## UUCF Paris Pledge Initiative

## Proposal to the UUCF Coordinating Team

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**Summary**

The Paris Pledge Initiative (PPI) is a proposed UUCF program to achieve the following key objectives: *1) Reduce UUCF carbon dioxide emissions by 50% by 2030 and 2) Reach a state of net zero carbon dioxide emissions for UUCF by the year 2050.* These proposed congregational goals are consistent with the global goals contained in the agreement reached at the Paris Climate Conference held in December 2015 and the UUCF Resolution on Climate Change passed by the congregation in 2013.

Energy consumption at UUCF translates directly into carbon dioxide production, so this program will focus on energy conservation and efficiency associated with electrical power and natural gas consumption. PPI is jointly sponsored by multiple UUCF organizations, including the Social Justice Council, the Property Stewardship Council, the Green Sanctuary Group, and the Faith Alliance for Climate Solutions.

The Paris Pledge Initiative is consistent with UUCF’s moral and ethical leadership in response to the global climate change crisis challenging all life forms, particularly plants, animals, indigenous/low-income human populations and economies.

**Background**

The 2015 United Nations Climate Change Conference in Paris reached an important agreement, which *“aims to strengthen the global response to the threat of climate change, in the context of sustainable development and efforts to eradicate poverty, by holding the increase in the global average temperature to well below 2 °C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5 °C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change.”*

In order to achieve these global warming goals, the scientific community has proposed the following associated goals for carbon dioxide emissions: *1) Reduce carbon emissions by 50% by 2030 and 2) Reach a state of net zero carbon emissions by the year 2050.* The state of net zero carbon emissions (a.k.a carbon neutrality) is achieved by balancing the amount of carbon released into the atmosphere with an equivalent amount of carbon sequestered or offset by absorption techniques. These carbon emission goals are now commonly referred to as the “Paris Pledge” and have been adopted as goals by many businesses and organizations around the world, including many churches and other non-profit organizations.

The challenge and opportunity presented by the Paris Agreement has motivated several groups within UUCF to come together to support the Paris Pledge at the UUCF congregational level. The key stakeholder groups for the UUCF Paris Pledge Initiative include the Social Justice Council, the Property Stewardship Council, the Green Sanctuary Group, and the Faith Alliance for Climate Solutions (FACS). We also hope that this endeavor motivates UUCF members to commit to similar goals at the individual or family level.

**Objectives**

The Paris Pledge Initiative will establish an ongoing program which will enable UUCF to achieve the following goals: UUCF will establish an intermediate goal to reduce its carbon emissions (energy consumption) by 50% by the year 2030. UUCF will also establish a longer range goal is to achieve full carbon neutrality (“de-carbonization”) by the year 2050. The energy that UUCF expends on heating, air conditioning, lighting, and other electrical power uses translates directly into carbon dioxide emissions that are released into the atmosphere and are directly linked to global warming.

##### Justification

There are several compelling reasons why UUCF should adopt this program and work to achieve these goals. First, the Paris Pledge Initiative ties directly into our 7th UU Principle, which is “Respect for the interdependent web of all existence of which we are a part”. PPI provides UUCF with a concrete goal which gives us an opportunity to live this principle in action. In 2013, the UUCF congregation overwhelmingly passed the Social Justice Resolution on Climate Change, which includes the following commitments:

*We commit to taking personal and congregational responsibility for reducing our own carbon footprints through our choices in transportation, in our homes and buildings, in use of renewable resources, and in eating and serving energy-efficient food that is locally produced and low on the food chain;*

We pledge help and call for our leaders to assist communities who bear great burdens of global climate change, including indigenous peoples, subsistence communities, communities of color, and those whose economic security may be affected by energy policies necessary to speed the transition from fossil fuels to renewable sources of energy.

*Be it further resolved: the UUCF Social Justice Council shall be charged with reporting annually to the congregation on UUCF actions, progress and new initiatives related to addressing these resolutions on climate change.*

We believe that the Paris Pledge Initiative provides UUCF with a strong opportunity to realize these goals and live our values. We also believe that the Paris Pledge will be a positive force for community building at UUCF since it is a shared goal that we will all work together to achieve. The PPI program will regularly publicize progress and help the entire congregation understand our strategies for reducing energy consumption. We will seek participation from a broad range of UUCF members, since we will have to work together to optimize our energy use. As mentioned previously, this will have the additional benefit of raising awareness and knowledge about this issue among a broader cross-section of UUCF members. We believe it will also increase our members’ motivation to adapt these practices and goals in their private lives.

Finally, we believe that these goals strongly support our principles of effective stewardship of congregational resources, particularly our buildings and equipment, but also extending onto our grounds and natural environment. Associated with this stewardship will be significant financial savings that will accrue over time. Some degree of up-front investments will be required to achieve these goals, but these investments will be planned carefully to minimize financial impact and to maximize long run cost savings.

**Technical Approach**

UUCF has been engaged in energy conservation efforts for over a decade and commissioned its first energy audit in 2007. A follow-up energy audit and associated energy conservation plan was completed in 2012. Since that time, several improvements have been completed on the UUCF campus which has reduced the amount of energy expended annually on the UUCF campus. The most important energy saving improvement in recent years has been the replacement of the parking lot lights with new LED fixtures.

Analysis completed by the Paris Pledge team (based on UUCF utility bills) shows that the total production of carbon dioxide (CO2) by UUCF (generated by natural gas and electricity) has decreased considerably over the last 8 years:

Year Total UUCF Production of CO2

2008 209 Tons

2014 167 Tons

2015 132 Tons

While this progress is impressive, we believe that significantly more progress can and should be made. We believe that UUCF will still be able to achieve a 50% reduction from our 2015 levels over the next 15 years. Therefore, our goal will be to achieve a total C02 generation in the range of 66 tons per year.

At present, we are conducting a new energy audit to serve as the basis for the energy conservation investment project portfolio. The economics of energy conservation have changed significantly over the last two years, largely due to the rapid penetration and price decreases for LED lighting. While the current audit is still in progress, we can describe some of the key areas that we will evaluate for energy savings over the short and medium time frames:

* Lighting improvements and regulation – Leveraging LED bulbs and lighting control enhancements for major power savings.
* Window improvements (especially the Admin & Program Buildings) - Apply insulating film to the inside of all legacy single pane windows to improve insulating capabilities. Current film products applied to single pane windows can provide over 90% of the insulating benefit of double pane windows at far lower cost than full window replacement. Some window replacements may be considered depending on the specific window location and condition.
* Insulation Enhancements – Several locations within UUCF buildings will likely need to be enhanced to reduce heating and AC costs.
* Heating and Air Conditioning Upgrades – As the current HVAC units reach their end of life, replacement units will be purchased that are consistent with UUCF’s energy reduction goals.
* Roofing Improvements - Adding reflective coatings to the Program Building roof will be evaluated.
* Other – Explore emerging opportunities and changing economics in local power generation, especially from solar.

After the current energy audit is completed, the PPI team will compile a list of proposed energy conservation projects including their initial investment requirements and estimated payback period.

**Project Management and Stakeholder Coordination**

We propose that the Paris Pledge Initiative be supported as a UUCF wide program under the joint sponsorship of the following UUCF organizations:

* Social Justice Council - Will manage the social justice dimension of PPI relating to global warming as well as managing associated advocacy efforts. The existing Social Justice Resolution on Climate Change is the key foundational document supporting PPI activities at UUCF
* Property Stewardship Council - Will manage and approve the resource stewardship dimension of PPI and will coordinate UUCF capital improvement efforts
* Green Sanctuary Group - Will provide general input with a special focus on the UUCF grounds and its potential for increased CO2 absorption
* Faith Alliance for Climate Solutions (FACS) - The FACS-UUCF group will provide core coordination and management functions for PPI. FACS will also share the knowledge learned from this initiative with the other FACS member congregations with a goal of providing mutual support.

Key ongoing task activities for the Paris Pledge Initiative will include the following:

* Technical Research and Engineering – Assessing technical solutions to energy conservation and working with professionals to optimize UUCF buildings and equipment to meet the PPI goals.
* Monitoring and Tracking – Establishing the current baseline of energy usage and tracking our progress towards meeting the PPI goals. Leveraging online tools such as the EPA Portfolio Manager. Establishing and updating a web-based Energy Dashboard, which will enable UUCF members to track PPI progress.
* Publicity and Marketing Communications – Educating the congregation about PPI goals and providing regular updates through a variety of communications channels.
* Funding, Development, and Advocacy - Evaluating investment alternatives and arranging appropriate funding mechanisms. Coordinating with stakeholders to insure adequate financial support.

Current PPI team members and key liaisons are as follows:

* Dave Anderson – PPI Project Coordination
* Dave Parsons – PPI Technical Planning & Energy Baseline
* Jean Wright –PPI Coordination and FACS Liaison
* Eric Goplerud - PPI External Liaison and Chair, FACS
* Wini Atlas – Lay Minister, Social Justice
* Suzy Foster – Lay Minister, Property Stewardship
* Lois Phemister – Chair, Green Sanctuary Group
* Jim Allen – Liaison, Property Stewardship Council

Upon approval of this program, we anticipate adding several members to the team to fully support the ongoing activities described above. Over time, we hope and anticipate that the Paris Pledge Initiative will become deeply embedded in the fabric of UUCF life.

**Funding Sources**

A wide range of funding mechanisms will be utilized to achieve the goals of the Paris Pledge Initiative. The selection of the appropriate funding approach will depend on the characteristics of the specific energy conservation investment project, including the amount of up-front funding required and the estimated payback period. A number of possible funding mechanisms are listed as follows:

Operational Process Improvements – Little or no up-front investment required. A significant amount of energy savings can be realized through changes in operating procedures and training for both the staff and congregation as a whole.

Operational Budget - A limited amount of energy conversation investment may be supported from the general Operating Budget, particularly the replacement of lower cost components.

Capital Expenses - Larger replacement and enhancement projects will require specific approval and may possibly utilize UUCF Capital funds.

The Reach Campaign - The Reach Campaign has a specific budget for capital improvement and energy conservation. The current Reach budget has an allocation of $100K for single-pane window replacement. We believe that newer window enhancement approaches may provide similar benefits and allow this Reach funding to be applied to a broader range of PPI related objectives

Grants - Certain investment projects will lend themselves to obtaining funding from grantors, including both UUCF internal grantors (e.g. the Endowment Fund, The Stan Richards Innovation Fund) or external grantors (e.g. the UU Veatch Program at Shelter Rock)

Loans - A number of funding organizations will provide attractive financing for energy conservation projects. Some lending institutions (e.g. Sparkfund) focus specifically on energy conservation projects and offer a wide range of funding amounts and attractive terms for this purpose.

Member Solicitation and Contribution Campaigns - Some investments may lend themselves to a direct appeal to UUCF members for funding. This type of funding mechanism would require Board approval and must be carefully coordinated with other UUCF funding solicitations.

**Proposed Schedule**

The following dates provide a proposed schedule for the commencement of PPI activities:

Proposal Approval by the UUCF Coordinating Team April/May 2016

Kick Off Planning and Project Portfolio Development Summer 2016

Program Kick-Off September 2016

Annual Progress Reports October of each Year

Individual energy conservation projects will be executed on varying schedules and will be included in the annual PPI progress reports.

Submitted by:

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