



#### WHAT TIME IS IT?



#### Vatican Video on Laudato Si: On Care for Our Common Home

https://www.youtube.com/watch?v=KXA5\_juFgDg&featu
re=youtu.be

#### □Current Wisdom

Francis - Laudato Si: on Care for Our Common Home

UN- Sustainable Development Goals (SDGs)

Paris Agreement

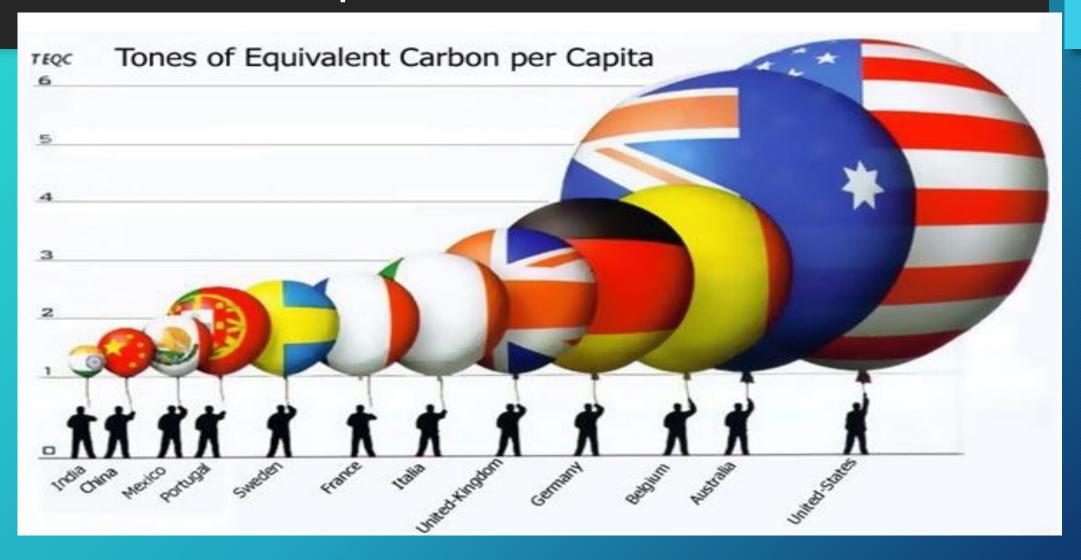
Drawdown

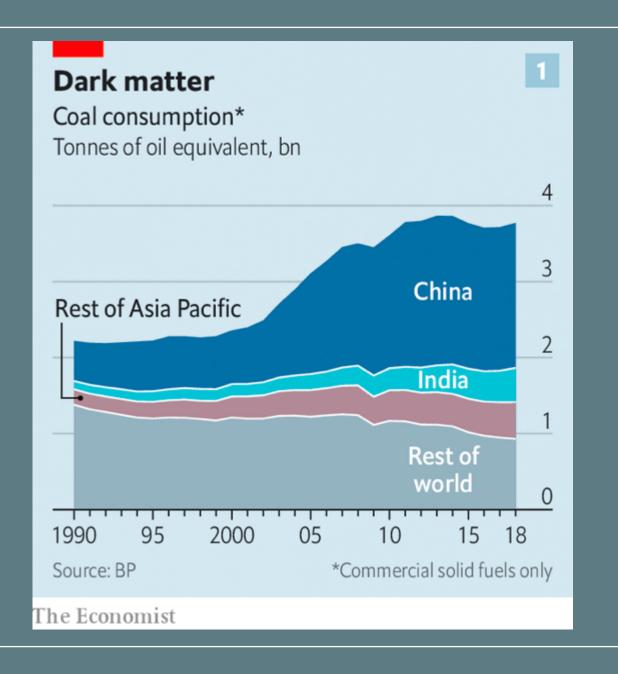
## A Carbon Story - 3 Numbers



- First Number:
- 2 degrees C- Paris Limit
- The Second Number:
- 565 Gigatons- CO2 "Budget " for 2 degrees C.
- The Third Number: 2,795 Gigatons-Industry Fossil Fuel Reserves

#### Carbon Per Capita





## Nations Approve Landmark Climate Accord in Paris

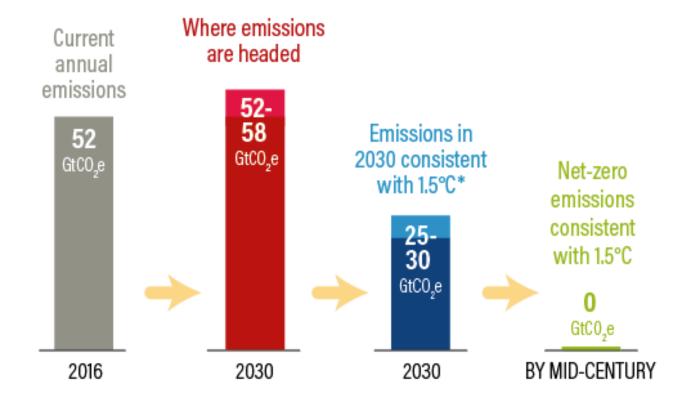
December 12, 2015



# **IPCC** 2018

# •12 YEARS TO TURN AROUND

#### The World Is Not on Track to Limit Temperature Rise to 1.5°C

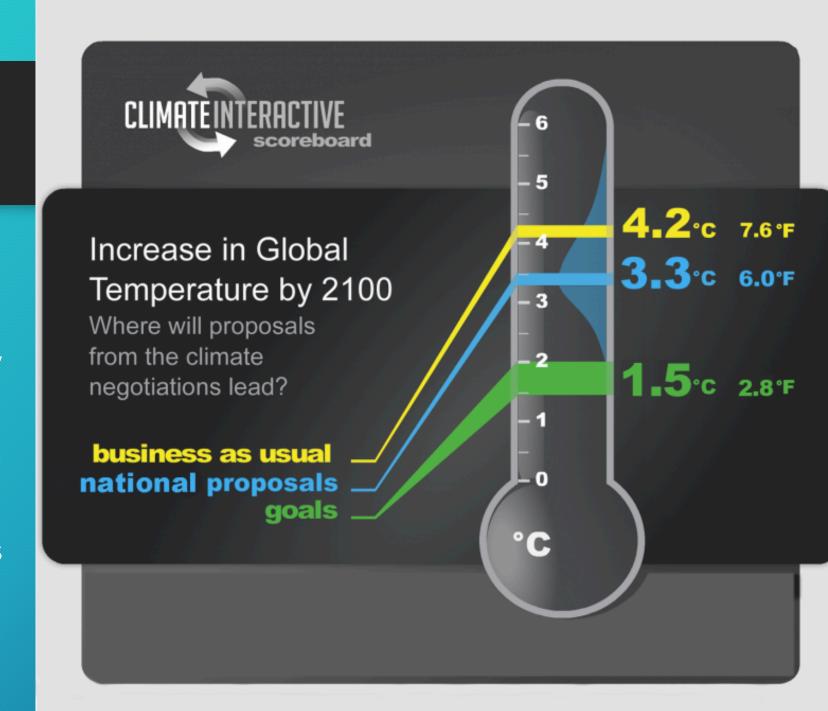


Notes: \*on average, no or low overshoot.



### IPCC Policy Warnings

Policy Leaders/Governments



#### **OCEAN IMPACT II**

half of the Oxygen in the atmosphere is produced by the ocean.

The ocean absorbs about a quarter of all carbon dioxide emissions; This has caused the acidity of ocean water to rise by 30 percent over the last 250 years.

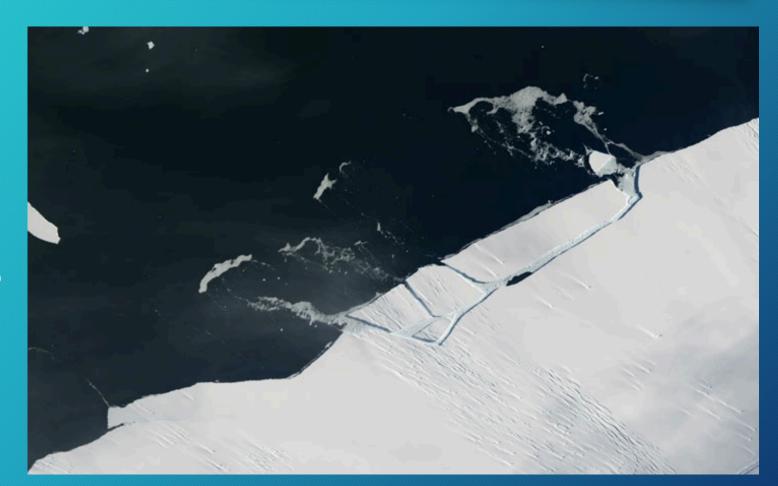
Carbon dioxide, ocean acidification, and global warming are intricately related.

#### Antarctic Melt Speeds Up Sea Level Rise

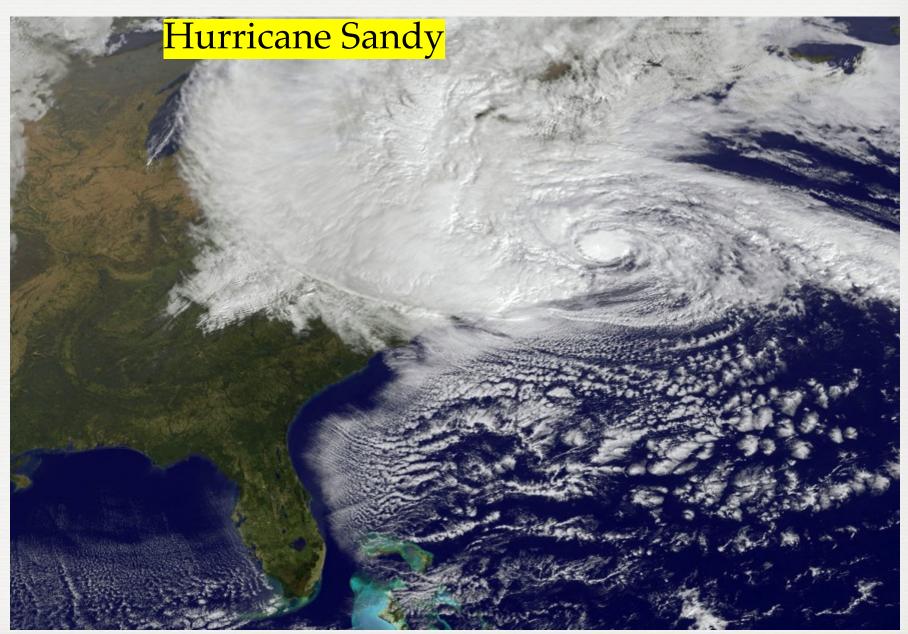
The rate of sea-level rise accelerates once the West Antarctic Ice Sheet hits its tipping point—likely set to occur somewhere between 1.5 and two degrees of warming,—when physics demands the whole sheet will irreversibly disintegrate.

#### Antarctic Ice Loss

Pine Island
Glacier drops
portion 10x size
of Manhattan
2017. 225
square miles



•October 29, 2012

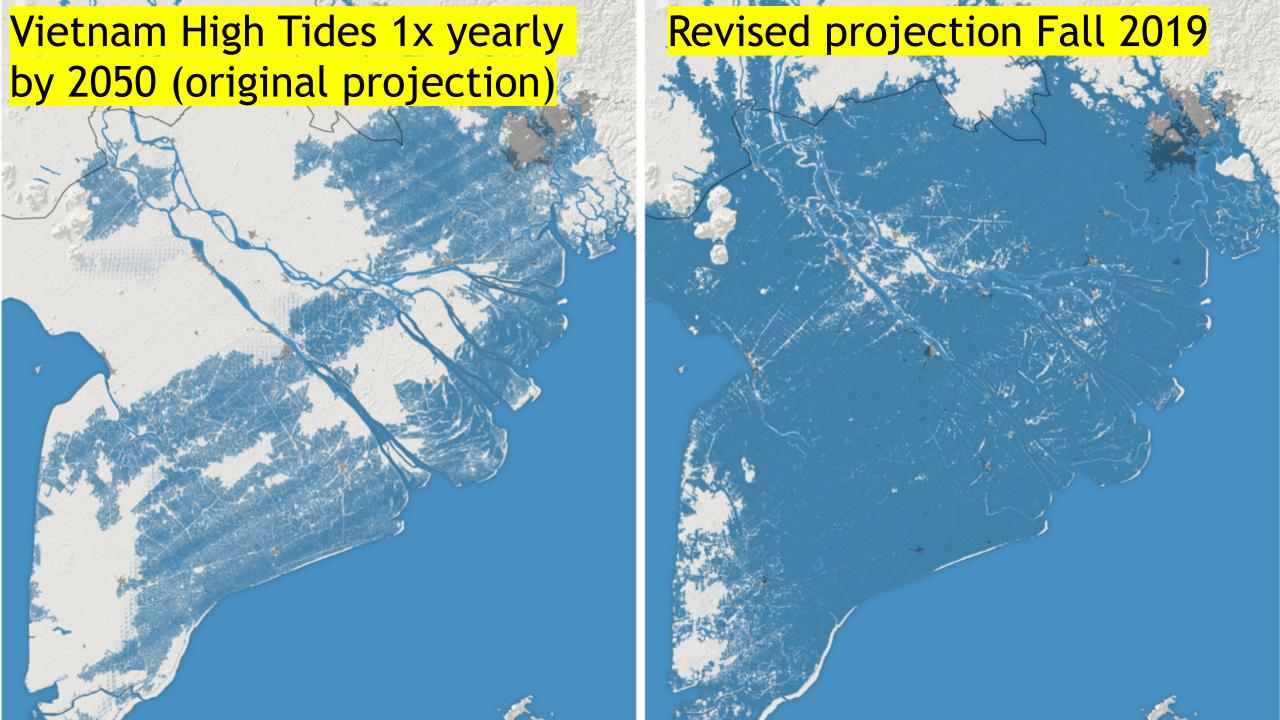




Maldives, Arabian Sea, 5 ft above sea level. Planet's lowest nation.

#### Sea Level Estimate revised upward Fall 2019

- •Land that is currently home to 300 million people will flood at least once a year by 2050 unless carbon emissions are cut significantly and coastal defences strengthened, says the study, published in Nature Communications.
- This is far above the previous estimate of 80 million.



#### Species at Risk

- Three-quarters of the Earth's estimated 8.7 million species are at risk, according to a 2011 PLoS Biology study.
- Even the most conservative estimates suggest that the current extinction rate based on vertebrate data is up to a hundred times higher than it would be without human intervention.





#### Inequality: 8 Men Own Half World's Wealth

• Just eight men own the same wealth as the 3.6 billion people who make up the poorest half of humanity,





# of Bottled Water ( Perrier, Poland Spring, etc. )

#### AND ...

- 1. Gerber
- 2. Toll House
- 3. Nesquik
- 4. Carnation
- 5. Nescafe

- 6. Tasters Choice
- 7. DiGiorno
- 8. Hot Pockets
- 9. Buitoni
- 10.Kit Kat
- 11.Butterfinger
- 12.Baby Ruth and 70 more beverage and snack items



Inequality: Hong Kong









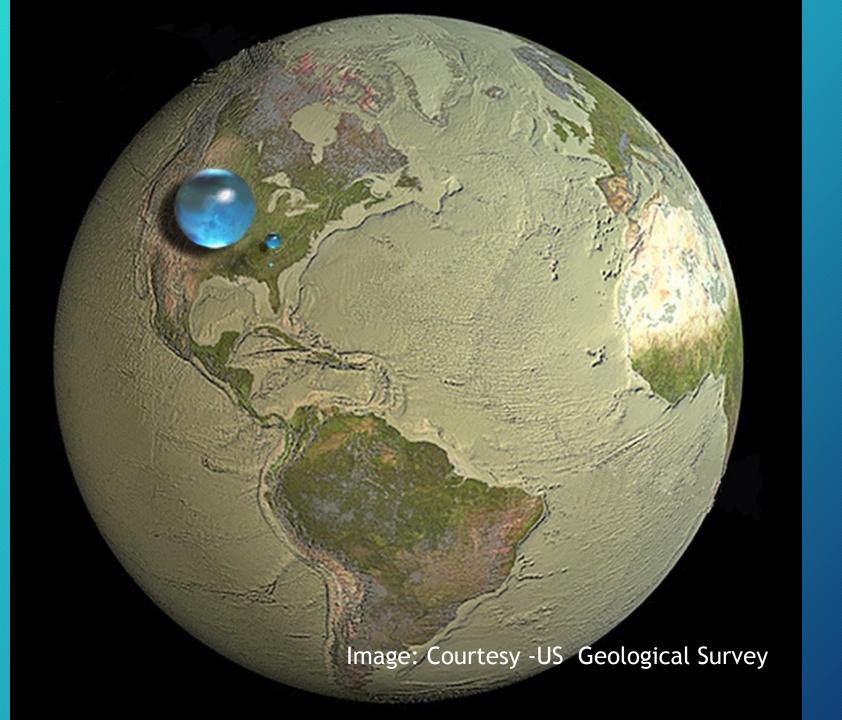
#### Laudato: Chapter 5-Final Question

Is it realistic to hope that those who are obsessed with maximizing profits will stop to reflect on the environmental damage which they will leave behind for future generations? #190

Big Sphere: All the Water in the World, includes oceans...(to scale)

Middle
Sphere:
fresh water
in ground,
lakes, rivers,
swamps...
not icepacks

Small dot is water in lakes and rivers only



70% of planet under water

.03% accessible and drinkable

3,000,000 gallons per beef steer

4,000 gallons to make one burger

2,900 gallons to grow cotton for one pair of jeans...

by 2030 nearly half the globe

could be facing water scarcity

#### Fresh Water



#### Laudato: Water (of 47 mentions)

- the lack of access to clean drinking water "indispensable for human life and for supporting terrestrial and aquatic ecosystems" [28];
- the challenges for food production due to droughts and disparities in water availability and "water poverty" [28];

#### Laudato - Water cont.

- the continued prevalence of water-related diseases afflicting the poor [29];
- the contamination of groundwater [29];
- the trend toward privatization and commodification of a resource to which the pope describes access to as a "basic and universal human right" [30].



## Deforestation

#### Oil Palm Plantation Cut From Rainforest





Coal Mining in Germany, largest moving machine

## Greta's Story



Link: Greta At Davos







Sunrise Movement USA - Green New Deal





# Laudato Si: On Care for Our Common Home

"It is my hope that this Encyclical Letter, which is now added to the body of the Church's social teaching, can help us to acknowledge the appeal, immensity and urgency of the challenge we face." (15)



#### Church and United Nations SDGs



#### Impact of Laudato at United Nations

- Macharia Kamau , Kenya Ambassador to UN
- Co-Chair of SDG Process 2012-2015

Paris Climate Agreement ,
 December 2015



#### SUSTAINABLE G ALS

























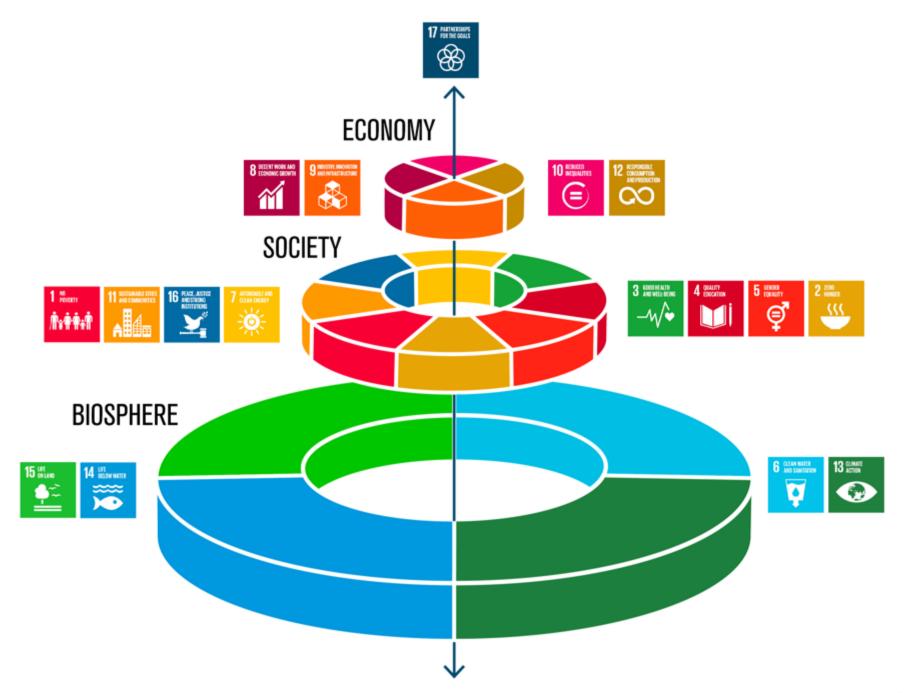








SUSTAINABLE DEVELOPMENT **GOALS** 



# Ensure availability and sustainable management of water and sanitation for all



#### SDG 6- HRWS background

- Human Right to Water and Sanitation not explicitly framed in Goals
- HRWS Included in <u>Preamble</u> after significant push by some member states and civil society
- Powerful member states opposed HR language through the final hours of negotiation at UNHQ

### Water Conflict Globally

- Pacific Institute lists nearly five hundred water-related conflicts since 1900;
- almost half of the entire list is since just 2010.

#### Laudato Si

The word "water" is cited forty-seven times in Pope Francis' encyclical, Laudato Si'. This demonstrates the great value and concern Pope Francis places on water as a sacred and essential part of life.





## Laudato Si: Integral Ecology

"Today, however, we have to realize that a true ecological approach always becomes a social approach;

it must integrate questions of justice in debates on the environment, so as to hear both the cry of the earth and the cry of the poor. " #49

#### Six Chapters

- 1. What is Happening to Our Common Home
- 2. The Gospel of Creation
- 3. The Human Roots of Ecological Crisis
- 4. Integral Ecology
- 5. Lines of Approach and Action
- 6. Ecological Education and Spirituality

# LAUDATO SI' Chapter One: What is Happening to Our Common Home

Chapter 1 presents the scientific consensus on climate change along with a description of other threats to the environment, including threats to water supplies and biodiversity.



#### Poor Suffer First

climate change sea level rise severe weather severe drought desertification, deforestation privatization of water food insecurity land grabbing, toxic dumping extractive industries: mining, logging, drilling species extinction: food and fisheries



### Green Encyclical/Social Encyclical

- Today, however, we have to realize that a true ecological approach always becomes a social approach;
- it must integrate questions of justice in debates on the environment, so as to hear both the cry of the earth and the cry of the poor. #49

# Chapter Three: Human Roots of Ecological Crisis

(Many) have accepted the idea of infinite or unlimited growth...

But this paradigm "is based on the lie that there is an infinite supply of the earth's goods, and this leads to the planet being squeezed dry beyond every limit." #106



### Chapter Four: Integral Ecology

We are not faced with two separate crises, one environmental and the other social, but rather with one complex crisis that is both social and environmental. #139



V. Intergenerational Justice



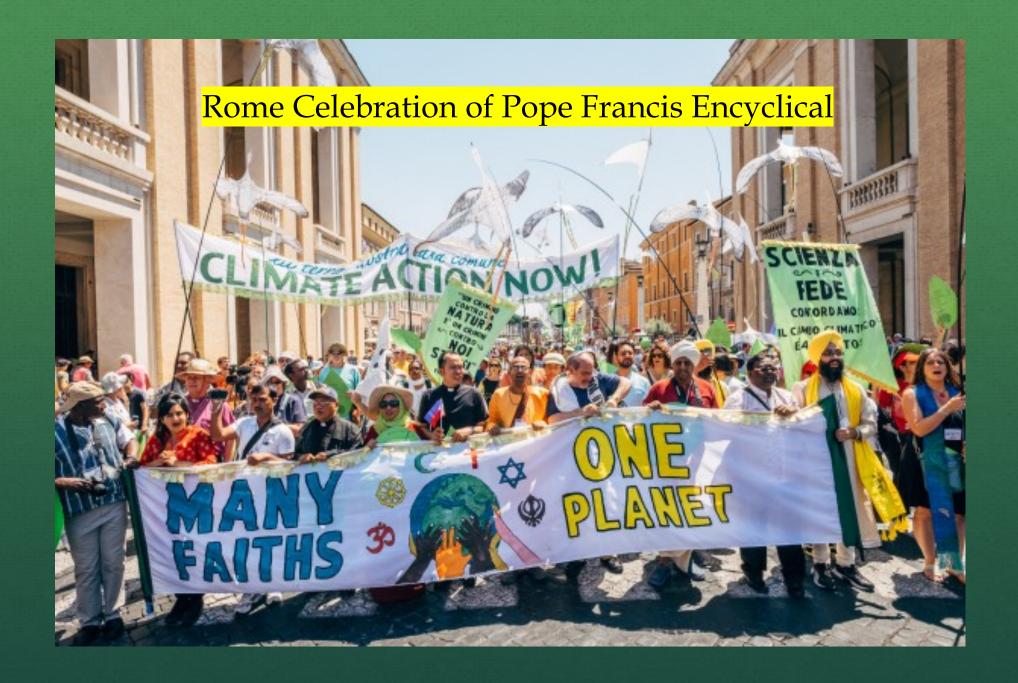


Chapter Six: Ecological Education and Spirituality

Many things have to change course, but it is we human beings above all who need to change.

We lack an awareness of our common origin, of our mutual belonging, and of a future to be shared with everyone.

#202



"The time has come to lower our voices, to cease imposing our mechanistic patterns on the biological processes of the earth,

to resist the impulse to control, to command, to force, to oppress,

and to begin quite humbly to follow the guidance of the larger community on which all life depends. "
--- Thomas Berry





# THE MOST COMPREHENSIVE PLAN EVER PROPOSED TO REVERSE GLOBAL WARMING

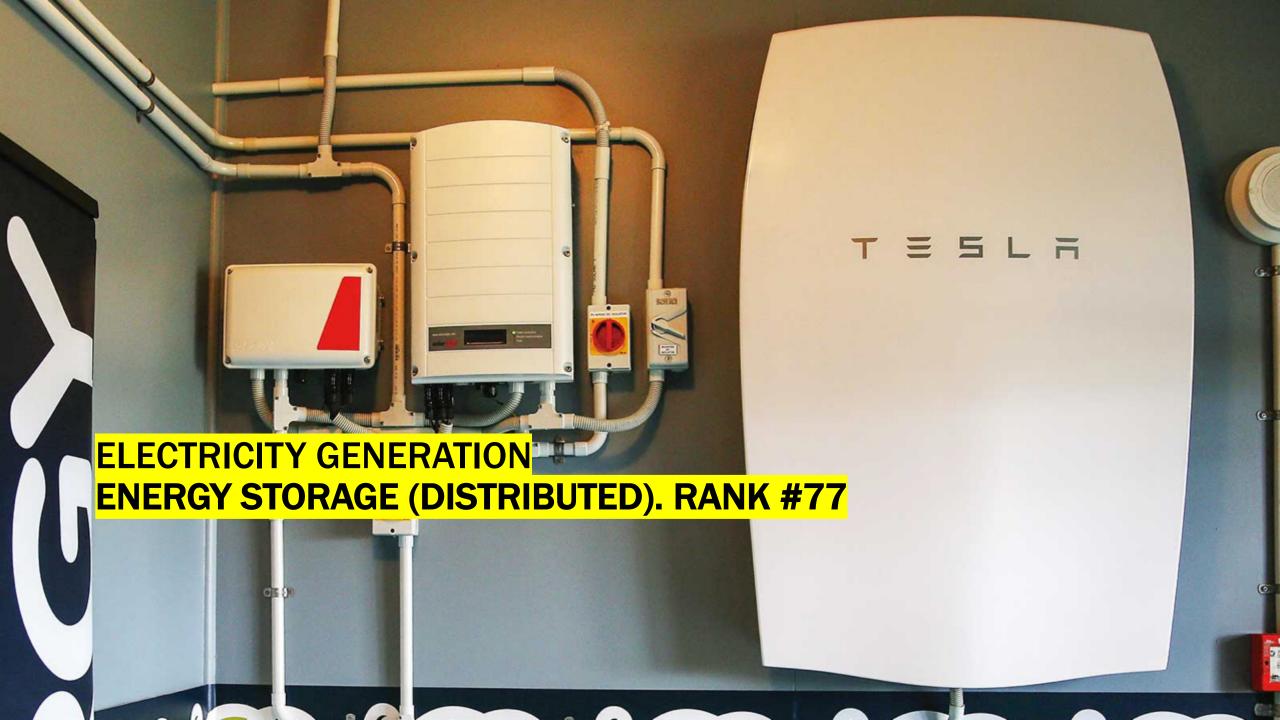
### 100 Best Solutions

• For each solution, we describe its history, the carbon impact it provides, the relative cost and savings, the path to adoption, and how it works.

#### 100 SOLUTIONS









### **EDUCATING WOMEN AND GIRLS: #6**

- #6
- RANK AND RESULTS BY 2050
- 59.6 GIGATONS REDUCED CO2
- IMPACT: Two solutions influence family size and global population: educating girls and family planning. Because the exact dynamic between these solutions is impossible to determine, our models allocate 50 percent of the total potential impact to each.
- We assume that these impacts result from thirteen years of schooling, including primary through secondary education. According to the United Nations Educational, Scientific, and Cultural Organization, by closing an annual financing gap of \$39 billion, universal education in low- and lowermiddle-income countries can be achieved.
- It could result in 59.6 gigatons of emissions reduced by 2050. The return on that investment is incalculable.

# Onshore Wind: #2



### Onshore Wind: #2

- #2. RANK AND RESULTS BY 2050
- 84.6 GIGATONS REDUCED CO2
- \$1.23 TRILLION NET IMPLEMENTATION COST
- \$7.43 TRILLION NET OPERATIONAL SAVINGS
- IMPACT: An increase in onshore wind from 3 to 4 percent of world electricity use to 21.6 percent by 2050 could reduce emissions by 84.6 gigatons of carbon dioxide.
- At a cost of \$1.23 trillion, wind turbines can deliver net savings of \$7.4 trillion over three decades of operation.
- These are conservative estimates, however. Costs are falling annually and new technological improvements are already being installed, increasing capacity to generate more electricity at the same or lower cost.

# Offshore Wind: #22

NEW YORK
OFFSHORE
WIND
PLANNED



New Jersey First Offshore Wind Contract

Offshore wind giant Orsted, which is planning several wind farms along the East Coast

Ørsted's 1.1 GW Ocean Wind project is expected to power roughly 500,000 New Jersey homes, generate \$1.17 billion in economic benefits and create an estimated 15,000 jobs over its lifetime.

## Refrigerant Management: #1



### MANAGEMENT/REDUCTION OF REFRIGERANTS: #1

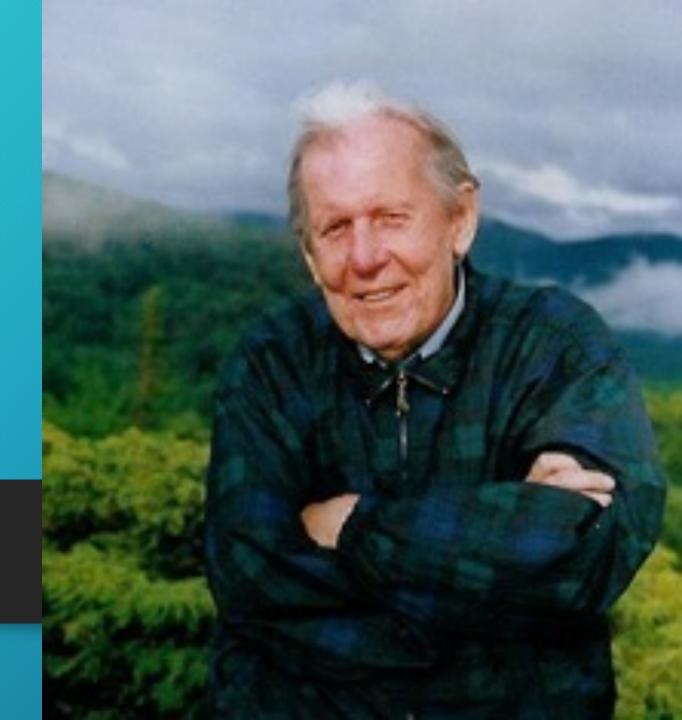
- RANK AND RESULTS BY 2050
- 89.74 GIGATONS REDUCED CO2
- \$-902.77 BILLION. NET OPERATIONAL SAVINGS
- IMPACT: Our analysis includes emissions reductions that can be achieved through the management and destruction of refrigerants already in circulation.
- Over thirty years, containing 87 percent of refrigerants likely to be released could avoid emissions equivalent to 89.7 gigatons of carbon dioxide.
- The operational costs of refrigerant leak avoidance and destruction are high, resulting in a projected net cost of \$903 billion by 2050.

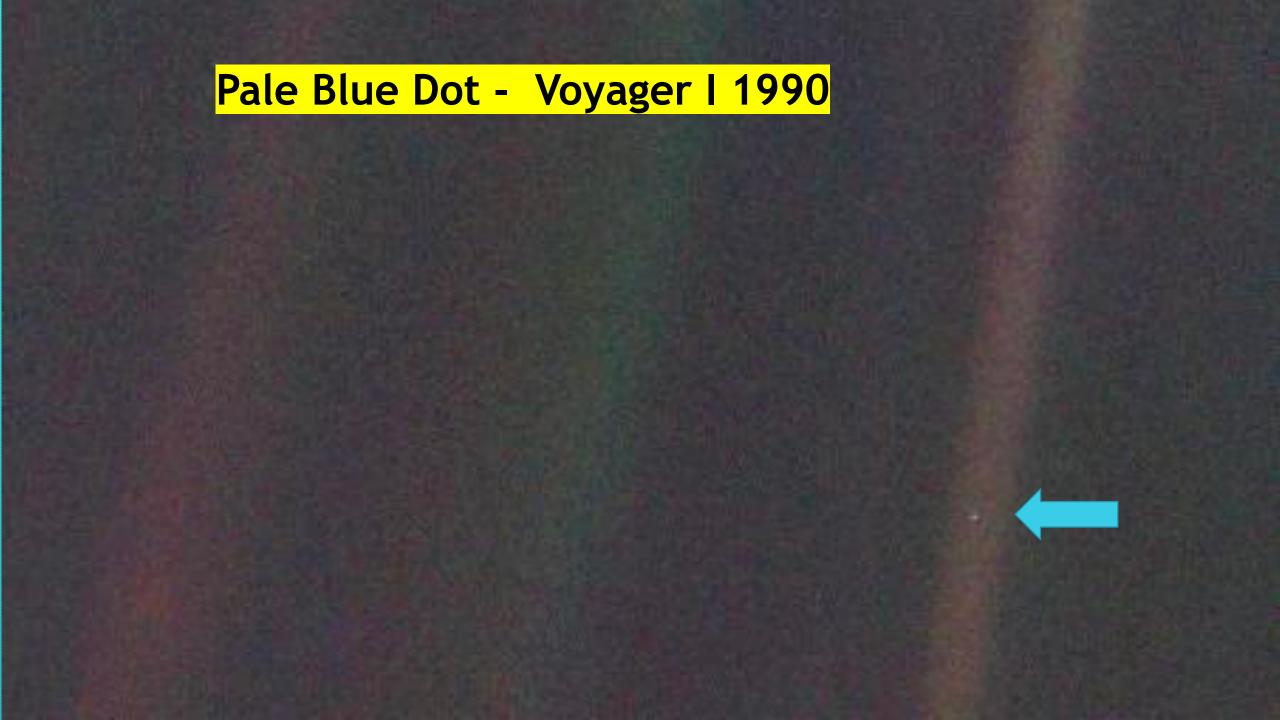
### **Advocacy Suggestions**

- Join a Group
- See, Judge, Act
- Contact Legislature
- Public Action
- Civil Disobedience
- Op Ed
- Keep Learning/Stay Informed
- Prayer and Fasting

"Perhaps the most valuable heritage we can provide for future generations is some sense of the Great Work that is before them of moving the human project from its devastating exploitation to a benign presence. We need to give them some indication of how the next generation can fulfill this work in an effective manner."

-Thomas Berry- The Great Work





## LAUDATO SI ANNIVERSARIES

- CONFERENCES SCHEDULED YEARLY
- 2020 VATICAN 5<sup>TH</sup> ANNIVERSARY
- 2021 OCEANIA PACIFIC
- 2022 LISBON- WORLD YOUTH DAY
- 2023 THE AMERICAS
- 2024 ASIA
- 2025 ROME 10<sup>TH</sup> ANNIVERSARY

