of time passed.

In pursuing our own destiny, we're going to have to discriminate between *corporate* globalization and "a more global footing," and between *free* trade, and *fair* trade.

Only a *new* 21st century political economy will do.

Given its relentless metamorphosis since the days of Tommy Douglas, how can we trust today's changeling NDP?

At the very least, we must achieve electoral reform to ensure a government that is up to the task.

Perhaps then, the NDP will remember its original socialist roots, and rise to the occasion!

And are *we* up to the task?

Élan

Want to Save the Climate? Break Up the Big Banks.

By Oscar Reyes, Foreign Policy In Focus, October 31, 2018

Despite dire warnings, politically influential big banks continue to lend billions to the fossil fuel industry every year.

A stark new United Nations climate report warns that humans have about 12 years to slash global emissions by nearly half. Unfortunately, that's going to be extremely challenging without deep changes to the global financial system.

Despite regularly claiming new commitments to "green finance," the big banks continue to lend billions to the fossil fuel industry every year – including for the most extreme climate-damaging activities, like exploiting tar sands oils and burning coal.

Continuing to invest in fossil fuels goes against all of the evidence about what needs to be done to tackle climate change. An estimated 80 percent or more of the world's known fossil fuel reserves need to remain in the ground if we're to have any chance of avoiding catastrophic consequences, like rising sea levels and melting glaciers.

In place of fossil fuel finance, investments should be redirected toward renewable energy, cleaner industry, and more sustainable agriculture, among other priorities. That requires reforms to the Fed and the breakup of the biggest banks.

The scale of this change can seem daunting. But in a new report for the Institute for Policy Studies, I've identified several priorities for achieving a more climate-friendly financial system.

Reform the Fed

The financial crisis laid bare the shortcomings of a system that was obsessed with "price stability" above all other factors. Since then, many central banks have revised their mandate to include the stability of the financial system as a whole. Some central bank leaders already interpret this to include broader social and environmental objectives, and it's time for the Fed to step up and do the same.

Increase Transparency

Mark Carney, governor of the Bank of England, has repeatedly emphasized greater transparency on the potential impacts of climate change on the economy.

More frequent extreme weather events, such as Hurricane Florence or the past summer's California wildfires, could have big impacts on property, trade and insurance premiums. Companies should be clear about how their business model would be affected by the transition to a cleaner economy. The international Financial Stability Board, established in response to the financial crisis, has suggested new global rules on climate transparency, which would be a good start.

Promote Clear Guidelines

In China, meanwhile, an interventionist central bank has played a key role in promoting green banking guidelines that prioritize loans for renewable energy and more efficient industry. The Fed should follow, while seeking to improve upon the patchy record of the People's Bank of China in implementing its own policies

More radically, banks should impose a "credit ceiling" on fossil fuel investment, with a clear timeline for reducing this limit to zero. If the oil needs to stay in the ground, the money to extract it needs to stay in the vault.

Take Lessons from Abroad

From Bangladesh to Costa Rica, there are many instances of state-owned banks and financial institutions leading the way in clean energy investments. In Bangladesh, for example, a government-backed lending program, supported by grants and soft loans from multilateral agencies, has helped to install more than 3 million solar home systems in rural areas in little more than a decade as part of a "rent-to-own" scheme.

Other changes will need to come from the ground up, including through the re-emergence of local savings banks and co-operatives. In Germany, for example, local savings banks have successfully targeted renewable energy and efficiency programs in their own communities, as well as partnered with the country's publicly owned development bank to ensure that its energy-lending is locally accountable. The rise of these smaller institutions, which are often non-profit and which sometimes have a social mission to serve disadvantaged communities, can also help turn the tide on the corrosive Wall Street culture that fed into the financial crisis.

Such changes are only likely to be achieved if there is a radical shake up in how banking works. Breaking up the "too big to fail" banks would be the most effective way to weaken the lobbying power of financial institutions with a vested interest in remaining the status quo. This would have not only climate benefits, but would also make for a more stable financial system.

Our economy – and our planet – depends on it.

Oscar Reyes is an associate fellow at the Institute for Policy Studies and an expert in climate finance.

Our Comment

Encouraging new information about what's going on elsewhere to save the planet!

Given our *public* central bank, it *should* be easier for us to fund policies for a sustainable environment than for countries in the grip of private central banks.

Why is our government buying into pipelines instead?

Élan