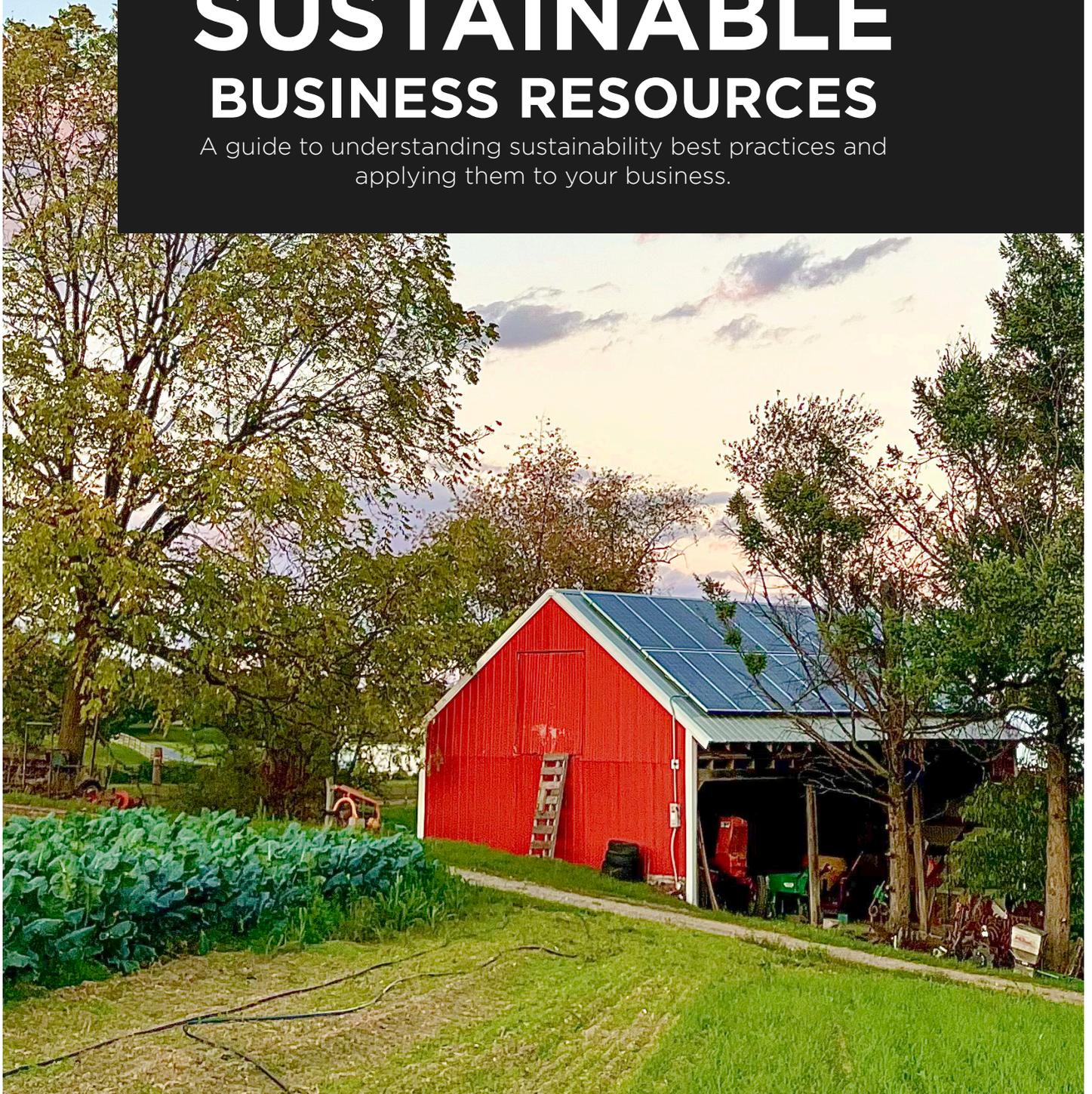


LANCASTER COUNTY, PENNSYLVANIA



SUSTAINABLE BUSINESS RESOURCES

A guide to understanding sustainability best practices and
applying them to your business.



Making This Your Resource

There are a variety of entry points to incorporating sustainable goals into your business. Starting points vary from jumping right into a greenhouse gas inventory, laying significant groundwork toward future requirements, or educating your team on terms, tools, and templates.

Use this as a reference guide as sustainability topics arise in your work

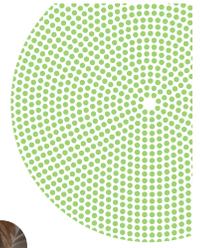


- Develop your business understanding of sustainable drivers
- Pair this guide with our networking and education forums
- View your business through a new lens and approach sustainability conversations from a new perspective
- Establish what works best for your business: to begin or deepen its sustainability planning
- Strategically incorporate financial savings and sustainability goals

After surveying businesses, we found that there was a wide variety of knowledge, opportunities to bridge information, and a variety of sustainability initiatives from different starting points - all of which contribute to reducing emissions in Lancaster County. Through our nine-month process, we listened, learned, and determined what we could offer to support the local business community. We hope you find this resource useful!



On behalf of the Lancaster Sustainability Cohort

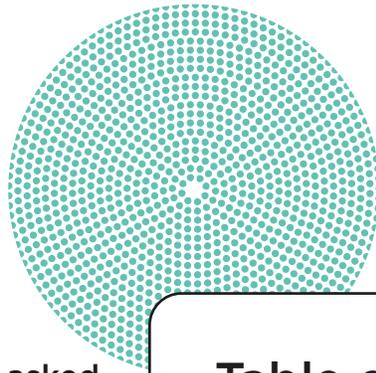


Our Sustainable Business Cohort

This resource is the product of a Sustainability Cohort convened by RegenAll, Lancaster Chamber, and MANTEC. The Cohort was made up of Lancaster County businesses who are trailblazers in their industries. Each brings a diverse level of comfort and knowledge around sustainability initiatives and has a significant interest in collective learning and action. The Cohort spent nine months working together to pinpoint best practices, share case studies, and engage experts to ensure this resource is applicable to businesses of all sizes. Taking a practical and nonpartisan approach, we want to share an overview of subject matter, best practices, and resources in order to accelerate and strengthen sustainable business practices. We encourage you to begin!

Overview

Sustainability 101



+ Increasingly businesses are asked about their sustainability culture and goals

Does your business inventory your greenhouse gas emissions? Is your business engaged in climate action planning? Does your business have goals to incrementally reduce your carbon footprint? These questions are asked during the request for proposal (RFP) process, during the hiring process, up and down the supply chain, by customers, by investors, and by associates and new management.

It is possible to begin on your path toward a sustainable future, whether you are brand new to sustainable thinking, driven by the market, or by your personal and professional values, and no matter how many resources your business is able to dedicate to sustainability.

Tax Credits and funding are now available to incentivize businesses to make changes and achieve sustainability goals. Increasing sustainable measures, energy efficiency, and reducing waste saves significant resources: money, time, and materials.

In addition, sound preparation will significantly save resources and time. This guide is designed to break down the components of sustainable practices, tools, and opportunities so that you can use this resource to jump start your work.

Table of Contents

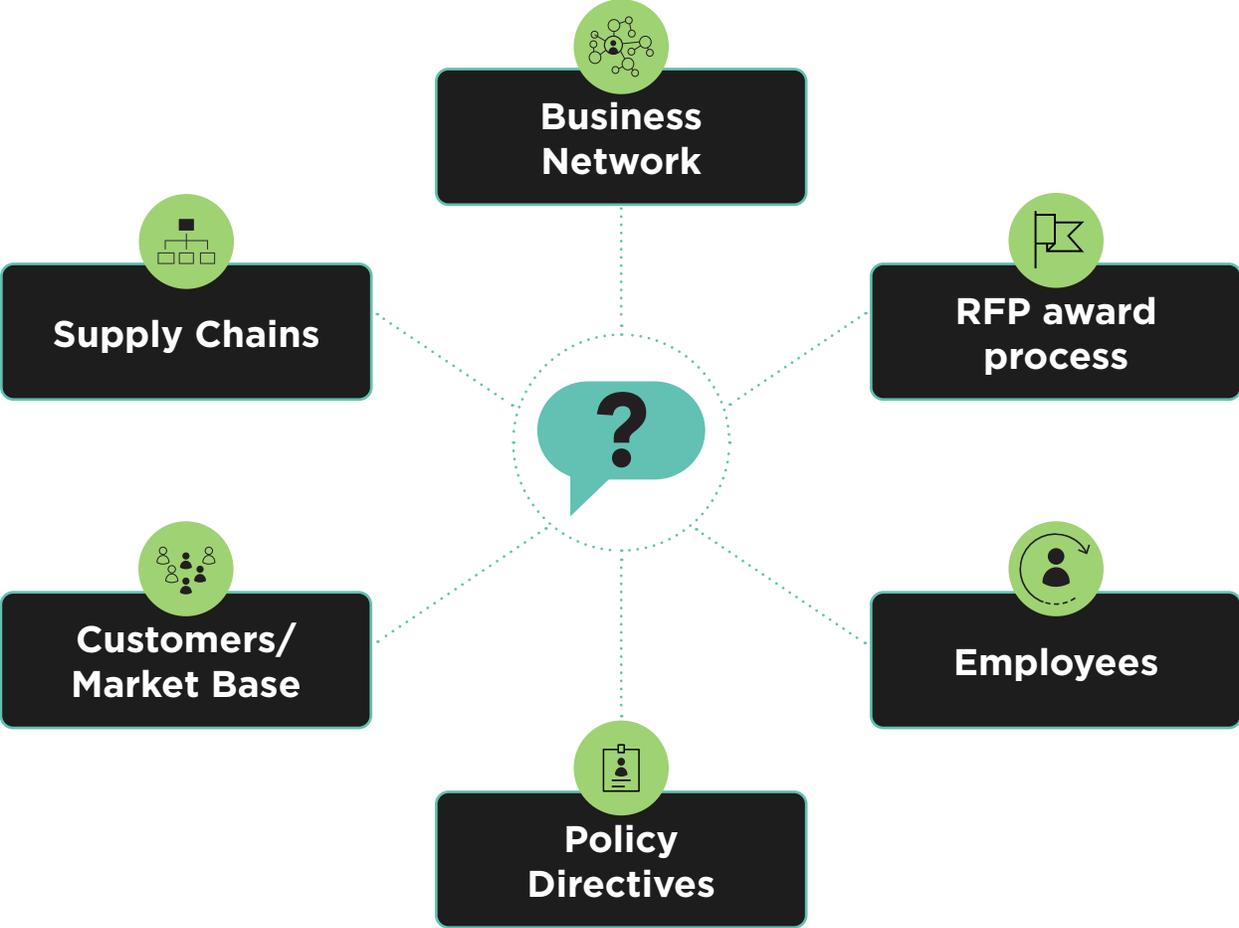
Making the Case for Sustainability	page 1
Lancaster County Greenhouse Gas Inventory	page 3
Foundational Strategies.....	page 5
Sustainability as a Culture	page 7
Greenhouse Gas Inventory	page 9
Climate Action Planning	page 11
Renewable Energy.....	page 13
Circular Loops and Waste Streams	page 14
Property Management.....	page 15
Transportation and Equipment	page 17
Navigating Myths and Challenges.....	page 19
Marketing	page 21
Tax Credits and Funding	page 24
Local Networks and Resources.....	page 25
Glossary of Terms	page 27

For Comments or More Information:

Visit RegenAll.org or contact us at contact@regenall.org

Making the Case for Sustainability

Who is asking about Sustainability?



What are motivators for Sustainability?



Financial incentives



Savings (time, resources, efficiency, money, etc.)



Value-added product/service



Increased marketability



Proactive cost-saving preparation for policy requirements



Recruitment and retention

- Greenhouse Gas Accounting
- Climate Action Plan
- Certifications & Storytelling
- Carbon Offsets



CLEAR CLIMATE STRATEGIES

Find your organization's path to net zero emissions.



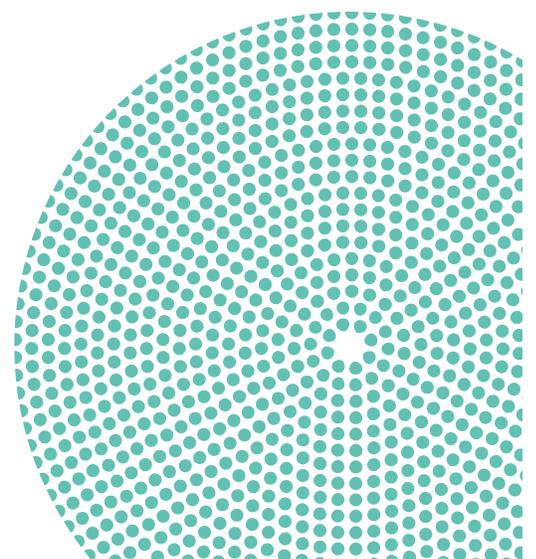
www.clearclimatestrategies.com | info@clearclimatestrategies.com

Lancaster County Greenhouse Gas Inventory

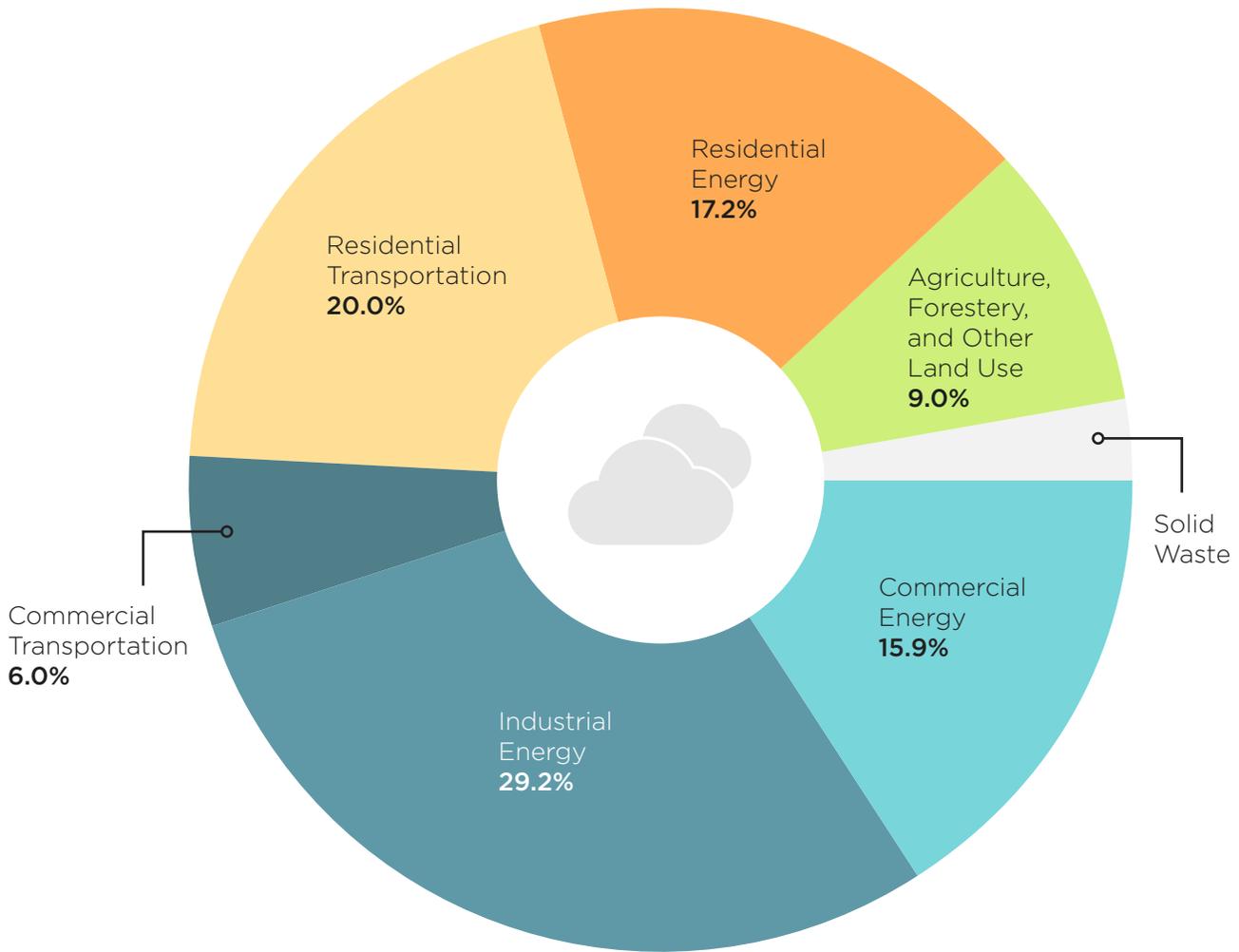
In 2020, RegenAll developed the first Greenhouse Gas Inventory for Lancaster County to identify the source and magnitude of emissions produced in the County, by sector. Our team measured energy use from six sectors including industrial energy; commercial energy; residential energy; transportation; Agriculture, Forestry, and Other Land Use (AFOLU); and solid waste. Emissions estimates were developed utilizing the industry standard ClearPath software from ICLEI (Local Governments for Sustainability), based on direct data requests from utility companies, wastewater treatment plants, and local transportation assessments.

The results of our inventory suggest that Lancaster County was responsible for emitting 10,582,141 metric tons of carbon dioxide equivalent (MTCO₂e) into the atmosphere in 2018. Emissions from the industrial energy sector contributed the most to this total, followed closely by transportation and commercial energy.

To help understand how we collectively might begin reducing these emissions, RegenAll further classified the sectors to determine what entities have the ability to influence emissions. When viewed this way, three clear decision-makers emerge: Lancaster farms control approximately 9% of emissions, households are responsible for 37%, and Lancaster businesses influence 51% of local emissions. In the context of this guide, this reveals why Lancaster businesses are so important for local emissions reduction.



Emissions in Lancaster County



~9% of emissions controlled by farms

~37% of emissions controlled by households

~51% of emissions controlled by businesses

WHAT CAN YOU DO?

Join Us In Looking Through a Sustainable Lens

- Engage in sustainability networking opportunities.
- Schedule an introductory conversation with RegenAll (also see list of consultants).
- Join local facility tours.
- Inventory and assess energy use (energy and operational energy) and waste streams.

Foundational Strategies

Building Your Team

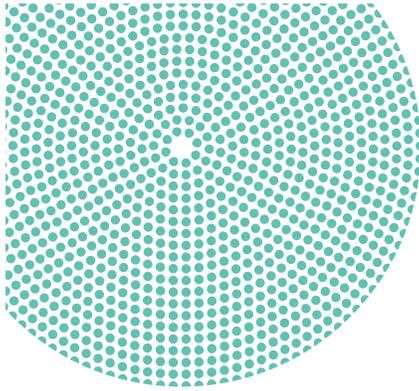
Developing a strong team establishes a foundation for incorporating sustainability into a business or organization.

The following team structure is reflective of a large business. Smaller businesses/organizations can tailor their team accordingly.

- **Finance Officer**
A financial case is needed to determine the practicality of initiatives proposed. The GHG inventory work is directly linked to accounting spreadsheets.
- **Procurement Director**
What a business orders for its supplies has a big impact on its own footprint. This position understanding how sourcing aligns with the business's climate action planning is a must.
- **Operational/Facility**
Identifying how to reduce emissions directly at facility locations is significant.
- **Compliance/Health and Safety**
A Compliance/Health and Safety Officer ensures sustainability efforts meet regulatory standards and protect worker safety. This role minimizes risks, aligns initiatives with legal requirements, and strengthens overall impact.
- **Passionate Employee(s)**
Having an employee who cares about sustainable practices and is motivated to improve business performance in this area is invaluable.
- **Executive Champion**
Executives set emission reduction goals and drive company culture; their participation on the action team is helpful and necessary. Executive alignment with and support for the goals is critical.



For a small business, one individual employed for sustainable work at .25 FTE can be enough to begin to move sustainability strategy and planning forward.



MARS

For us, net zero is more than just a goal.

It's an achievable plan.

LET US HELP YOU INNOVATE AND GROW YOUR BUSINESS

Empowering manufacturers, startups, and entrepreneurs with funding, expertise, and a supportive entrepreneurial community.

DISCOVER HOW WE CAN PROVIDE THE CAPITAL YOU NEED TO BRING YOUR INNOVATIVE IDEAS TO LIFE.
CNP.BENFRANKLIN.ORG



Maximize Your Business Scrap Revenue With Lancaster's Leading Recycling Partner

Industrial Scrap Metal Recycling Center in Lancaster, PA

CALL OR TEXT
(717)598-2491

INDUSTRIAL
CONTAINER
SERVICE

RESIDENTIAL
DROP-OFF SERVICE

Visit recycleyourmetal.com to learn more

 24-Hour Turnaround Guarantee

 Up-front Formula Pricing

 Prompt Payments

 80+ Years Of Experience

Sustainability as a Culture

- Communicate the benefits of the sustainability goals.
- Create strategic internal marketing and educational opportunities around sustainable business practices.
- Clearly state the benefits of sustainability goals.
- Host local organizations and nonprofits to speak on local opportunities and resources.
- Allot time for employee-inspired sustainable action.
- Provide incentives.
- Celebrate cultural wins: share out success stories.
- Track & communicate progress, as changes are implemented.



What matters to your employees?



**What motivates them?
Examples: clean air, clean water, local agriculture, sense of community.**

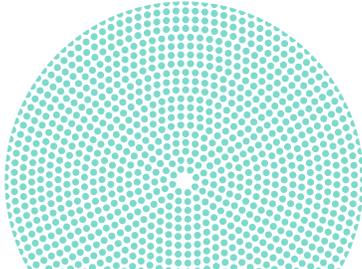


What can be offered to establish buy-in?

WHAT CAN YOU DO?

Measure Engagement

- Productivity Studies
- Job satisfaction surveys
- Value surveys





Bring ideas to life
 Asking questions to determine sustainability motivators forms purpose and reason, and is a great way to grow engagement.

At Eurofins, sustainability is at the heart of what we do.

We are guided by our vision and core values to be the global leader in Testing for Life by contributing to a healthier and safer world that provides a strong foundation towards Environmental, Social and Governance (ESG) initiatives.

View our 2023 Sustainability Report.

eurofins | BioPharma Product Testing

INTERIORS HOME is committed to becoming a leader in climate action and sustainable business practices in the furniture industry. INTERIORS HOME offers furniture products from manufacturers with strong environmental commitments and clear sustainability initiatives.

Live your style
 Love your home.

At INTERIORS HOME, we proudly support

REGENALL

FURNITURE DESIGN MATTRESSES RUGS

FAMILY OWNED
 LOCALLY GROWN™

INTERIORSHOME
 interiorshome.com
 LANCASTER • CAMP HILL • YORK

GHG (Greenhouse Gas) Inventory

Every activity has an emissions component associated with it. A greenhouse gas inventory is a detailed summary of a business or organization's annual emissions.

An inventory is an important step to better understand the source and magnitude of the emissions to prioritize actions for the greatest impact.

An emissions factor is used to convert financial records (accounting spreadsheets) into emissions amounts based on each specific activity. These emission factor conversions are pre-established and based on extensive scientific and economic research.

Three Categories of GHG

The GHG inventory is broken down into three categories, Scopes 1, 2, and 3. Large corporations are typically held to a standard of all three scopes. It is valuable to have this comprehensive understanding of your actual GHG emissions and impact as a baseline measurement from which successes can be measured and reported. Smaller companies may find it more manageable to begin with Scopes 1 and 2.

A business may be planning to incorporate a GHG inventory, however, you can immediately begin preparing. Early preparation will save significant time and resources and the inventory process will run smoother.

Worried about cost?

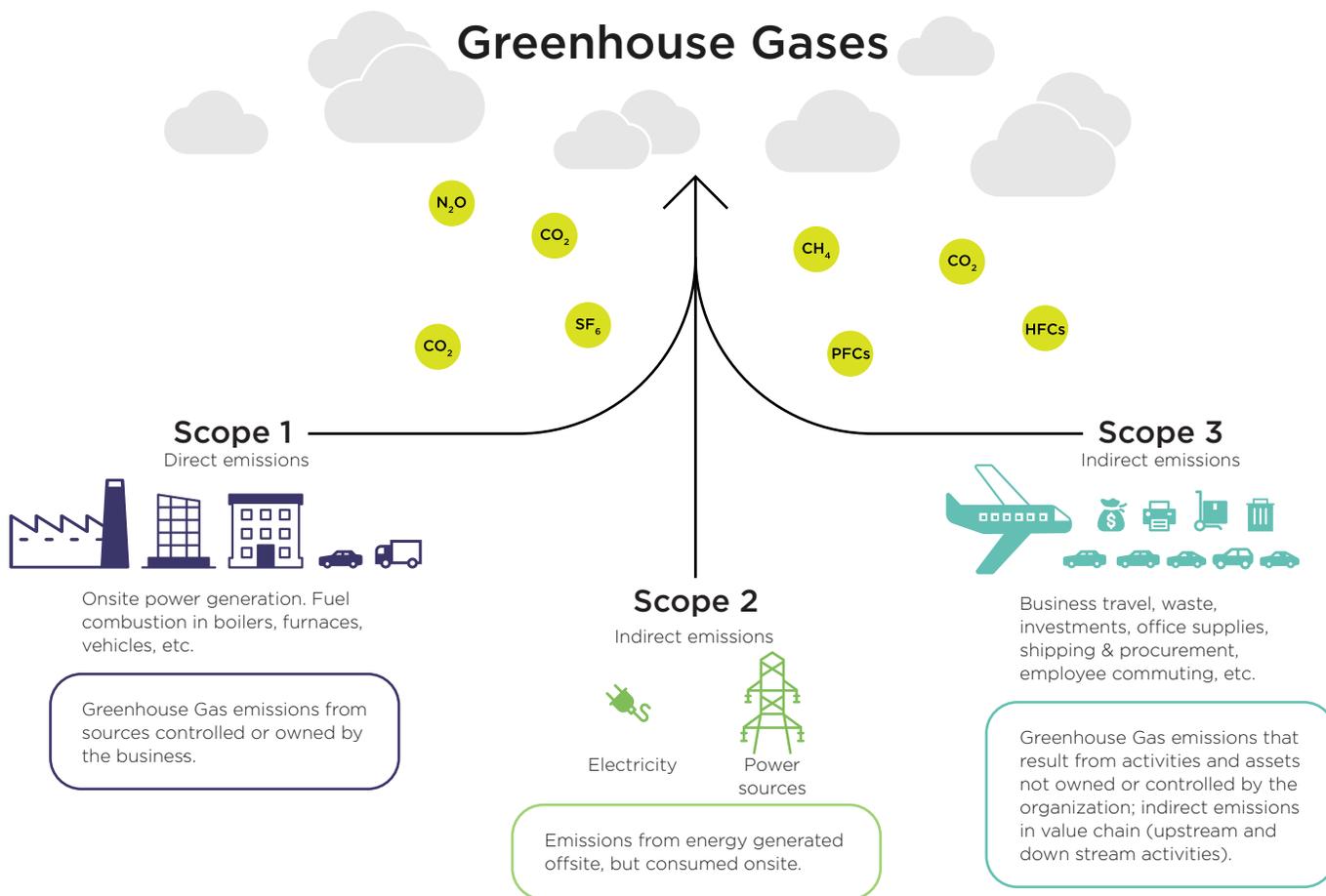
Initially, an online tool can be used to estimate emissions, or for a more thorough review you can contract a professional.



Resources Available

Check out our ever expanding online resource directory





WHAT CAN YOU DO?

Prep Now - Save Time & Money

Aligning business accounting spreadsheets with the information needed for GHG inventory tracking can take some time. Use the resource section to find a template for how to begin aligning these categories. The sooner you begin, the more time and resources you save.

Activate Your Team

Establish roles of responsibility for compiling the information needed to track emissions. This can be as simple as assigning a role for inputting corresponding accounting data on the GHG spreadsheet. Each data input process will vary based on company procedures. It is important to make the process for inputting information efficient and automatic.

Climate Action Planning

A Climate Action Plan (CAP) includes both targets and action steps for the purpose of incrementally reducing emissions. It is beneficial to complete a GHG inventory prior to climate action planning in order to effectively set goals. It is important that the goals are achievable.

Each emissions reduction goal is paired with a feasible set of outlined steps that a business can take to effectively reduce emissions. Steps can have a cost and cost savings associated with them; there

are sources of funding to support businesses in achieving their emission reduction goals.

Additional Standards & Certifications

- B-Corp Certification
- ESG Reporting
- SBTi (Science Based Targets)
- GRI (Global Reporting Initiative)
- EcoVadis Ratings
- United Nations Sustainable Development Goals (UN SDGs)

WHAT CAN YOU DO?

Understanding Carbon Offsets

To achieve credible and quantifiable GHG reduction targets, look at the Carbon Offset Guide to learn how to reduce emissions while diligently working towards your target goals.

Priorities

Courtesy of Clear Climate Strategies

1. Do the Easiest Thing First
2. Focus on the Flashiest
3. Every Big Thing Counts
4. Offset What You Can't Get At

Starting New Habits

You can immediately begin incorporating sustainable steps and culture into your daily business activity without a Climate Action Plan. Know that both the GHG inventory and the CAP are tools of measurement and tracking. They are also beneficial to your business's transparency and marketing.

Get to Know the Free Services Available

A number of free resources are available to businesses and the community to help understand how to advance sustainability efforts. Check out the resource page to see what could work for you, your business, your neighbor, or your community.

Your farm or rural small business can save 50% on going solar.

Learn how with our free step-by-step guide.

SolarUnitedNeighbors.org/RSSREAP



Renewable Energy

Renewable Energy Certificate (RECs)

Businesses may purchase renewable energy certificates (RECs) as a method of supporting clean energy production equivalent to their energy usage. Purchasing RECs helps clean energy producers flourish and it certifies your business as being powered by clean energy. Purchasing RECs does not literally change the source of your business's electricity; all generated energy goes to the same place - the power grid - and it is impossible to know your electricity's exact source the same way it's impossible to track a cup of water poured into a river. Each megawatt-hour (MWh) of clean

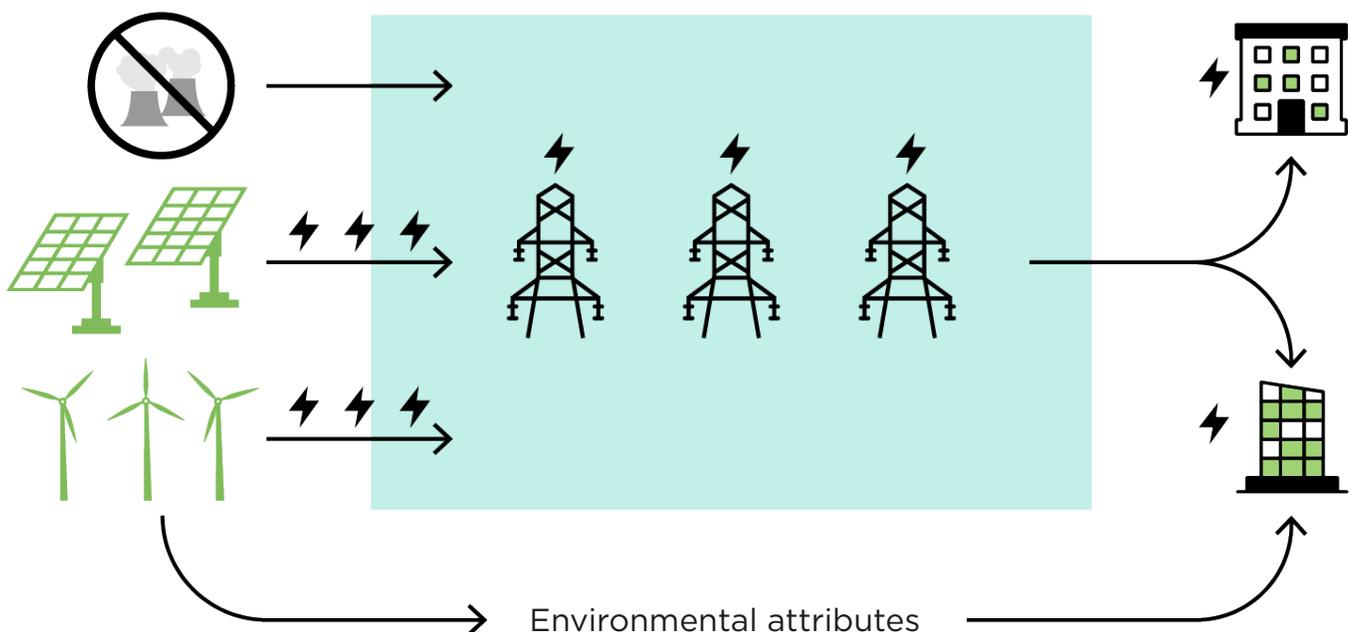
energy, such as electricity generated from wind or solar farms, holds two values. One is electricity, and the other is a certificate that verifies such electricity was generated from a renewable source. That certificate, the REC, may be purchased by companies who wish to support clean energy proportionate to their energy consumption and show their commitment to sustainability.

Pennsylvania participates in the following markets:

- PA Tier I RECs
- PA SRECs

Participating in state-sponsored programs may make businesses eligible for grants or other incentives.

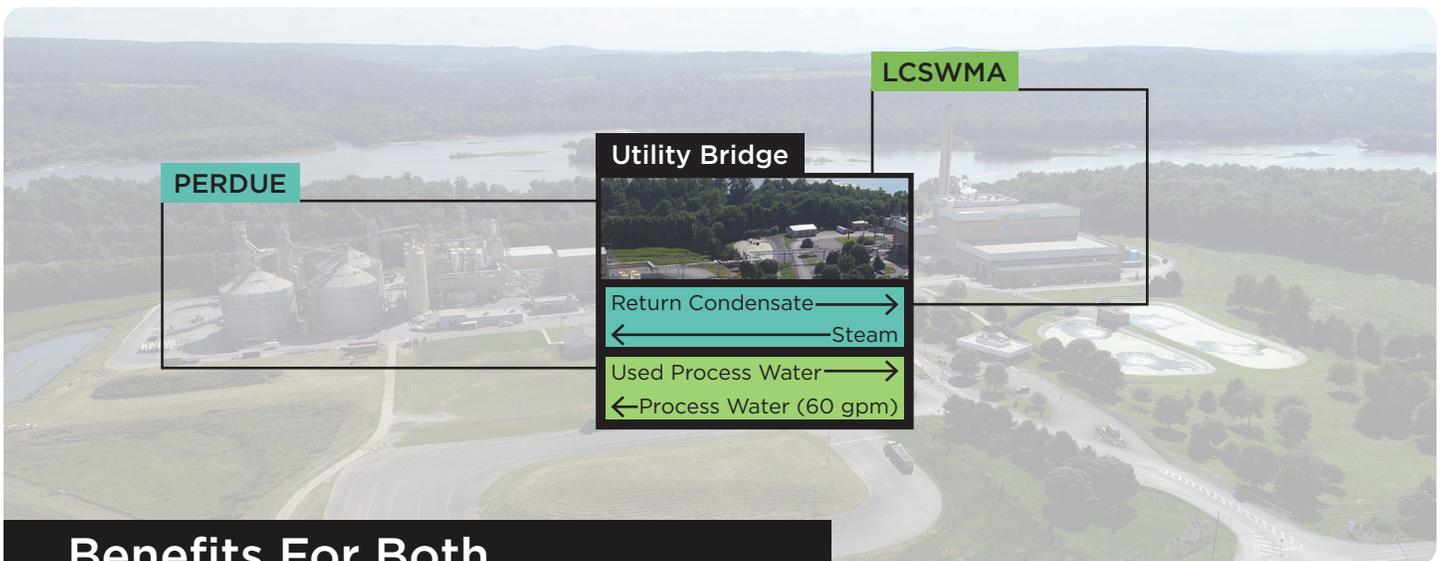
Renewable Energy Credits



Circular Loops and Waste Streams

Finding ways to reuse resources and create circular looping systems can have a significant emission reduction impact. These can include inter-business resource looping or looping within one's own business. At times it is as simple as considering the possibility.

Local examples are rapidly increasing; businesses are making smart choices with regard to resource sharing, repurposing, and reusing. This is driven by rising costs as well as a desire to be sustainable.



Benefits For Both



PERDUE AgriBusiness

- No water withdraw from Susquehanna River (47M gallons annually)
- No fossil fuel use (Offsets 30,500 MTCO2e annually)
- Reduced transportation costs for farmers & local outlet for meal and hulls



LCSWMA

- Above market rate for ~20% of steam (\$79 MWh equivalent)
- Long-term, stable revenue (\$64M over 20 yrs.)
- WTE vs. Landfill: 1-ton GHG offset for every 1-ton waste processed

Areas To Consider:

- Resource sharing
- Resource reuse
- Resource re-purposing
- Waste removal
- Recycling
- Second-chance resources

Property Management

Solar

Many options exist for integrating solar energy on properties: including rooftops, covered parking lots, mixed-use agriculture and landscaping. Facilities can cover their own energy usage, add income by selling to the grid, or selling SRECs on the market. Rebates and tax credits are regularly available.

Geothermal, wind and water turbines

Several less-common opportunities for facility heating and cooling and energy generation may make financial sense. Turkey Hill partnered with NextEra and Lancaster County Solid Waste Management Authority to install two 1.6 MW wind turbines powering the dairy and creating a strong visual sustainability identity.

EV chargers

Providing EV chargers for employees allows for convenient charging while at work which serves as an added recruitment incentive. Work commuting is accounted for in Scope 3.

Energy Efficiency

Emissions and cost savings can be easily achieved through shifts in LED lighting, auto on/off switches, energy efficient equipment purchases, air circulation, building envelope and weatherization.

Landscape

There are both cost and emissions savings to be found in lawn maintenance: mowing, mulching, chemicals. Tree and native garden plantings are beautiful outdoor spaces for employees and customers, reduce emissions, reduce maintenance expenses, reduce pollution, increase biodiversity and butterfly/bee habitats. Access to these improve mental health and reduces stress.

Refrigerants

Refrigerants play a critical role in facility sustainability because they are potent greenhouse gases that can significantly impact climate change if not managed properly. Transitioning to low-global warming potential (GWP) refrigerants and ensuring proper maintenance can help reduce emissions and improve overall energy efficiency in HVAC and refrigeration systems.



Solar Tour

Invite the fire company to take a tour of your solar, show them where the main shut off is located.

LCSWMA protects our beautiful community by managing waste responsibly and sustainably.

We are proud to partner with the Lancaster Sustainability Cohort as a sponsor for this Resource Guide for businesses.



As part of our commitment to manage waste as a resource to protect and benefit our community, LCSWMA established an Environmental Management System (EMS) that is certified by the International Organization of Standards. We also became a member of the Wildlife Habitat Council (WHC) to engage in habitat conservation, biodiversity promulgation, and public education at our facilities. Visit our website to learn more.

www.lcswma.org



Resources Available

Check out our ever expanding online resource directory



WHAT CAN YOU DO?

Evaluating Current Services and Management

It is always good practice to evaluate “what’s always been done.” Small findings can lead to significant energy savings. Take a thorough facility walk through and evaluate practices and energy consumption with an eye toward identifying competing (heating and cooling) energy expense and overuse. Take a look at the online resources page for an Energy Assessment.

Transportation and Equipment

Transportation is a significant contributor to Lancaster GHG emissions and air quality concerns. Employee commutes, business travel, and fleet emissions are important factors in a sustainability strategy, impacting both environmental and social outcomes. By making thoughtful choices in how goods and employees move, businesses can reduce emissions, improve air quality, lower costs, and enhance their reputation. The type of equipment as well as the intensity of the transportation vehicle and its use will determine which strategies you choose to employ.

Important actions to consider:

- Optimize routes for reduced fuel use.
- Encourage remote work, carpooling, or public transit for employees.
- Transition to fuel-efficient or electric vehicles: Cost-competitive models are available from passenger vehicles and vans to Class 6 trucks and buses. EV's have dramatically lower lifetime emissions than their gasoline or diesel-powered counterparts, even when you include emissions from manufacturing the vehicles. This is especially true if you can charge your vehicles using renewable electricity.
- Partner with sustainable logistics providers.

- Offer incentives for eco-friendly commuting options like biking, walking, or transit.
- Explore carbon offset programs for unavoidable emissions or as a stop-gap solution.

Although upfront costs are typically high, EVs generally have much lower per-mile lifetime operating costs. Electricity prices are usually lower per mile than gasoline, and less volatile. Plus, maintenance costs are a fraction of those for an internal combustion engine (there are fewer moving parts that can break in an EV). To capture per-mile savings, you'll most likely need on-site charging for your fleet in order to charge the vehicles after business hours and get a better dollar/kwh price. Public resources, such as tax credits and grants through PennDot and the PA Department of Environmental Protection (DEP), are available for commute planning, EV chargers, and other needs.



Resources Available

Check out our ever expanding online resource directory





Empower Your Future with Green Lending

Community First Fund is committed to helping you make a positive impact on the environment and our community. We offer affordable and incentivized rates for:

- Affordable Housing
- CRE – Acquisition, Rehab and New Construction
- Small Business Equipment
- Energy Efficient Home Appliances
- Home Equity for Home Improvements

We don't just offer loans. We partner with you to identify additional savings through product rebates and tax credits.

To learn more, please call: 717.393.2351
Or visit: communityfirstfund.org



COMMUNITY FIRST FUND®

51 S. Duke Street | Lancaster, PA 17602



Meet Your Business Sustainability Goals



Renewable
Electricity



Carbon Neutral
Natural Gas



Net Zero
Carbon Diesel



Energy
Efficiency



Solar
Validation

ShipleEnergy.com | 717-864-4669

Navigating Challenges and Myths

Smart, sustainable business decisions occur in an ever-changing market. New technology and change is frequently accompanied by misinformation, hurdles, and lack of case-studies. As one example, rooftop solar can have a rumor mill of assumptions; however, a solar company will provide a feasibility study with solutions. There are numerous local resources and services that can navigate you around barriers that you may encounter.

WHAT CAN YOU DO?

Attend Local Events

For problem solving conversations and sharing of work-arounds, attend local networking events.

Ask us!

We can share local success stories and connect you with local resources.



REGENALL

Scan for our
events calendar



Join us for Carbon Neutral Coffee

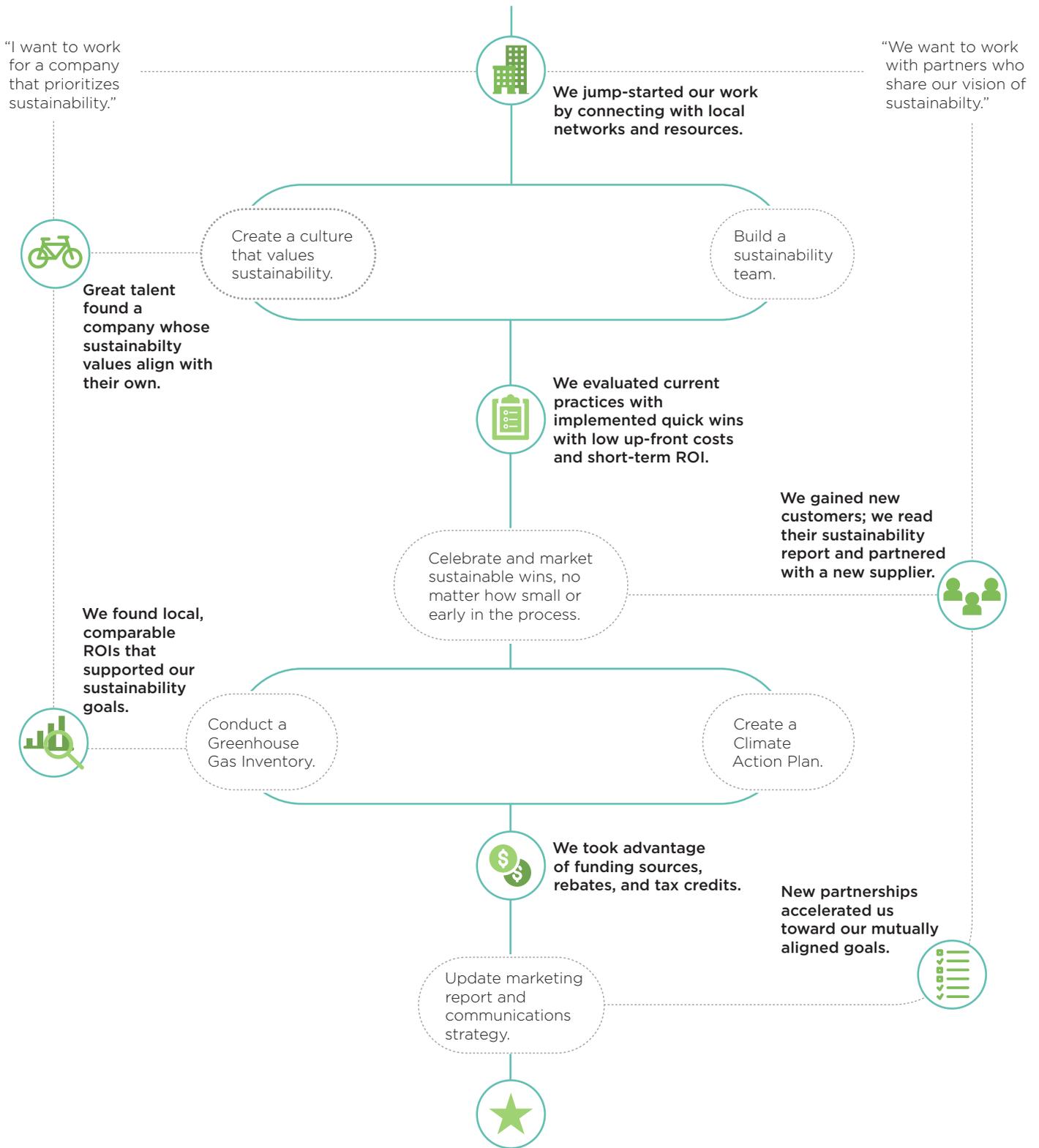
Learn. Innovate. Evolve. Lead.

An express morning meetup for business people who want to advance sustainability practices to reduce carbon emissions and to develop new business opportunities.

Semi-structured networking to spark inspiration, grow partnerships, and gain resources to support sustainability business initiatives and collective action.

Meeting every third Thursday from 7:45 a.m. – 9:15 a.m. at Southern Market Lancaster, 100 S. Queen St., Lancaster, PA 17603

“I want a sustainable future for my business.”



“Over the past five years, we’ve made significant progress! We’re excited to continue to invest in our resilient and sustainable future.”

Marketing



New customers and talent are finding your business because of your work in sustainability! This is good for your bottom line and your sustainability project track record. Good marketing, outreach, and impact tracking is essential. What may seem like a low-key practical change to save energy is good news to share. A regularly distributed report on energy use/savings and sustainability activity should be consistently communicated to customers, vendors, associates, and other key stakeholders.

Building Confidence

It is valuable to communicate and market sustainability goals and activity. However, it is important to be transparent about the values being measured in a GHG inventory and why certain values are represented as such. This gives stakeholders confidence in the evaluations of your footprint.



Greenwashing vs. Transparency

It is important to understand the difference between transparent sustainability and the traps of greenwashing. Customers value transparency over misleading labels. Build trust with your audience and customers by accurately portraying your sustainability initiatives in your marketing. Greenwashing also has legal liability from both investors and consumer protection laws.

WHAT CAN YOU DO?

Get Inspired

Look at examples of successful marketing of sustainable initiatives. In addition to gaining ideas on how to market your current sustainable practices, you can also learn about local resources to get ideas for new sustainable practices.

WOODSTREAM FOUNDATION



Good for the consumer • Good for the planet • Good working conditions
• Good governance • Good corporate responsibility

WOODSTREAM.COM

Expert Energy Advisors

Helping to sort through the confusion and support your energy management goals.

- Electricity & Natural Gas Procurement
- ASHRAE Energy Audits
- Solar Feasibility Studies
- LED Lighting & Controls
- Demand Management
- Real-Time Metering

www.richardsenergy.com | (717) 898-6330 | 781 S Chiques Rd, Manheim PA 17545



WE'RE A LANCASTER BASED, FAMILY-OWNED SOLAR COMPANY.



2,000+
Systems Installed
since 2009



10-Year Guarantee
on Production and
Workmanship



Experienced Team
of Over 100 Solar
Experts



**Paradise
Energy Solutions**

Save With Every Sunrise®

Get an **INSTANT** price and
savings estimate for your
solar investment.

Scan To Calculate
YOUR Savings



Tax Credits and Funding

Tax credits for carbon reduction projects provide significant incentives for businesses and individuals to invest in advanced energy efficiency technologies. These credits can be used to accelerate your adoption of renewable energy, energy efficiency improvements, carbon capture, and other sustainable upgrades. Tax credits for projects such as solar installation; electric vehicle infrastructure; carbon capture and storage systems; and wind, water, and geothermal energy are available. In most cases, these credits cover 30% or more of the project costs upon completion of the project. Sustainable investments have become financially viable, especially when paired with front-end grants and green infrastructure loans (see resources for C-PACE / Community First Fund, now Finanta). An extensive set of online resources for funding, rebates, and tax credits is available.

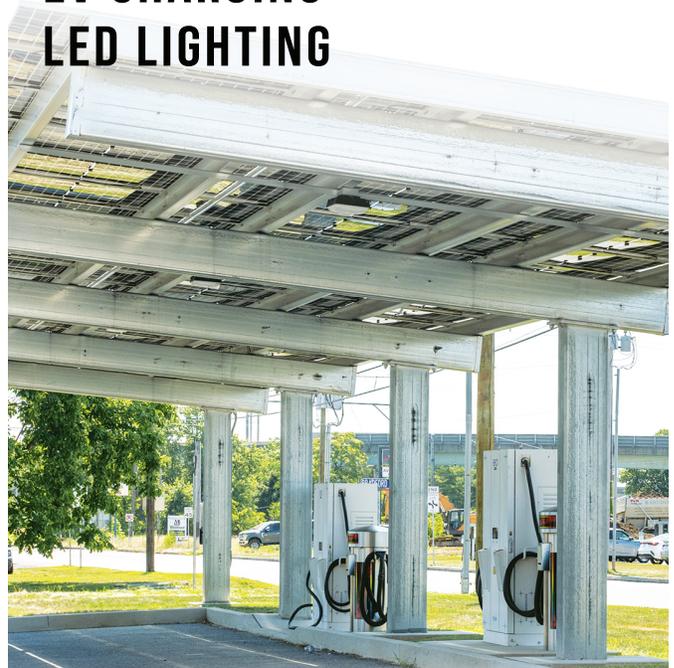


Resources Available
Check out our ever expanding online resource directory



Your **SUSTAINABILITY** Partner 

**SOLAR
EV CHARGING
LED LIGHTING**



In 2009 MVE Group began helping commercial businesses by designing, installing and servicing commercial scale solar pv projects around their sustainability goals.

As commercial electricians, we also have the experience to provide an energy audit and find additional energy saving solutions to save you money and provide energy efficiency.

Contact MVE Group to learn how we can help you with your energy saving goals.

MVE
GROUP
ELECTRIC | SOLAR | SECURITY



WWW.MVEGROUP.COM

POWERFUL SOLUTIONS

717-738-2451

INFO@MVEGROUP.COM

2010 W MAIN STREET EPHRATA, PA

Local Networks and Resources



Resources Available
Check out our ever expanding online resource directory



Local Technical and Professional Services

Align

www.alignltd.com

August Mack Environmental

Adriana Townsend,
Sustainability Manager
atownsend@augustmack.com
augustmack.com

Ben Franklin Technology Partners

benfranklin.org

Clear Climate Strategies

info@clearclimatestrategies.com
clearclimatestrategies.com

Finanta

Previously Community First Fund
717-393-2351
finanta.org

MANTEC

info@mantec.org
www.mantec.org

MVE

717-738-2451
info@mvegroup.com
mvegroup.com

Paradise Energy

paradisolarenergy.com

RegenAll

contact@regenall.org
regenall.org

Richard Energy

richardsenergy.com

SAHD Metal Recycling

recycleyourmetal.com

Shiple Energy

www.shipleenergy.com

SUN (Solar United Neighbors)

info@solarunitedneighbors.org
solarunitedneighbors.org

align

Strategic Innovation for the Climate Economy

Create financial growth through new products and services that address the demand for lower carbon solutions.

- Market Research
- Facilitating Ideas
- Product Development
- Strategic Plans & Business Plans

www.alignltd.com

Co-founder of Lancaster's Carbon Neutral Coffee Meetups

Certifications, Standards, and Reporting

- B Corp Certification
- ESG overview slide deck
- ESG planning spreadsheet
- GRI (Global Reporting Initiative)
- SBTi
- UN Sustainable Development Goals

Energy Audits

- Energy Audits and Assessments by PennTap

Examples of Sustainability Reports and Marketing

- See Online Resource For Examples

Greenhouse Gas Inventory

- GHG Data Checklist
- GHG Online Calculator (free)
- GHG EPA Online Calculator (free)
- Scope 2 (Site) Sample Spreadsheet

Transportation

- Alternative Fuel Incentives
- Commute PA
- EV Chargers

Power Purchase Information

- Power Purchase Agreement General Info

Offsets

- Local Offsets
- Offset Guide

Tax Credits and Funding

- Clean Energy and Climate Solutions Federal Funding Database
- C-Pace
- DEP Grants, Loans, Rebates
- Energy Funding and Assistance Finder
- Grants and Rebates - PennTAP (psu.edu)
- Grants and Rebates Resource
- Inflation Reduction Act Database
- Inflation Reduction Act Tracker
- Infrastructure (+IRA) Funding Tracker
- IRA Resource Database
- Local Infrastructure Hub Funding Opportunities
- PA State Energy Program
- PPL Energy Incentives
- Public Climate Provisions in the IRA
- Recycling Financing
- RISE PA
- Small Business Administration
- Small Business Resources
- State Support Center IRA Deadline & Program Tracker

Networks

- Carbon Neutral Coffee
- IFMA Central PA Chapter
- Recycled Materials Association



Glossary of Terms

Biofuel

A fuel produced by the conversion of biomass such as sugar cane or corn, charcoal or wood chips, and/or biogas from anaerobic decomposition of wastes. Ethanol and biodiesel are first generation examples.

Carbon Neutral/Carbon Neutrality

Having a net-zero carbon footprint. A balance between GHG emissions into the atmosphere and the removal of the climate pollutant emissions through carbon sinks or other offsets.

CCF (Community Climate Fund)

A funding mechanism created by RegenAll to fund new emissions reductions projects. A business purchases offsets through RegenAll, and in doing so invests in local emission reduction projects.

CDP

A not-for-profit charity that runs the global disclosure system for investors, companies, cities, states, and regions to manage their environmental impacts.

Combustion

The use of fossil fuels to generate energy, when doing a GHG inventory.

Energy Efficiency Tax Credits

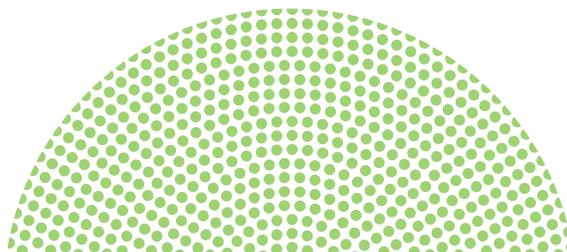
Opportunity to claim tax deductions or credits based on the amount of increased energy efficiency of a building's system. Usually by 25%.

Emission Factor

A representative value or conversion relates (as closely as possible) the quantity of a pollutant released into the atmosphere with an activity associated with the release of that pollutant.

E-waste

Electronic waste. For example: old smartphones and computers, printers, monitors and batteries.



ESGs

Environmental, Social, and Governance (ESG) refers to a framework used to assess a company's performance and impact in areas related to environmental stewardship, social responsibility, and ethical governance practices.

Fossil Fuel

A general term for organic materials formed from decayed plants and animals that have been converted to crude oil, coal, natural gas, or heavy oils by exposure to heat and pressure in the earth's crust over hundreds of millions of years.

GHG (Greenhouse Gas)

The name for gasses that trap heat in the atmosphere; these include carbon dioxide CO₂, methane CH₄, nitrous oxide N₂O, fluorinated gasses.

GHGI (Greenhouse Gas Inventory)

An accounting of all emissions activity. A emission factor conversion system is used to translate megajoules of energy produced or dollars spent, in specific categories and regions, to emissions totals.

GRI (Global Reporting Initiative)

A not-for-profit organization that helps businesses and organizations communicate their ESG impacts. GRI work includes developing and refining sustainability standards and providing sustainability reporting guidelines.

IRA (Inflation Reduction Act)

The most significant climate legislation in U.S. history. It provides funding, programs, and incentives to accelerate a transition to clean energy. It includes 26 federal energy tax incentives: tax credits, a tax deduction, accelerated depreciation, and tax credit monetization.

ISO501

International Organization for Standardization (501 relates to Coal)

Net Zero

Achieved when all emissions released are counterbalanced by removing GHG from the atmosphere (carbon removal). First a plan is developed to reduce emissions to near zero, the remaining emissions are then offset or reduced by other methods.

Offset

Represent a metric ton of GHG emissions avoided or reduced. Offsets are purchased from organizations committed to investing in projects which reduce or sequester greenhouse gasses. Such projects should be additive, accountable, and durable.

PPAs (Power Purchase Agreements)

A Power Purchase Agreement (PPA) is an arrangement in which a third-party developer installs, owns, and operates an energy system on a customer's property. The customer purchases the system's electric output for a predetermined period. A PPA allows the customer to receive stable and often low-cost electricity with no upfront cost, while also enabling the owner of the system to take advantage of tax credits and receive income from the sale of electricity. Though most commonly used for renewable energy systems, PPAs can also be applied to other energy technologies such as combined heat and power (CHP). A PPA does not always include installation on the customer's property. (source: <https://betterbuildingsolutioncenter.energy.gov/financing-navigator/option/power-purchase-agreement>)

REC (Renewable Energy Certificate)

A method companies use to purchase renewable electricity. Formally, a renewable energy certificate (REC) is a market-based instrument that represents the property rights to the environmental, social, and other non-power attributes of renewable electricity generation. RECs are issued when one megawatt-hour (MWh) of electricity is generated and delivered to the electricity grid from a renewable energy resource.

SBTi (Science Based Targets initiative)

A partnership between international organizations to mobilize the private sector to take up climate action. They use science-based targets to give companies a path to reduce GHG emissions, defining how much and how quickly a business must reduce its emissions to be in line with Paris Agreement goals.

Scope 1

GHG emissions from sources controlled or owned by the organization/business. Examples include fuel combustion in boilers, furnaces, and vehicles).

Scope 2

Indirect GHG emissions associated with the purchase of electricity, steam, heat, or cooling. This is the organization's energy use.

Scope 3

GHG emissions that result from activities & assets not owned or controlled by the organization (i.e. business travel, employee commuting, supplies, procurement), but that the organization indirectly affects through its value chain (upstream and downstream activities). Can be referred to as value chain emissions. To meet GHG Protocol standards, scope 3 emissions must be reported.

Safety Data Sheet (SDS)

A Safety Data Sheet (SDS) provides detailed information on the properties, hazards, safe handling, and emergency measures for chemical substances. It includes instructions on proper storage, disposal, and first aid, helping users minimize risks in the workplace and ensure regulatory compliance.

SRECs (Solar Reverse Energy Credits)

RECs specifically for solar energy systems.

Public Commitments

Eurofins has a publicly reported target to achieve carbon neutrality by 2025, through a combination of CO2 emission reduction projects and carbon offsetting including the purchase of carbon credits. In early 2024, Eurofins signed a SBTi commitment letter joining the growing group of companies setting ambitious science-based targets.

Mars, the maker of beloved treats for pets and people, has committed to reduce emissions across its full value chain by 50% by 2030 and achieve Net Zero by 2050. Included within the full value chain emissions targets, Mars set a goal to reduce Scope 1 and 2 emissions from its direct operations by 42% by 2025 and by 100% by 2040.

DISCLAIMERS

This guide is intended to provide general information on sustainability best practices and help companies explore how to apply those practices. It is not exhaustive and may not cover all resources or practices. Resources, regulations, and best practices may evolve over time. We encourage readers to consult additional sources, professionals, and experts to stay current with the latest developments in sustainability.

Thank you!

Our Cohort Conveeners



Emily Fritz
Sustainability Consultant

Our Cohort Participants



Emily Fritz
Sustainability Consultant

Our Sponsors

Align
August Mack
Ben Franklin Technology Partners
Clear Climate Strategies
Community First Fund
Eurofins
Four Seasons
Interiors Home
LCSWMA
Mars Wrigley
MVE
MANTEC
Paradise Energy
Sahd Metal Recycling
ShIPLEY Energy
SUN
Richard Energy
Woodstream

Further Support



This resource guide is made possible through a grant provided by the Lancaster County Community Foundation



Creative Direction by Zach Johnson-Medland
Data Visualization & Design by Colleen Witkowski