

# Voluntary environmental improvement and community engagement ideas and resources for facilities

## Environmental Improvements

Complying with environmental regulations is required, but what can you do beyond that? Consumer interests have evolved. Today, consumers want businesses and industries to do their part to proactively protect the environment. Going beyond regulations can be a strong business decision that can:

- Save money by reducing regulatory obligations, fees, and staff time
- Improve indoor air quality, employee health, and reduce odors
- Increase competitiveness and efficiency
- Expand green marketing potential
- Boost employee satisfaction, retention, and attraction
- Enhance public perception of your business
- Build operational flexibility
- Improve local air quality
- Help meet company climate goals

## Examples of Voluntary Environmental Improvements

- Address nuisance/quality of life elements (lights, odors, noise, traffic)
  - Route traffic through non-residential roads
  - Implement no-idling policies to reduce idle vehicle emissions, odors, noise, and fuel waste
  - Keep vehicle exhaust systems tuned up to reduce emissions, noise, and odors
  - Wet sweep parking and storage lot entrance/exits to reduce dust from traffic
  - Plant groundcover, water, or treat unused dirt and gravel areas to control dust
  - Plant shrubs/trees for a windbreak to reduce dust from gusting
  - Change vehicle backup notification from beeper to scratching noise (lower impact)
  - Fix squeaky/loud belts and parts on outdoor equipment such as HVAC units
  - Limit noisy outdoor activity to daytime business hours
- Voluntary emission controls
  - Add control equipment or replace inefficient control equipment
  - Consider cross-media impacts, energy use, and entire production process when replacing existing controls or planning new projects to achieve the lowest emissions for all media
  - Retrofit emissions controls on aging diesel equipment
  - Include existing voluntary controls in your permit (provides assurance that they're operating well and can provide community some peace of mind)
    - Facility can also take credit for permitted control to reduce annual emission inventory fees

- Cover, water, or treat outdoor material piles to control dust and avoid particulate lift-off events
- Enclose receiving and loadout processes to reduce fugitive dust emissions
- Choose to use lower emitting materials or processes
  - Capture biogas to reduce emissions and provide a cost-effective source of renewable energy
  - Change from using coal or fuel oil to natural gas or electricity
  - Use more efficient coating application methods with higher transfer efficiency
  - Upgrade old/inefficient boilers, coaters, generators, etc.
  - Switch from solvent-based to water-based materials and cleaners
  - Move to low-VOC adhesives, finishes, cleaners, resins, etc.
  - Remove products containing PFOS, PFOA, PFAS
  - Upgrade to powder coating system
- Transportation
  - Promote sustainable transportation for employees, contractors, and other guests
    - Post information about nearby bus or train routes, bike share locations
    - Subsidize bus passes for employees
    - Provide bike parking
    - Install an electric vehicle charger in your parking lot; even better if powered by solar PV!
    - Subsidize installation of an electric vehicle charger accessible to the public
    - Create a carpool ride board to help connect potential carpoolers
    - Generally, make it easier for employees and visitors to use more sustainable modes of transit
  - Move to lower emitting or electric fleet vehicles, including tractors, delivery vehicles, and yard trucks
  - Use [smart salting best management practices](#) or a contractor who is certified in smart salting to reduce chloride pollution while keeping roads, parking lots, and sidewalks safe in winter
- Reduce cross-media impacts/emissions
- Voluntarily lower limits in your permit that are unnecessarily higher than actuals to reduce public concern about possible increases in actual emissions
- Enhance monitoring to provide additional assurance that excess pollutants are not emitted from your facility
  - Install bag leak detectors on fabric filters
  - More frequent monitoring/checks
  - Walk through with VOC detector
  - Use MPCA drone with pollutant/infrared sensor
  - Voluntarily conduct stack testing or more frequent tests to better characterize emissions
- Conduct voluntary air quality dispersion modeling (outside/before a permit action) or risk assessment
- Utilize environmentally-friendly surfaces on your property
  - Plant low-maintenance native and adapted vegetation landscaping and trees as appropriate
  - Install stormwater-friendly surfaces such as pervious pavers, and porous asphalt / cement
  - Create a raingarden
  - Reduce surface heat from your parking lot with vegetation, shading, and porous surfaces
  - Use lighter/reflective materials for roofs, walls, and pavements
- Reduce energy use and move to sustainable energy sources
  - Implement LED light replacements
  - Move away from T12 or T8 ballasts to more efficient T5 ballasts

- Install motion sensors on lights in bathrooms, offices, and other low-traffic areas
- Increase opportunities for natural light. Once the infrastructure is in place, sunlight is free. Plus, daylighting has been shown to increase employee productivity, reduce absenteeism, and improve morale
- Get a reduced-cost energy audit from your local utility. Contact [EnergySmart](#) to get connected with energy efficiency programs in your area
- Consider window awnings which [can reduce summer heat gain of west-facing windows by 77%](#)
- Choose renewable energy to reduce your carbon footprint and stabilize rising energy costs
  - Consider participating in a community solar garden or leasing/purchasing solar panels
  - Install solar PV or solar thermal on roofs with adequate size, orientation, and structural support
  - You can often sign up for wind-generated power through your electric utility such as [Xcel's Windsource](#) program
- Incorporate [sustainable business practices](#) to prevent waste and pollution before they are generated
  - [Use recycled materials](#) in your product
  - [Find/develop markets for waste](#) streams from your facility
  - Implement/improve employee [recycling program at your facility](#)
  - [Practice green and safer product chemistry](#)
  - Implement a product stewardship program
    - Work with all parties involved in designing, manufacturing, selling, and using the product to address lifecycle impacts of the product
    - Make products out of readily reusable/recyclable materials and forms
    - Create a program to collect and recycle products at the end of their useful lives

## Community Engagement

Neighbors can be source of resistance to doing business in their community, but they can also be resources that support, promote, and help your company flourish. Building personal relationships, gaining mutual understanding, and working with each other to address concerns builds trust and provides a two-way channel of communication that can be beneficial to all parties. Engaging and building genuine relationships with local organizations, groups, and individuals is good business that can:

- Enhance public perception of your business
- Increase employee satisfaction, retention, and attraction
- Help adapt to and recover from disruptions
- Enhance quality of life for employees and local residents
- Save money and time by reducing hurdles for future projects
- Build community support

### Examples of Community Engagement

- Build personal relationships with community members
- Provide your community a way to contact you directly with any concerns or questions
- Notify neighbors ahead of projects that could have increased traffic, noise, odors, or visual impacts - Include expected date/time of activities and contact info for more information
- Learn about and engage with community through your employees and coworkers
- Attend local community meetings
- Offer facility tours
- Host or sponsor community events such as a picnic, neighborhood cleanup, restoration project, tree give-away/planting, kids learning event, ice cream social, music
- Volunteer to routinely water recently planted trees in the community

- Mail fliers to neighbors notifying about events, facility tours, etc. and provide a contact who they can reach out to with inquiries
- Use social media (e.g., Nextdoor, Facebook, Twitter) as a tool to reach neighbors, notify about projects and events, and build relationships
- Host community coffee hour at a local coffee shop – answer questions about the facility, let folks know about upcoming projects or events, and build relationships
- Get involved with and/or support local community groups, organizations, events, volunteer activities
- Help with local school activities (e.g., science fair, art fair)
- Work with community members and local officials to help develop park area, green space, tree canopy, or sustainable infrastructure
- Volunteer to become an expiring permit (for state non-expiring permits) to make sure your permit is regularly updated with the latest language and best practices, and provide regular formal public involvement opportunities
- Establish a community advisory group which provides a mechanism for bilateral conversation with your neighbors
  - Example - [Community Advisory Council to Flint Hills Resources Pine Bend Refinery](#)

## Additional Resources

### Screening and Evaluation Resources

You know your business best and what is feasible for you. Below are additional resources to provide context to the area your facility operates in. These resources may provide additional insight on the history, environmental impacts, demographics, and interest in your facility's area.

- **Understanding Environmental Justice in Minnesota** – view where the MPCA considers areas of concern for environmental justice. This tool also provides census data on the most frequently spoken languages by English language learners, MPCA's air pollution score, and other environmental sites and facilities in Minnesota with What's in My Neighborhood.  
<https://arcg.is/vqaGa>
- **EJSCREEN** – view several environmental and socio-economic indicators for the area around your facility and see the results relative to the rest of the state and the United States.  
<https://www.epa.gov/ejscreen>
- **MPCA Tribal contacts list** – view the list of Federally recognized Tribes in and around Minnesota, and view their counties of interest for MPCA projects.  
<https://www.pca.state.mn.us/sites/default/files/p-gen5-25.pdf>
- **Treaty lands map** – view the US Forest Service's Tribal Connections map of Treaty and Tribe information. After entering an address, there are links to view and read English versions of Treaties that apply to the area around your facility. It also lists the associated Tribes.  
<https://usfs.maps.arcgis.com/apps/webappviewer/index.html?id=fe311f69cb1d43558227d73bc34f3a32>
- **Minnesota Climate Trends** – read about the three major trends that characterize Minnesota's changing climate as tracked by state climatologists at the MN Department of Natural Resources.  
[https://www.dnr.state.mn.us/climate/climate\\_change\\_info/climate-trends.html](https://www.dnr.state.mn.us/climate/climate_change_info/climate-trends.html)
- **Climate Change and Human Health: Who's Most at Risk?** – explore how and why various populations in the area around your facility may be at risk from Minnesota's changing climate.  
<https://www.epa.gov/climate-change/climate-change-and-human-health-whos-most-risk>

## Technical and Financial Resources

There is a wealth of resources available through the MPCA and partner organizations to help evaluate and implement environmental improvements.

- **Minnesota Technical Assistance Program (MnTAP)** – an outreach program at the University of Minnesota which helps Minnesota businesses develop and implement industry-tailored solutions that prevent pollution at the source, maximize efficient use of resources, and reduce energy use and costs to improve public health and the environment.  
<http://www.mntap.umn.edu/us/>
- **MPCA Grants and Loans Programs** – the MPCA offers a variety of environmental assistance loans and grants to help defray the costs associated with environmental improvements. Explore open grants and loans and sign up to be notified when the MPCA makes new funding opportunities available.  
<https://www.pca.state.mn.us/business-with-us/grants-and-loans>  
<https://www.pca.state.mn.us/air-water-land-climate/volkswagen-settlement-grants>  
<https://www.pca.state.mn.us/business-with-us/funding-opportunities>
- **Small Business Environmental Assistance (SBEA)** – helps Minnesota businesses comply with environmental rules, reduce wastes and emissions, and reduce regulatory obligations. The SBEA focus is on small businesses that are independently owned and operated, have fewer than 100 employees, and are not major sources of waste or emissions.  
<https://www.pca.state.mn.us/business-with-us/small-business-environmental-assistance>