# Pathway to Net-Zero Faithbased Organizations

A guide to help faith-based organizations to become greenhouse gas and pollution free



#### The Challenge

The United Nations Intergovernmental Panel on Climate Change, the State of Colorado, Boulder County, and the City of Boulder have all set greenhouse gas pollution reduction goals of 50% by 2030 and 90% by 2050. To avoid the worst impacts of the climate crisis, every organization and individual must participate. The good news is that faith-based organizations are well positioned to be leaders in turning this challenge into an opportunity.

This pathway demonstrates the steps that your faith-based organization can take to become more energy efficient, save money, and reduce your climate impact to zero. This pathway is a clear and simple way to understand where you are currently and what the major steps are on the journey.

#### The Goal

The goal of the effort is for faith-based organizations to take active and visible action in transitioning their facilities to have zero climate impact. A second goal is to share work faith-based organizations are doing to motivate and inspire other businesses to act, both locally and across the country.

#### **The Vision**

A significant number of faith-based organizations have become inspired and empowered to take action that demonstrate the benefits of converting to efficient lighting and equipment in addition to adding renewable energy. Many are also actively working with their supply chain to inspire and empower their stakeholders to take similar action. Through making these efforts highly visible, this leadership inspires a larger movement that significantly accelerates the adoption of a sustainability lifestyle – first around energy, but also around other critical areas like waste, use of resources, and relationship to the natural world.

### Step 1: Assess, Measure & Plan

It is important to first understand what opportunities are appropriate for your organization and what incentives are available. To determine success, you need to benchmark your energy use and calculate greenhouse gas emissions, repeating this annually. Building from the opportunities identified and the benchmarking data you can create a plan and set goals that drive your journey toward becoming a net-zero Faith-based organization. Feel free to use the rest of the action steps in this document to help inform your organization's plan.

Assess Opportunities	Target Date	Person Responsible
☐ Review and adopt the City of Boulder's <u>climate action commitment</u> for your organization*		
☐ Engage with PACE to learn about resources, incentives and opportunities*		
□ Work with PACE and Xcel to complete building assessments*		
☐ Review local sustainability ordinances and how they apply to your organization		
☐ Identify electric conversion opportunities to pair with renewable energy		
☐ Evaluate renewable energy opportunities (such as solar PV, RECs, Community) to offset electric load		
☐ Determine budget and available financing options		
Measure and Track	Target Date	Person Responsible
☐ Establish a benchmarking process to measure energy use*		
☐ Calculate annual greenhouse gas emissions**		
☐ Continue to measure and track progress against goals**		
Plan	Target Date	Person Responsible
☐ Develop the action plan (determine level of property owner commitment)		
☐ Evaluate cost/payback of each measure to help prioritize budget		
☐ Set tangible and actionable goals, and timeline**		

<sup>\*</sup> First wave of actions

<sup>\*\*</sup> Ongoing Actions

# **Step 2: Engage and Communicate**

It is beneficial to begin engaging with your staff, customers and other stakeholders at the start of this process. However, you will need to engage with all these groups throughout your journey to minimize barriers and maximize impact. Engaging with customers and staff is great for organization, many studies have shown that staff and customers both invest more in organizations that are value driven. Additionally, by publicizing and sharing your success you can inspire others to work toward effective climate solutions.

Staff Engagement	Target Date	Person Responsible
☐ Appoint an energy steward, champion and/or develop a green team*		
☐ Create a forum for staff to share and suggest their ideas		
☐ Share goals and commitments with management and staff		
☐ Provide ongoing sustainability educational opportunities for your staff**		
Stakeholder Engagement	Target Date	Person Responsible
☐ Engage with property owners to gauge interest*		
☐ Present climate action plan to property owner to get buy in. Change lease if necessary		
☐ Create a green purchasing policy and distribute to your supply chain		
☐ Join industry specific groups to learn how peers are addressing sustainability**		
☐ Participate in sustainability leadership groups to better understand current trends**		
Communication and Recognition	Target Date	Person Responsible
☐ Publish your climate action commitment on your website, in your organization, or other forum*		
☐ Publish your goals on your website, in your organization, or other forum		
☐ Communicate your wins as they happen on your website, in your organization, or other forum**		
☐ Become PACE Certified organization		* First ways of acti

First wave of actions

<sup>\*\*</sup> Ongoing Actions

# **Step 3: Implement Energy Efficiency**

The checklists of energy efficient measures below are an example of how you may list and prioritize measures according to your action plan. The first section are actions that make sense to implement regardless of whether you own or lease your space as they have quick paybacks and/or enhance the quality of your space. The second set of actions might require partnering with your property owner/manager to implement if you lease your space.

**Target Date** 

**Person Responsible** 

**Operational Projects** 

	☐ Identify what lighting temperatures, fixture and bulb types suit your space*		
Interior Lighting Upgrades	☐ Determine over-lit areas and reduce unnecessary fixtures*		
	☐ Replace inefficient lighting with LED (Energy Star or DLC)		
	☐ Install controls (daylight/occupancy sensing opportunities)		
	☐ Inventory all kitchen equipment (log age and note any Energy Star labels)		
Kitchen Equipment	☐ Replace inefficient equipment with Energy Star		
24	☐ Service equipment keep refrigeration coils clean and free of dust**		
HVAC	☐ Weatherstrip drafty doors and windows*		
Optimization and	☐ Adjust thermostat temperature setpoints and setbacks		
Envelope	☐ Insulate ductwork and/or bring into condition space		
Water	☐ Appropriate thermostat temperature setpoints*		
Heating Efficiency	☐ Replace faucet aerators and pre-rinse spray valves		
Higher Capital Inv	restment Projects (done in partnership with property manager)	Target Date	Person Responsible
Outdoor Lighting Upgrades	☐ Replace inefficient lighting with LED (Energy Star or DLC)		
	☐ Consider curfew controls and/or timers to reduce run-time		
HVAC Optimization	☐ Add a building automation system		
	☐ Perform test & balance of air distribution system		
Building Envelope Improvements	☐ Air tightness testing to identify air leakage, durability issues		
	☐ Increase insulation R-Value in roof		
	☐ Invest in efficient windows or apply window film to mitigate solar heat gain		

<sup>\*</sup> First wave of actions

<sup>\*\*</sup> Ongoing Actions

### **Step 4: Adopt Renewable Energy**

The checklists of renewable actions below are an example of what you might include in your action plan. The first section looks at installing renewable energy on your building and might require you to partner with your property owner/manager to implement if you lease your space. The second section provides alternative ways to purchase renewable energy if installing is not an option or if you cannot meet the load demands with self-generation.

Higher Capital Inv	estment Project (done in partnership with property owner/manager)	Target Date	Person Responsible
Install Renewables	☐ Review <u>incentives</u> , financing and power purchasing agreement options*		
	$\square$ Get bids from several contractors $^*$		
	☐ Install/Purchase Renewable Energy		
Other Renewable	Options	Target Date	Person Responsible
Community			
Community	☐ Investigate community solar opportunities*		
Community Solar	☐ Investigate community solar opportunities* ☐ Invest in community solar		
•			
Solar	☐ Invest in community solar		

#### **Step 5: Pursue Electrification**

The checklists of electrification actions below are an example of what you might include in your action plan. Electrification is a crucial step to becoming a net-zero organization because regardless of how efficient you are or how much energy your produce with renewables if you use natural gas to power heating and/or equipment you are still burning fossil fuel.

Electrification	Target Date	Person Responsible
☐ Review incentives and financing*		
☐ Convert from gas to efficient electric kitchen equipment		
☐ Convert from gas to efficient electric heating		
☐ Reduce distribution losses with tankless water heating		
☐ <u>Install electric vehicle charging stations</u>		

<sup>\*</sup> First wave of actions

<sup>\*</sup> First wave of actions
\*\* Ongoing Actions

<sup>\*\*</sup> Ongoing Actions

### **Step 6: Execute Other Strategies**

The impact you can have spans further than your buildings and the energy they consume. Below is a list of things you could consider adding to you plan that begin to address the broader climate impact of your organization. The scope of what you address may vary and you likely will add additional actions.

Other Emission Rec	luction Strategies	Target Date	Person Responsible
Transportation Alternatives	☐ <u>Install bike racks</u> to encourage staff and customer cycling		
	☐ Identify ways to increase pedestrian friendly zones		
	☐ Educate tenants/patrons on available transportation options		
	☐ Develop a <u>zero-waste</u> program		
Landfill Waste Diversion	☐ Create a green purchasing policy and distribute to your supply chain		
	☐ Develop a green cleaning policy		
Efficient Water Use	☐ Use drip irrigation and native drought-tolerant plants		
	☐ Conduct an outdoor irrigation assessment		
	☐ Replace inefficient toilets with WaterSense-labeled models		

