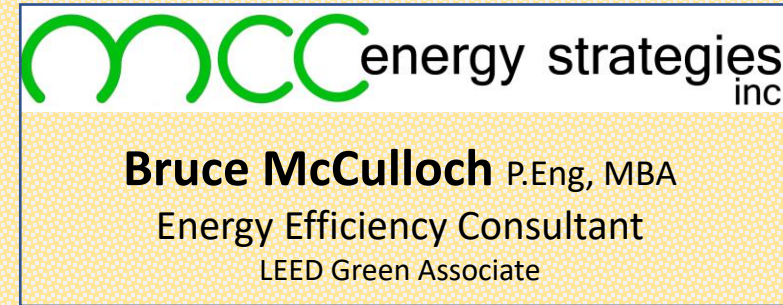


Introduction



Congrats on moving forward with this Amendment!

The existing Act has been an impediment for 3 situations for me

- 1) townhouse style condo corporations – Bedford and Chester
- 2) community solar farms in Western NS
- 3) Municipal Water treatment Facility using over 100 kW per day

Thank you in advance for allowing me to share some thoughts

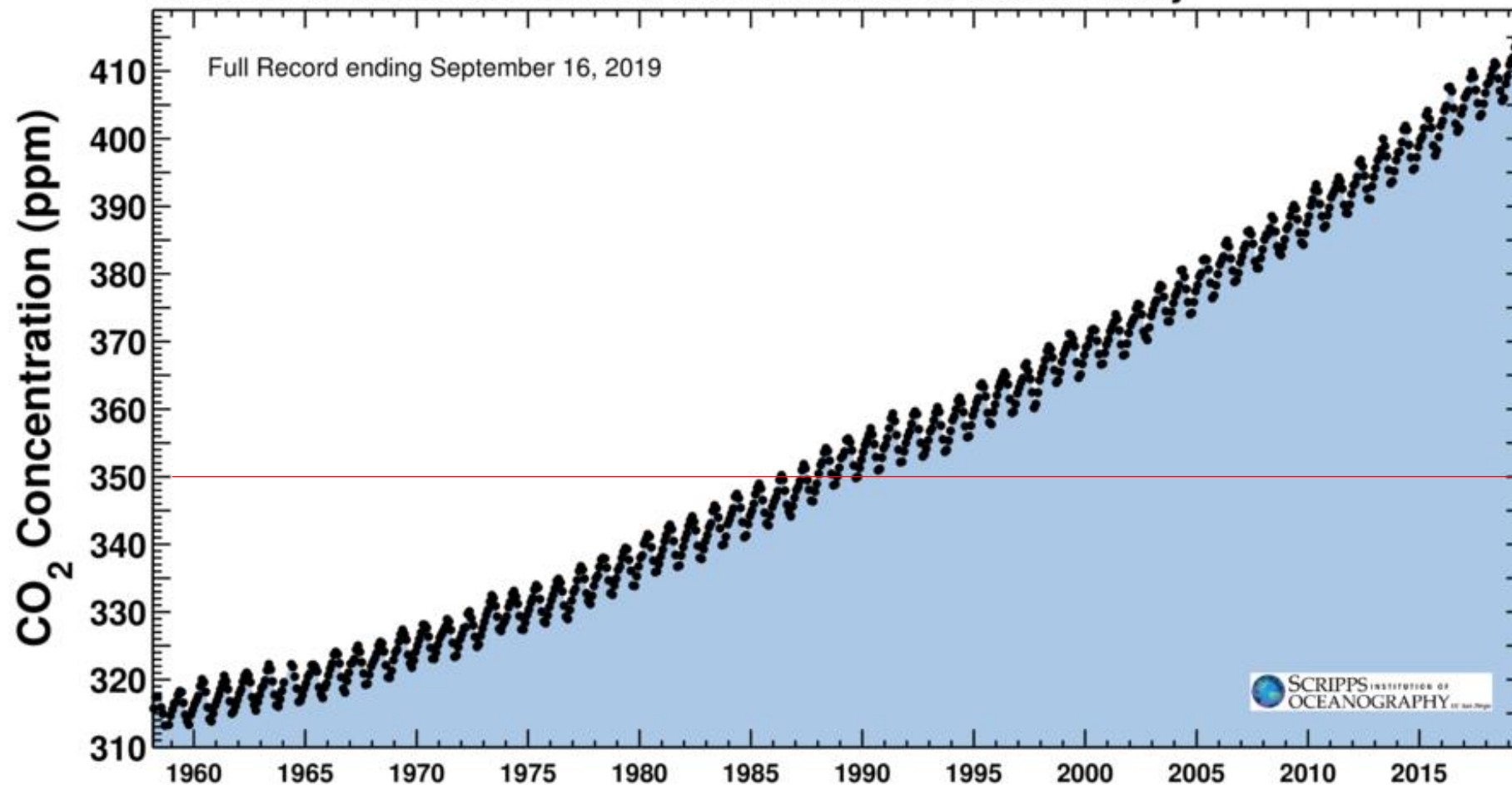


Latest CO₂ reading

September 16, 2019

408.12

Carbon dioxide concentration at Mauna Loa Observatory



350 is safe level

Inadequate Messaging from our Media

Last week, Feb 12, 2020

~~Yesterday~~, scientists reported that the concentration of carbon dioxide in the atmosphere has reached an all-time high of 416 parts per million—up from 411 ppm in just one year.

It's impossible to understate how bad this news is. The maximum safe level of carbon dioxide to prevent catastrophic climate change is 350 ppm. In fact, before 1950, carbon dioxide levels never went over 305 ppm in the previous 800,000 years!

But as Greta Thunberg said, "The saddest thing is that this won't be breaking news."

The **concentration of atmospheric carbon-dioxide** surged past 420 parts per million (PPM) for the first time in recorded history this past weekend, according to a measurement taken **by** the National Oceanic and **Atmospheric** Administration (NOAA) at the Mauna Loa Observatory on the Big Island **of** Hawaii. 5 days ago

<https://www.forbes.com> › sites › davidbressan › 2021/04/07

Carbon-Dioxide In Earth's Atmosphere Spikes To Record Level



Putting climate considerations into every decision



Various slides from **Eric Freed** presentation at **Build Green Atlantic Conference** – 30 Sep 2019

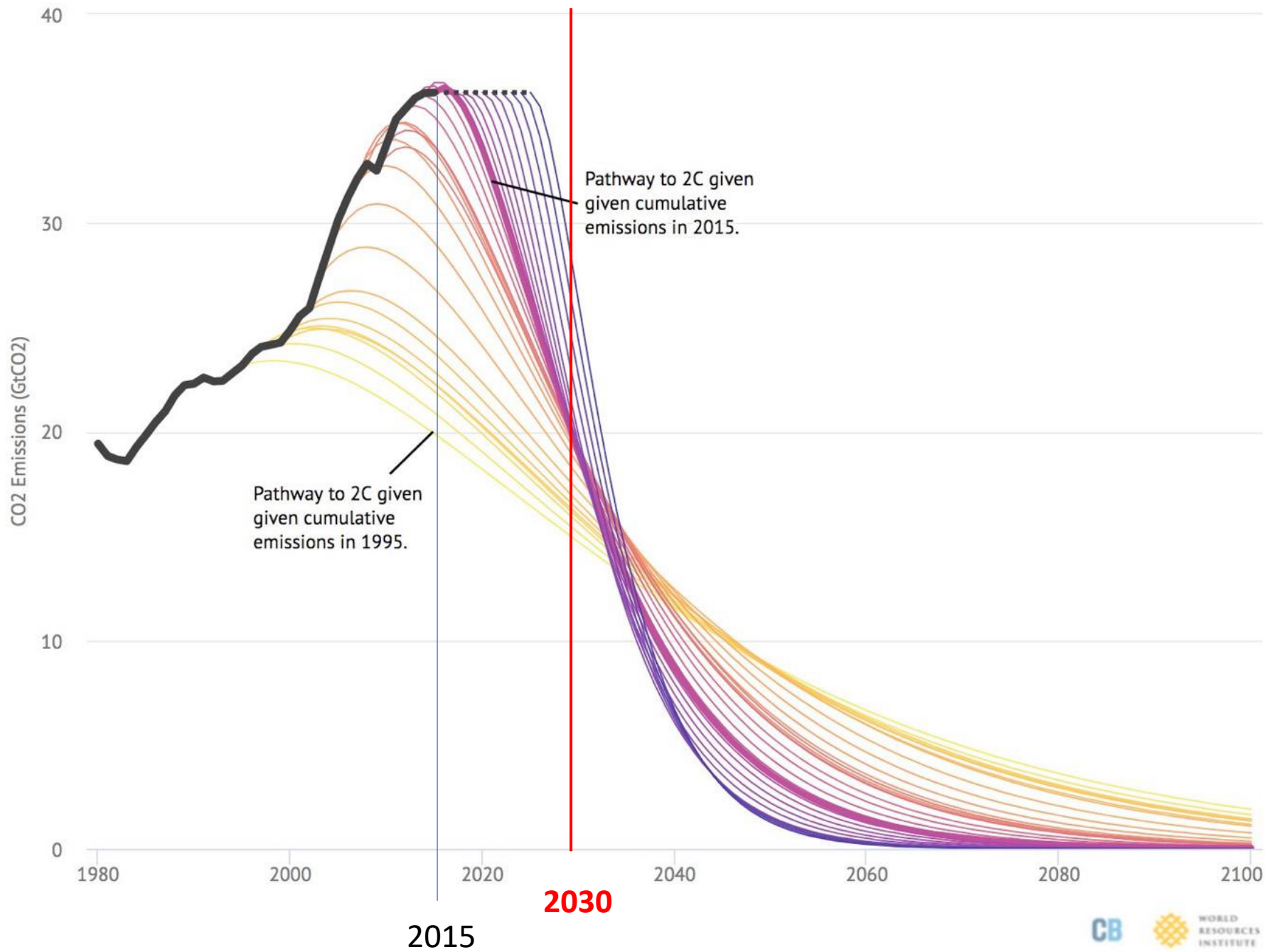
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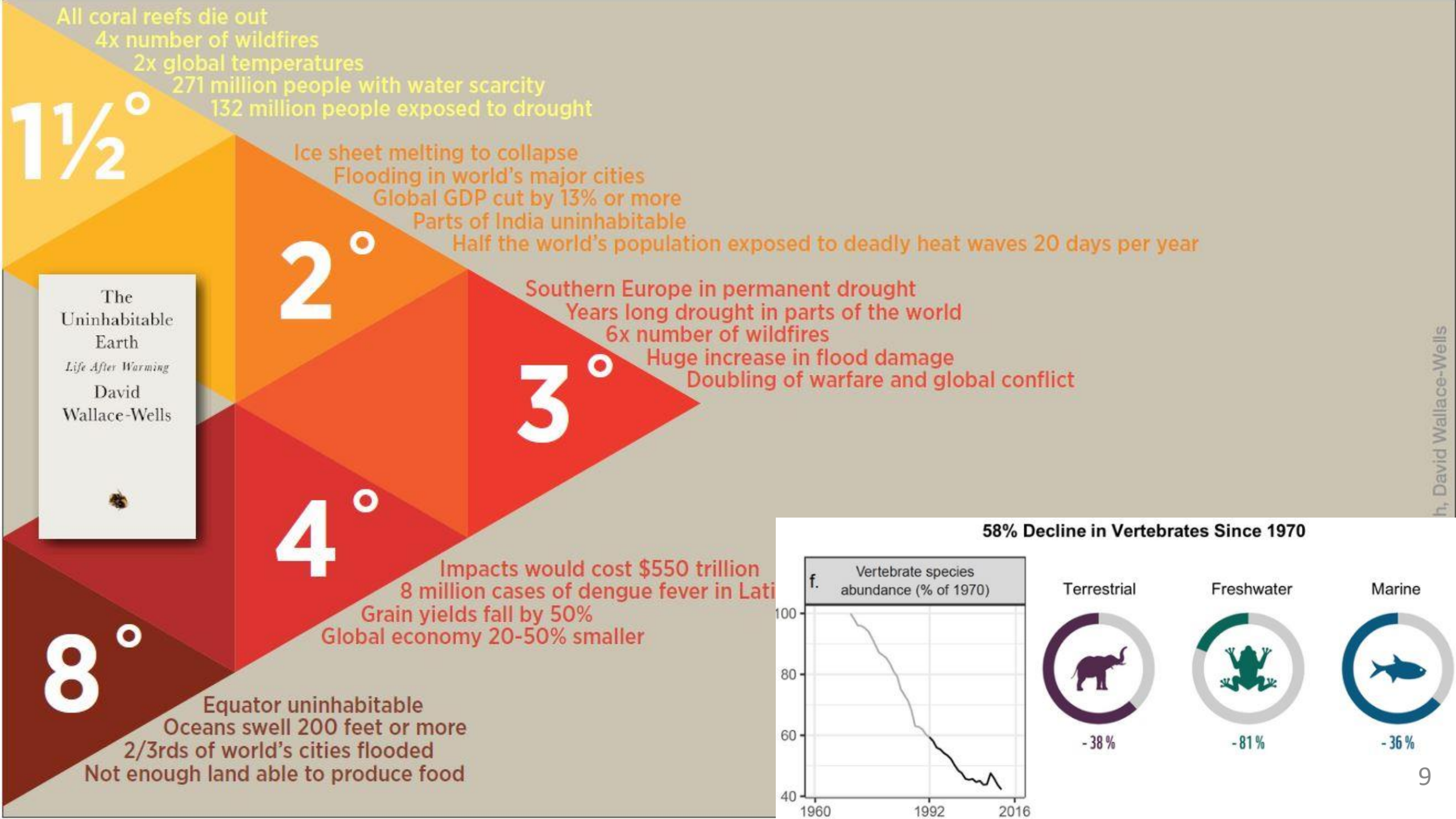


there is NO “new normal”



To limit warming to 2C, global emissions must fall more quickly if they peak later





Freeway expansion

Bridge construction


Living at sea level

 Building to code minimum

Installing copper

 Using concrete

Banning graywater

 Demolishing buildings


Parking requirements

Fossil fuel subsidies 

Shopping at Amazon

Buying a car

} is
CLIMATE
DENIAL.

A young woman with a long braid, wearing a bright pink shirt, is seated at a podium with a microphone. She has a serious expression. The background is a solid blue color.

“...and all you can talk about is
MONEY
and fairy tales of
ECONOMIC
growth.”

Address to the United Nations
September 23, 2019

MARK CARNEY named UN Special Envoy on Climate Change

In conversation with *The Sunday Edition's* host Michael Enright, Carney stressed that citizens in countries such as Canada and the United Kingdom have agreed, through their elected parliaments, to meet the target of the 2016 Paris Agreement to limit the increase in global temperatures to 1.5 degrees C. The Intergovernmental Panel on Climate Change has stated that target cannot be met without **reaching net-zero emissions by 2050.**

The UN will be hosting its 26th climate change summit — known as COP26 — in Glasgow this November and **Carney already** is working toward "a position where **climate issues are part of every single professional financial decision**, so decisions by banks, insurance companies, pensions, investors." He says pressure is building across the financial world to prioritize the state of the planet...

"The thing that I'm working on is to make sure **the financial system is thinking every day, every minute of every day, about that issue.** And it's putting money behind those who are solving the problem — or are part of the solution — and it's taking money away from those who aren't moving fast enough," he said. "It's time to get on with it. It's transition, transition, transition."

So – why am I here?

Many Technical Solutions exist, and
engineers, and others are keen, but...

...we need Political help to allow it to happen.

And many of the issues are behavioural, or economic.



RADICAL

EFFICIENCY!

(Reduce demand!)



RADICAL

SUFFICIENCY!


(Appropriate technology!)



RADICAL

SIMPLICITY!

(Keep it dumb!)



RADICAL

ELECTRIFICATION!

(Stop burning!)



RADICAL

DECARBONIZATION!

(Clear the air!)



RADICAL

RESTORATION!

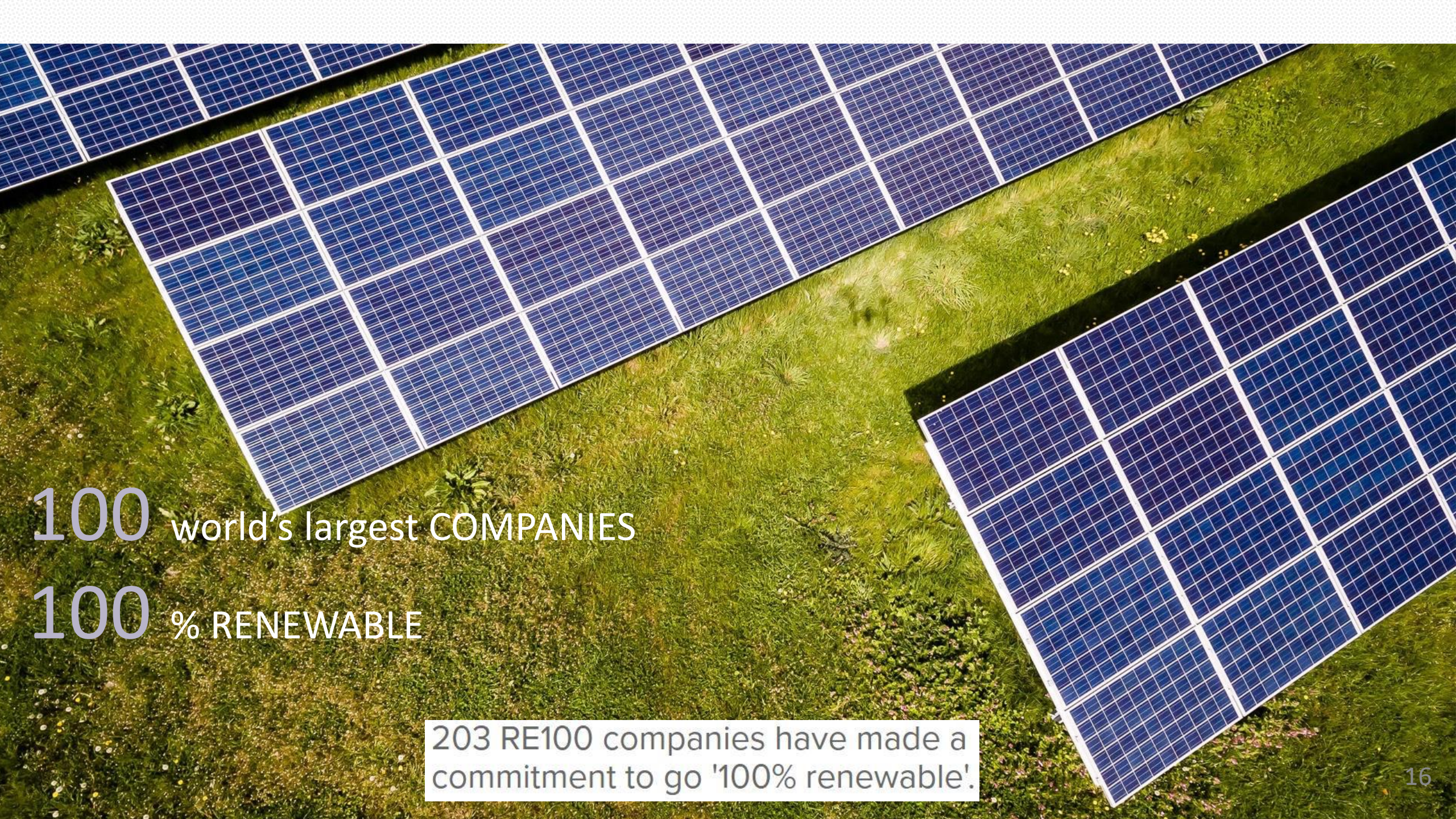
(Clean it up!)

RADICAL
COMMUNITY!

NEW FOCUS



when we work with potential,
problems dissolve.



100 world's largest COMPANIES

100 % RENEWABLE

203 RE100 companies have made a
commitment to go '100% renewable'.

Zero Carbon Building standards are needed

Because;

- Buyers want granite counter tops ahead of energy efficiency
- Developers simply sell buildings, and don't look at Life Cycle Cost
- Note: Developers such as Peter Polley, of Polycorp seek out leading edge building solutions, and go far beyond the minimum building code.
- (But most developers don't do this !!!)

Energy Improvement Sequence for Buildings

- **Elimination of Waste.** Assessment of equipment that should be retired, or procedures that need adjustment.
- **Energy Efficiency Measures.** Once waste has been eliminated, remaining equipment is assessed to determine if a business case can be made for upgrades
- **Energy Conversion - from fossil fuel** based to biomass or more efficient electrical energy-based equipment or building upgrades.
- **Renewable Energy.** After A), B) and C) have been performed, the new load level is used to determine the appropriate amount of renewable energy for the facility.

Example of “the right thing”

In 2007, the Progressive Conservative govt of NS passed **Environmental Goals and Sustainable Prosperity Act (EGSPA)** which

- Recognized the need to shift to the Green Economy,
- cost effectively avoided need for more landfills and expensive tipping fees,
- Encouraged companies from all over to come create innovative recycling technologies as part of the Province’s economic development strategy,
- a cap on carbon emissions was placed on Nova Scotia Power,
- created Conserve Nova Scotia, which later became **Efficiency Nova Scotia**

Efficiency NS is now being emulated across country, & abroad

Summary thoughts: (followed by some specific ideas)

A) climate issues to be part of every single **political, institutional, and personal decision**

B) Nova Scotia an example to Canada, and Canada an example to the world of how to

- work together
- so that **every day, every minute of every day, we think environment**

C) a different attitude required toward **deficits**
environmental vs **fiscal**

"It's time to get on with it. It's transition, *transition*, **transition**."



Amendments to Electricity Act – Great First Step!!

So... specific additional ideas:

- **Moratorium on new building** construction until developers agree to a zero-carbon approach.
 - 12 key developers in HRM, do 70% of the development
- **commuter rail** can come in from Bedford
 - Hardball with CN Rail
- Fines and publicity for **idling motor vehicles**
 - Low hanging fruit, gets the message out
- **Eliminate PST rebate on home heating** - target extra \$ to low income households
 - political suicide for one party to go it alone
 - opportunity for all parties to work together – radical politics!

BILL NO. 97

(as introduced)



3rd Session, 63rd General Assembly
Nova Scotia
70 Elizabeth II, 2021

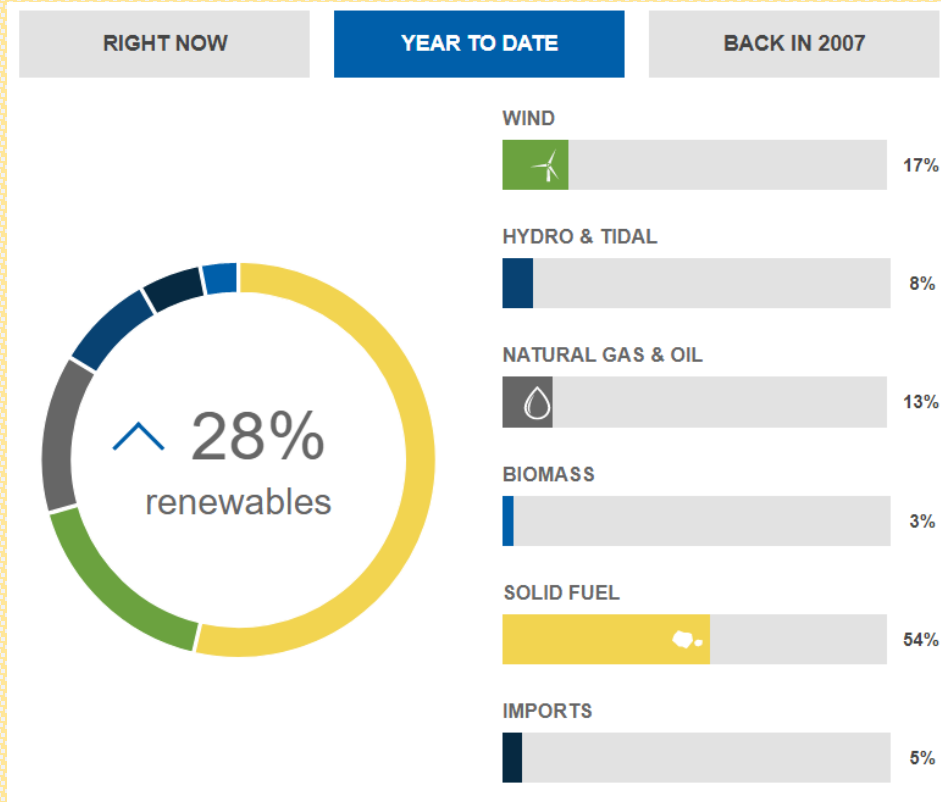
Government Bill

Electricity Act
(amended)

The Honourable Chuck Porter
Minister of Energy and Mines

Biggest single issue – energy emissions

- Tough targets for NS Power to reduce Carbon emissions
 - 2019-Jun-09 NSP announces that they are at 30% renewables, but....



From NS Power Home page on April 12, 2021

Note: No solar

NS has better solar potential than Germany
(& Germany gets 7% of their energy from Solar)

Despite significant solar uptake recently, NS gets less than 1% of it's energy from solar

US solar industry powers ahead as investors back batteries

Fund managers and energy-hungry tech companies bankroll 'solar-plus-storage' projects





Policy: Climate to be 1st part of every **decision**



“the economy is a wholly-owned subsidiary of the environment” – *Herman Daly, former Senior Economist to the World Bank*