WISC ENERGY & ECOLOGY WORKING GROUP PRESENTS:

INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE SUMMARY

Many people of faith, united across theological lines by our commitment to care for and be stewards of all of God's creation and our call to serve vulnerable communities, have read with alarm recent reports about the growing threats of climate change.

In particular, a 2018 report by the Intergovernmental Panel on Climate Change, the United Nations body that assesses climate science, expressed the urgency of taking rapid action over the next decade to avoid the worst possible risks associated with long-lasting or irreversible changes. Read the full report here.

We offer the following take-aways from the report out of deep concern but also with hope, that as Pope Francis has said, "human beings... are ... capable of rising above themselves, choosing again what is good, and making a new start."

- **Rising global temperatures will make it more difficult for communities to adapt to climate change and to reach poverty and hunger eradication goals.**

- **The world's annual carbon emissions need to drop by nearly half by 2030 and to net zero by 2050 to keep global warming at 1.5 degrees Celsius compared to preindustrial levels. Reducing the emission of other potent greenhouse gasses such as methane (from agriculture and the production of natural gas) and hydrofluorocarbons (manufactured for use in refrigeration and air conditioning, among other things) also will contribute to reaching the goal.**

- **The report projects that annual global carbon emissions are on track to stay the same or increase, not decrease, by 2030.**

- **Keeping global warming to 1.5 degrees will require rapid and far-reaching transitions in energy, land use, transportation and other infrastructure. For instance, investments in low-carbon energy technology and energy efficiency will need to increase by roughly a factor of five by 2050 compared to 2015 levels.**

The report names many possible methods for reaching the 1.5 goal. These include energy efficiency, transition to renewable and non-carbonized energy, and removing CO_2 from the atmosphere through agricultural processes and tree planting as well processes such as capturing carbon from the atmosphere. All four scenarios laid out that limit warming to 1.5 degrees C contain various combinations of all of these methods.

The report also cautions that carbon removal technologies have societal and environmental risks that should be considered and reliance on these technologies alone is risky as they have not yet been employed at scale. The report emphasizes that carbon capture and removal (CCR) must be used in conjunction with deep emission reductions, and that these reductions combined with energy efficiency measures are the fastest means to holding emissions at the target level.

People of faith have a responsibility to be caretakers of all creation, to preserve a livable planet for future generations, and to address the disproportionate burden of global warming on poor and marginalized communities. As this scientific data is used to formulate policy, we will keep these principles in mind as we advocate for solutions that avoid further environmental degradation, injustice, and inequalities.