



Let There Be
Peace on Earth
And Let It Begin
With Me

EarthConnection News

Volume 3, Issue 2

Winter 2019

"May the hope, the peace, the joy, and the love of the Christ Child fill our lives and become part of all that we say and do."

The Multiple Effects of Climate Change

Climate change occurs when changes in Earth's climate system result in new weather patterns that remain in place for an extended period of time. In the past these changes have taken millions of years, but today the effects of climate change are being felt in decades, primarily due to human activity.

One manifestation of climate change is global warming. Statistics from the National Oceanic and Atmospheric Administration (NOAA) and the Na-

tional Aeronautics and Space Administration (NASA), both agencies of the U.S. Government, have confirmed that 2018 is the fourth warmest year on record globally.

Rising temperatures, however, are only one indicator of climate change. Melting glaciers and rising sea levels are impacting many low-lying countries and small islands. Recent scientific studies show that new elevation data triple estimates of global vulnerability to sea-level rise and

coastal flooding.

Changing rain and snow patterns are occurring. Because of their light color, snow and ice reflect more sunlight than open water or bare ground, so a reduction in snow cover and ice causes the Earth's surface to absorb more energy from the sun and contribute to a warming planet.

Thawing permafrost in the Arctic regions is increasing rapidly. Vestiges of ancient life and masses of carbon—
cont'd on p. 2

Climate Change Impact on Business

by Chase Pankey, Mt. St. Joseph University Intern

Climate change represents a new and somewhat daunting topic for many businesses. The challenge is compounded by the diverse and uncertain projections of changes in temper-

ature, precipitation patterns, extreme events, and other effects.

Some of the potential effects of climate change are the following:

Re: Electric Utilities

- * Peak electricity
- * Increased risk of damage to facilities

-cont'd on p.4



"Symptoms of sickness are evident in the soil, in the water, in the air, and in all forms of life."

-Pope Francis

Climate cont'd

that have been locked in frozen dirt for millennia are entering the atmosphere as methane or carbon dioxide. The carbon is accelerating the effects of climate change. Permafrost covers about 24 percent of the exposed landmass of the Northern Hemisphere – about 9 million square miles.

In Alaska, permafrost temperatures have warmed as much as 2°C in the last few decades. A recent study projects that with every 1°C increase in temperature, 1.5 million square miles of permafrost could be lost through thawing.

As a result of higher temperatures and more heat

waves, there has been a significant rise in droughts and wildfires on multiple continents. Warmer oceans are also contributing to an increase in stronger storms as evidenced by multiple catastrophic hurricanes and typhoons during the past several years affecting millions of people.

Impacts of Climate Change on Health

Pope Francis states in his encyclical on the environment, *Laudato Si'*, that symptoms of sickness are evident in the soil, in the water, in the air, and in all forms of life.

Climate change is impacting the seasonal cy-

cle of vectors that spread the diseases, such as, mosquitos, ticks, and rats. Climate is influencing the transmission, distribution, and incidences of West Nile Virus, Lyme Disease, Malaria, Zika Virus and Chikungunya Virus and is playing a

key part in increasing the range of these viruses.

In addition to threatening health through increased disease, freshwater shortages and worsening smog also are leading contributors to multiple health issues.

Madrid Climate Conference

The Conference of the Parties (COP) 25 is taking place in Madrid, Spain from December 2-13, 2019. This conference is addressing the steps countries who have signed the Paris Agreement have taken to

address climate change and necessary next steps. Leading the changes are cities throughout the world. The mayor of Medellín, Federico Gutiérrez, said that in order to achieve global

climate action it is necessary to start from the local level. "We can have many differences - political, religious - but there is something that we all have in common: the air that we breathe." Learn more at: <https://enb.iisd.org/climate/cop25/enb/>

Signs of Hope



(Senegal solar power)

Many countries are heeding the call to take active steps to adapt to and mitigate the effects of climate change.

The following are examples of positive action:

The Government of **Senegal** recently received the Future Policy Award for its National Strategy for the Promotion of Green Jobs.

Mauritius is integrating a green economy into a plan against poverty and exclusion.

Peru is developing green jobs policies at the sub-national level.

Ghana is aligning national policies with climate commitments.

Mongolia is opening up channels for financing a green economy transition.

South Africa is developing a Green Economy Knowledge Platform. .

Source: Partnership for Action on Green Economy (PAGE) works with five UN Agencies and multiple ministries across countries, through south-south and triangular cooperation and through public-private partnerships.

Write an Anaphora

Anaphora is a Greek term which means “a carrying up or back.” This type of poem uses successive lines or phrases that begin with the same word(s). It can resemble a litany.

Example:

Nature calls in the whispering leaves

Nature calls in the song of the birds

Nature calls in the swirling snow

Nature calls in the howling winds

Nature calls in the roaring thunder...

How does nature call you? Add some lines to this anaphora or try one of your own. We will share your writings on our website and/or in subsequent newsletters.

*Nature
calls in
the
swirling
snow...*

The Green Cincinnati Plan

The Green Cincinnati Plan has helped establish Cincinnati as a national leader in sustainability and an attractive destination for prospective businesses as well as people looking to raise families in a sustainable environment.

The Green Cincinnati Plan was updated in 2018 and presents a comprehensive set of recommendations to advance the sustainability, equity and resilience of the city. The Plan will help map Cincinnati's path to 100% renewable energy, starting with a proposal to

build the largest city-owned solar array in the country. The Plan was developed by a Steering Committee which included government, corporate, academic, non-profit, faith and community organizations.

Learn more at:
<https://www.cincinnati-oh.gov/oes/citywide-efforts/climate-protection-green-cincinnati-plan/>



370 Neeb Road
Cincinnati, Ohio 45233

Phone: 513-451-3932

Email: scearthconnection@gmail.com

www.scearthconnection.org

Sign up to receive our newsletter, schedule of activities and movies or to schedule presentations on your site. Contact Sue DiTullio, Administrative Assistant, at the above phone number or email.

Girl Scouts at EarthConnection



Impact on Business cont'd from p. 1

- * Uncertainty over energy output
- * Uncertainty over water supplies for cooling power plants

Re: Mining

Extreme weather events increase physical risk to business operations (e.g. flooding)

Re: Building Design and Construction

- * New design standards needed for extreme weather
- * Insurance may be more

expensive or difficult to obtain for existing buildings, new buildings, and during the construction process

Re: Agriculture

- * More refrigerated distribution and storage
- * Damage to transportation infrastructure
- * Limited availability of water
- * Quality issues
- * Access to land during flood or extreme rain con-

ditions

- * Less frequent frosts will affect quality of certain crops and reduce kill-off of pests/disease
- * Exposure of workforce to increased heat
- * Farm buildings affected by extremes of wind, heat, rain (animal welfare issue)

A number of businesses recognize the dangers that climate change poses to their industries and are actively taking steps to adapt to and/or mitigate its effects.