

CLIMATE ACTION PLAN

2020

SAINT MARY'S COLLEGE

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WITH MORAL LEADERSHIP - 2**

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PREPARED BY THE SUSTAINABILITY COMMITTEE

**SAINT
MARY'S
COLLEGE**
of CALIFORNIA

TACKLING THE CLIMATE CRISIS WITH MORAL LEADERSHIP

Saint Mary's has a bold vision of sustaining an environment where all people have clean air to breathe, clean water to drink and access to resources to live a healthy life. As one of the early signatories of Saint Francis' Pledge, an initiative of the Catholic Climate Covenant, and responding to our Lasallian Catholic Mission to live in and act as a community, Saint Mary's has long been committed to the responsibility of caring for our common home. We do this by protecting our common resources and advocating alongside communities who face the harshest impacts of global climate change.

Tackling climate change is not just a technological challenge, it is a moral, ethical and social justice issue. Pope Francis' Encyclical on Care for Our Common Home, *Laudato Si*, warned that "those who will have to suffer the consequences of what we are trying to hide will not forget this failure of conscience and responsibility."

Our Plan details the major goals, projects and initiatives to most effectively and quickly ratchet down our greenhouse gas emissions, while infusing values of justice, equity and inclusivity. We must transform the way we operate our College, including how we heat and power our buildings, how we commute to campus, and where our energy comes from. These actions will not only reduce our impact on the climate, but also position Saint Mary's to continually define what it means to be a climate-friendly college.

VALUES
that inspire
ACTION

Guiding Principles

Three frameworks guide our work.



The **U.N. Sustainable Development Goals** are an urgent call for action by all countries and institutions. They recognize that ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth – all while tackling climate change and working to preserve our oceans and forests.



Pope Francis' **Laudato Si'**: *On Care for Our Common Home* is the appeal to "every person living on this planet" for an inclusive dialogue about how we are shaping the future of our planet. Pope Francis calls the Church and the world to acknowledge the urgency of our environmental challenges and to join him in embarking on a new path. This encyclical is written with both hope and resolve, looking to our common future with candor and humility.

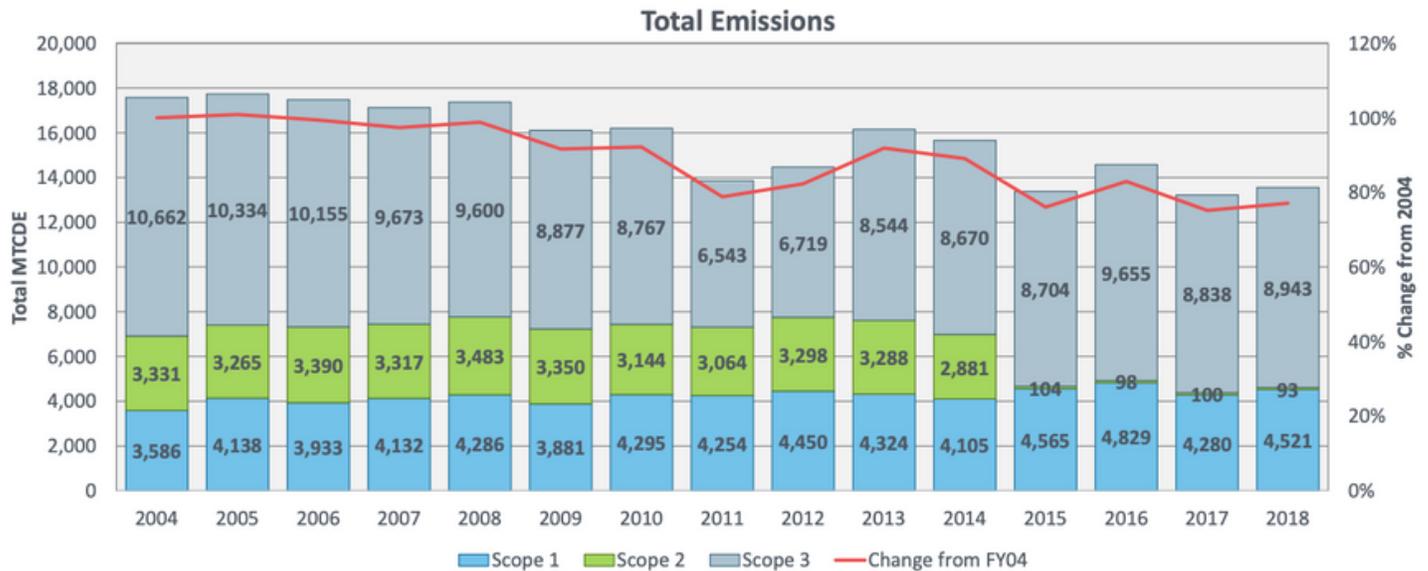
Most importantly, we are guided by our five core **Lasallian principles**: Faith in the Presence of God; Respect for All Persons; Inclusive Community; Concern for the Poor and Social Justice; and Quality Education.



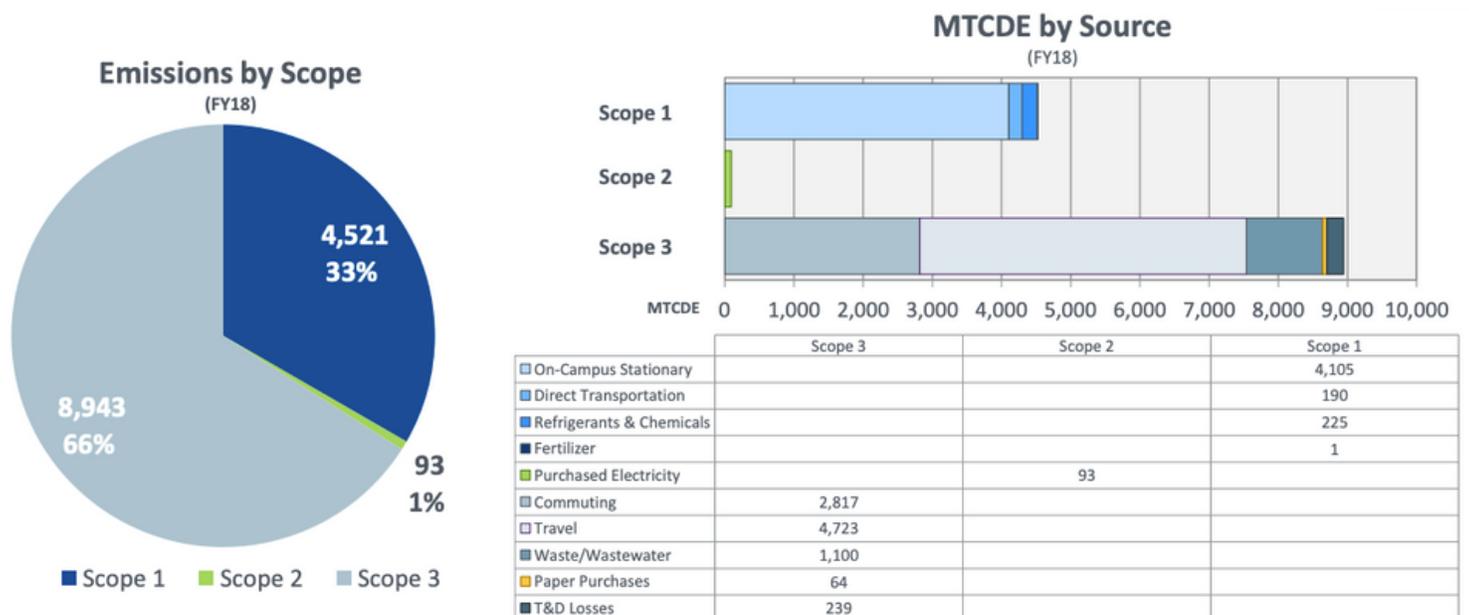
Rooted in
JUSTICE

Our Emissions Overview

GREENHOUSE GAS EMISSIONS RELATED TO CAMPUS OPERATIONS



By 2018, Saint Mary's had reduced greenhouse gas emissions by an estimated 22% since 2004, the earliest data available. Most of this remarkable achievement is due to the institution's decision to purchase renewable energy credits (RECs) from wind power, almost entirely eliminating Scope 2. Saint Mary's largest remaining greenhouse gas emissions are natural gas use for heating buildings (30%) and transportation (56%). The following section outlines strategies and projects to reduce these and other emissions.



Greenhouse gas emissions are categorized into three scopes: **Scope 1** includes emissions from owned sources, **Scope 2** includes emissions from purchased energy, and **Scope 3** includes all other emissions, such as travel.

PRIORITIZING ACTIONS

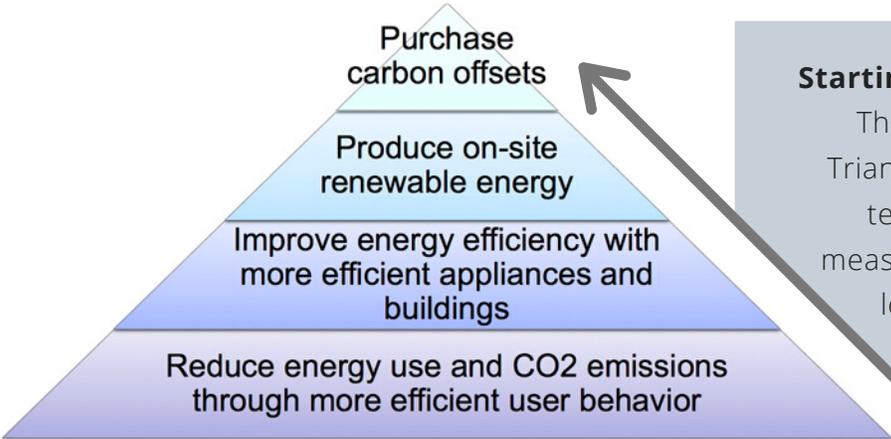
Why invest in Scope 2 despite having almost eliminated emissions in this category? Long-term solutions to climate change require that we eliminate or substantially reduce the amount of greenhouse gasses being emitted into the atmosphere. There are many ways to do this (see pyramid below), but some have better payoffs (financially, environmentally, and on our health and wellbeing) than others. For example, energy efficiency improvements almost always result in more net cost savings and carbon reductions than any other measure, while purchasing carbon offsets is often deemed a last resort. While Saint Mary's Scope 2 emissions are nominal due to our investment in renewable energy credits, we are continuing to invest in measures at the bottom rung since they will have the most impact on climate change, are more financially sustainable, and make our local communities stronger, healthier and more economically resilient.

Major Emissions:

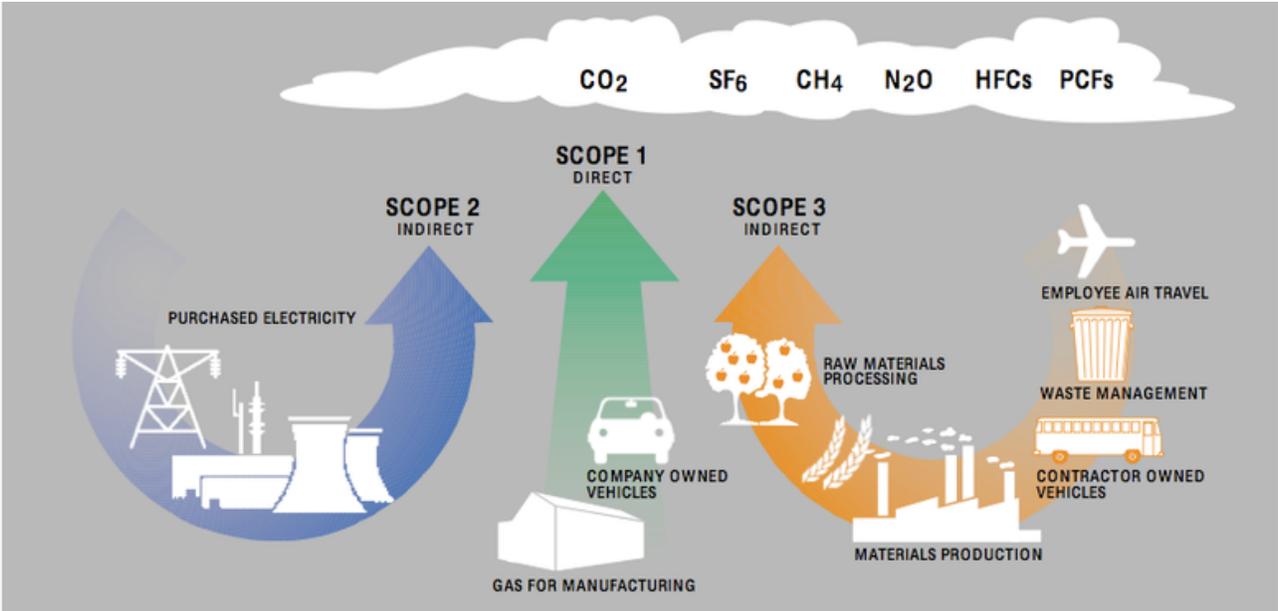
Scope 1:
Natural gas (mostly for heating) & campus fleet

Scope 2:
Purchased electricity

Scope 3:
Commuting and college-sponsored travel.



Starting at the bottom rung
The Climate Action Priority Triangle (left) depicts longer-term, more cost-effective measures at the bottom, and less effective, short-term measures at the top.



Our decarbonization TARGETS

30% ↓
by 2025

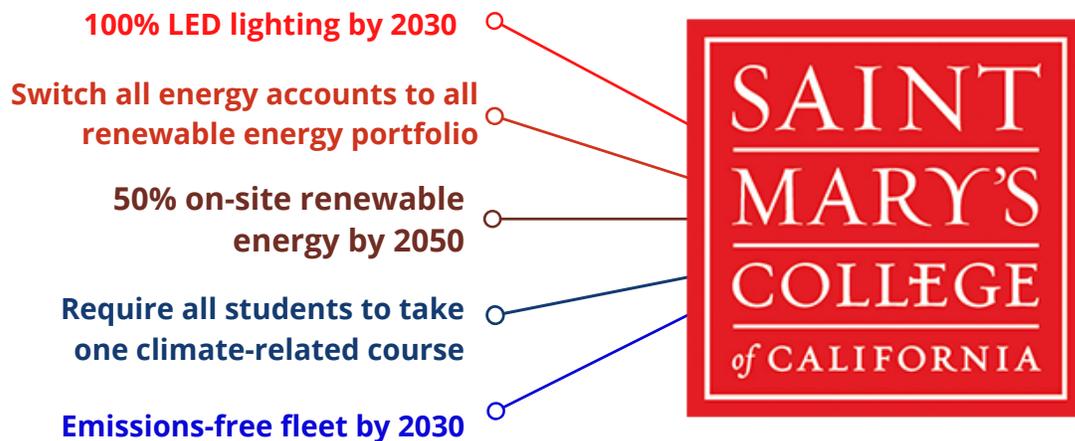
Carbon Neutral
Scope 1 & 2
by 2030

Carbon Neutral
Scope 3
by 2050

Why set ambitious targets?

We find ourselves at a pivotal moment for the earth's climate. The world's top scientists have told us we have a ten-year window to make rapid reductions in the carbon pollution causing global warming. Anything less will severely destabilize the global climate, leading to extreme weather, droughts, floods and sea-level rise that will be increasingly hard for humans to manage.

MORE SPECIFIC AREA-FOCUSED GOALS WILL HELP US REACH OUR DECARBONIZATION TARGETS, INCLUDING:



OUR APPROACH

TOP TARGET AREAS



ENERGY



TRANSPORTATION



POLICY



EDUCATION

FOUR ACTION AREAS

Our institution has identified four major areas - **energy, transportation, policy & education** - where we can achieve the largest and most cost-effective carbon reductions. Instead of addressing emissions scope-by-scope, our plan is to tackle carbon emissions through these interwoven areas of action and opportunity. The following pages detail their importance, key goals in each area, as well as metrics by which to measure success.

EQUITY & JUSTICE

As a Lasallian Catholic college with a mission to inclusively serve marginalized communities, we will examine how our operations, decision-making, programs, policies and practices may unintentionally perpetuate inequities. Communities of color and low-income communities fare far worse than their counterparts in nearly every area, including: housing, health, criminal justice, employment, and the environment - all of which are inextricably connected. Climate change is no different - the most vulnerable populations will bear unequal climate-related burdens, including health disparities, economic instability and greater risk to extreme weather events. How do we ensure that our initiatives result in equal distribution of environmental and institutional gains? We must give constant consideration to how our projects and policies, not only in this Climate Action Plan but elsewhere in our institution, impact Environmental Justice communities both locally and globally. For example, burning fossil fuels can lead to health impacts, such as respiratory symptoms, cardiovascular disease, and cancer. Because most power plants are located in or near communities of color and low income communities, those impacts must be considered as we make important institutional decisions, such as where our energy comes from. We will apply this racial equity lens throughout the planning, decision-making and implementation process.





**EFFICIENT.
RESILIENT.
FOSSIL-FREE.**

ABOUT

Shifting to low-carbon sources of energy typically requires significant advance planning particularly when involving changes to on-campus infrastructure. These types of changes must be strategically timed to coincide with retirements of existing campus energy equipment. Due to the growing threats of extreme weather events, such as fires, we also acknowledge the importance of energy resiliency. We view resilience as the ability of a system or community to survive disruption and to anticipate, adapt, and flourish in the face of change.

ENERGY

Saint Mary's is pursuing the following actions with measurable indicators in **red**.



ENERGY EFFICIENCY

Invest in strategic energy management, which prioritizes energy-related projects and measures to yield the most GHG reductions and financial savings.

Energy efficiency indicators from our internal SEM Opportunity Register will be listed online beginning Fall 2020.



RENEWABLE ENERGY

Pursue on-site renewable energy, which will result in financial savings, resiliency, less pollution in vulnerable communities and reduced GHG emissions.

% renewable energy of total usage



ENERGY RESILIENCY

Invest in energy resilient power systems, which not only can produce renewable energy day-to-day, but will allow SMC to operate during power shutdowns if coupled with battery storage.

on-site renewable energy generation with battery storage back-up in kWh



COMMUNITY CHOICE AGGREGATE

Switch all energy accounts to all renewable energy portfolio. This could include our local Community Choice Aggregation (CCA), Marin Clean Energy (MCE), which invests in non-polluting, local and renewable sources of energy.



**CONNECTED.
HEALTHY.
SMART.**

ABOUT

Transportation is the largest contributor of Saint Mary's GHG emissions, and arguably the most difficult to tackle since it involves disrupting status-quo modes of commuting and traveling. Environmental impacts compounded by human health implications make this area particularly important. During this iteration of the CAP, our plan is to focus on fleet vehicles as well as student, faculty and staff commuting. In our next iterations we plan to address business air travel more directly, with the use of carbon offsets among other measures.

TRANSPORTATION

Saint Mary's is pursuing the following actions with measurable indicators in red.



TRANSPORTATION DEMAND MANAGEMENT

Promote and incentivize alternative modes of transportation, including biking, carpooling, BART and the County Connection. These measures will help reduce single-occupancy vehicles.

% single occupancy vehicles



EV CHARGING STATIONS

Provide more Electric Vehicle charging infrastructure, including Level 2 Charging Stations and designated parking spaces, to support the campus community and visitors to transition to vehicles that operate without fossil fuels.

EV charging stations & usage



ELECTRIC FLEET

Transition vehicles owned and leased by Saint Mary's to operate without fossil fuels.

% SMC fleet that is all-electric.



SMART MOBILITY

Connect students and our campus community to safe, affordable, efficient and clean transportation through the use of smart mobility applications.



**LISTEN.
PLAN.
LEAD.**

ABOUT

The term “policy” refers to a standard set of principles that guide a course of action. Some of our greatest environmental successes are a result of well-crafted and timely policy implementation. Guiding principles and the hoped-for behavioral changes must be addressed at all levels - from our own campus to our local community to national and international policy-making.

POLICY

Saint Mary's is pursuing the following actions with measurable indicators in **red**.



STATE AND LOCAL ACTION

Work with local and national organizations and decision-makers to advocate for public policies that support climate action.

Engage in public policy at local, state, national level



CAMPUSWIDE POLICIES

Implement or revise several campus-wide policies including: temperature set point policy; sustainable purchasing policy; sustainable food policy, fair trade institution status, etc.

revised or implemented climate-related policies



BEHAVIORAL CHANGE

Increase student-led initiatives for residents and campus users to adopt best management practices in regards to energy and water-saving behaviors as well as waste diversion practices.



COMMUNITY RELATIONSHIPS

Engage leaders in local communities and organizations to identify opportunities for Saint Mary's to leverage its educational resources to improve regional resiliency.



**ENGAGED.
PLACE-BASED.
INCLUSIVE.**

ABOUT

Research, teaching and learning are some of the most important ways in which transformative change in higher education will have lasting and far-reaching impact. Our approach includes education inside and outside the classroom, enhancing creative and systems-level thinking around sustainability and climate action.

EDUCATION

Saint Mary's is pursuing the following actions with measurable indicators in **red**.



CURRICULUM

Make climate neutrality and sustainability a part of the curriculum and co-curricular educational experience for all students.

climate-related courses and co-curricular programs offered



INTER-CAMPUS DIALOGUE

Offer resources and curriculum on climate-related issues for both academic development and operational behavioral change. Foster a group, workshop or online resource to share ideas and information.



CLIMATE ACTION HUB

Serve as a 'hub' in our local community for creating and disseminating knowledge about regional climate adaptation strategies and solutions.



CAMPUS AS A LIVING LAB

Utilize Saint Mary's infrastructure and operations as tools to provide students with real-world skills and, for the institution to meet its sustainability goals.

class projects, thesis projects, term papers, published papers

TIMELINE & PROCESS

WHAT IS OUR TIMELINE AND PROCESS FOR IMPLEMENTATION?

WE ENVISION THE CLIMATE ACTION PLAN AS A MULTI-STAGE, ITERATIVE PROCESS MARKED BY SEVERAL MILESTONES: (1) GHG INVENTORY, (2) ESTABLISH TARGETS, (3) DEVELOP THE PLAN, (4) IMPLEMENT POLICIES & PROJECTS, (5) MONITOR RESULTS.



2019

- Review GHG data
- "Listening" stage - town hall meetings and focus groups
- Establish reduction targets, measurable goals and metrics to verify progress

2020

- Implement policies and measures outlined in the 2020 CAP
- Updated website with up-to-date and interactive content metrics and progress

2025

- Analyze goals and metrics and establish new benchmarks, policies and projects, if needed.
- Update Climate Action Plan

2030

- Verify whether 2030 reduction targets were met
- Continue to develop new strategies and plan as technologies develop



CLIMATE ACTION PROJECT HIGHLIGHTS



LEGEND



LED Lighting: Saint Mary's plans to begin a comprehensive, phased LED lighting installation project starting with outdoor pole lights.



Alternative Transportation: In 2019, a Transportation Demand Management Plan was implemented to decrease the number of single occupancy vehicles coming to campus and increase alternative transportation.



Solar PV: The College is currently scoping several solar PV projects to generate on-site renewable energy, including rooftop solar on the Recreation Center.



EV charging stations: In 2020, 11 new charging stations were installed to reduce motor vehicle emissions by providing EV charging stations powered by clean, renewable energy.

WAYS YOU CAN TAKE ACTION

Sustainable Trips

- Share a ride
- Work remotely one day per week
- Get out of your car and walk, bike or take public transit

Energy Use

- Turn off lights when not in use
- Close all windows when heat or air conditioning is on
- Take shorter showers
- Opt for energy efficient appliances for your office, room or department

Green Purchasing & Toxic Waste

- Reduce your exposure to harmful chemicals in cleaning and personal care products
- Safely dispose of products with toxic chemicals, such as fluorescent lights, batteries, and paint

Zero Waste

- Send nothing to landfill
- Buy only what you need
- Consider sharing with roommates, classmates or colleagues
- Repair what is broken, and reuse what you can
- Refuse single-use items, such as straws, plastic cups and plastic utensils
- Bring a reusable travel mug and water bottle
- Recycle & compost



SAINT MARY'S COLLEGE

Report prepared by the Sustainability Committee, endorsed by the
Associated Students, Academic Senate and Staff Council.

Sustainability
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