

WVU POLLUTION PREVENTION NEWSLETTER

SEPTEMBER 2024

INDUSTRY FOCUS: Wood Processing and Sawmills

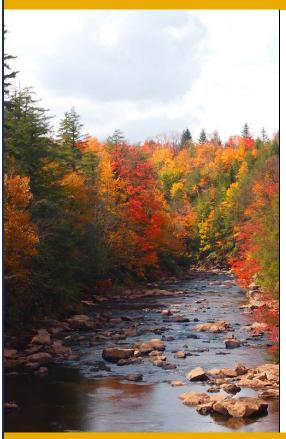
Welcome to the latest edition of the WVU Pollution Prevention Newsletter! In this issue, we are excited to introduce the dedicated members of the WVU Pollution Prevention Team, committed to environmental stewardship. Explore valuable insights as we share industry best practices for enhancing energy efficiency and sustainability in wood processing facilities and sawmills. You will also find P2 tips that can be implemented at home or in the workplace. Lastly, discover the range of services we offer to support Small and Medium-sized Enterprises and businesses throughout West Virginia. Stay informed, inspired, and engaged with our commitment to environmental excellence and community impact.

FEATURED IN THIS EDITION

WHAT IS POLLUTION PREVENTION 2	HIGHLIGHTING OUR IMPACT
OUR SERVICES 2	WHAT'S NEW?
P2 INDUSTRY FOCUS 3	THE P2 TEAM
P2 @ WORK 3	CONTACT US



WHAT IS POLLUTION PREVENTION



Pollution Prevention (P2) is one of the key approaches towards an initiative to improve the energy efficiency and productivity of key industries while prioritizing environmental sustainability. The initiative focuses on reducing or preventing pollution at its source.

The primary objective of our Pollution Prevention program is to provide technical assistance to Small and Medium Enterprises in **key industries** and within **disadvantaged communities** in West Virginia by assisting with identification, development, and implementation of P2 methods. The recommendations provided to the industries are designed to help the business lower operational costs by reducing expenditures, water and energy usage, waste, and disposal costs, while at the same time maintaining and often improving productivity.

Key Industries:

- 1. Food and Beverage Manufacturing and Processing
- 2. Chemical Manufacturing, Processing, and Formulation
- 3. Automotive Manufacturing and Maintenance
- 4. Aerospace Product and Parts Manufacturing and Maintenance
- 5. Metal Manufacturing and Fabrication

OUR SERVICES

- 1. **Pollution Prevention Assessments:** The project team will make a planned visit to your facility to assess and gather data on energy, water, material, and personnel use. Assessment data along with input from the facility managers will be used to develop P2 recommendations. A detailed report based on the findings will be submitted to the facility shortly after the on-site assessment.
- 2. **Energy Audits/Assessments:** Applying for a USDA-REAP grant and need an assessment? Want to save money? The project team will visit your facility and identify opportunities to improve energy efficiency. A detailed report will be provided to the business, including estimates of implementation costs, energy use savings, energy cost savings, and simple payback period for each identified opportunity.
- 3. **Training Workshops:** Training workshops will be conducted to help businesses learn P2 Best Practices, tools, techniques, and resources available, and how to modify their process or site to improve energy efficiency, productivity, and environmental sustainability.
- 4. **Technical Assistance:** The project team can provide on-site or off-site technical assistance on a variety of industrial concerns related to topics including pollution prevention, energy efficiency, sustainability, environmental impact, and process improvement. Contact us for assistance!
- 5. USDA-REAP Application Assistance: Applying for grant funding can be a challenge, especially for the small businesses that do not have an expert at grant-writing on the payroll. Our project team can help you navigate the application process and assist with completing the application for USDA-REAP funding.

P2 INDUSTRY FOCUS

Tips for Wood Processing Facilities and Sawmills

- Make Wood Waste an Asset: Disposing wood waste can be a logistic challenge and a significant expense for
 wood processing facilities, sawmills, and other wood-product manufacturers. Wood waste, such as sawdust
 and woodchips can be utilized in a biomass boiler to generate heat and or electricity for use in the facility,
 saving on natural gas or electricity costs, or the wood waste can be turned into wood pellets and sold for a
 profit.
- Get the Most Out of Each Log: Use technology to optimize how logs are cut, making sure you get the
 maximum amount of usable wood from each one. This not only reduces waste but also makes your operation
 more efficient.
- Efficient Kiln Drying: Upgrade to energy-efficient kiln drying systems and optimize drying schedules to reduce energy consumption. This lowers energy costs and minimizes carbon emissions, improving the overall environmental footprint of the wood processing operation.

P2 @ WORK

Improve Sustainability at Work

- Replace Desktop PCs with Laptops and Docking Stations: With the recent move towards a hybrid work
 environment, more companies are providing employees with laptops for use when working from home. By
 swapping desktop PCs in the office with docking stations and monitors that can be used with a laptop, the
 unnecessary energy consumption of desktop PCs, especially when in standby mode during non-operating
 hours, can be eliminated. Since laptops consume up to 75% less energy than a desktop PC, this can lead to
 significant savings.
- **Purchase Eco-Friendly Office Supplies**: Source office supplies made from recycled materials and prioritize suppliers with strong environmental credentials. Using eco-friendly supplies reduces waste and supports the market for recycled products, contributing to a more sustainable supply chain.

P2 @ **HOME**

Make a Positive Impact at Home

- Install Smart Thermostats: Install a smart thermostat to optimize heating and cooling schedules based on
 occupancy and preferences. This improves energy efficiency, reduces utility bills, and lowers greenhouse gas
 emissions by minimizing unnecessary heating and cooling.
- Water Saving Options: Install low-flow fixtures and faucet aerators to reduce water consumption. The water consumed in a home is directly related to the amount of wastewater generated. To reduce water usage at home, opting for low-flow fixtures and faucet aerators is a great option.

HIGHLIGHTING OUR IMPACT

The WVU Pollution Prevention (P2) team takes great pride in the impact we have within the borders of West Virginia since January of 2023. From energy savings to CO₂ reduction, the recommendations we develop for these businesses not only help these businesses improve their sustainability, but also their bottom line!

Look at the impact of the opportunities we have found! →

20 Energy Efficiency/P2 Assessments

39 Recommendations

With Annual Savings of...

\$368,936 in Energy Costs

2,624 MWh of Electricity

11,102 MMBtu of Natural Gas

2,452 Metric Ton CO₂ Equivalent

WHAT'S NEW?



Webinar: P2 Week - Actionable Strategies for General Industries and NEAs September 16, 2024 - 12:00 to 1:00 PM (EDT)

<u>Topic</u>: Explore key pollution prevention (P2) concepts, best practices, and sector-specific strategies.

Register Here or use the QR Code!



Webinar: Optimizing Building Comfort and Efficiency: A Guide to Enhancing HVAC Energy Usage

September 27, 2024 - 12:00 to 1:00 PM (EDT)

<u>Topic</u>: Gain an understanding of HVAC fundamentals, learn why HVAC is important to sustainability within industry, and discover how businesses can transition towards sustainable HVAC systems.

Register Here or use the QR Code!



Webinar: How to Transform your Business for a Carbon Neutral Future September 30, 2024 - 12:00 to 1:00 PM (EDT)

<u>Topic</u>: Learn practical strategies for reducing your carbon footprint and positioning your business as a leader in sustainability.

Register Here or use the QR Code!

THE P2 TEAM

Faculty & Staff



Dr. Ashish Nimbarte PhD, PE, CEM Principal Investigator



Dr. Christopher Moore PhD, CEM Project Manager, Co-PI



Farzana Islam Research Engineer



Dr. Imtiaz Ahmed PhD



Dr. Avishek Choudhury PhD

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P2 Website



Inquire about Services



Questions or Comments?