EMFACT
Energy & Materials Flow and Cost Tracker

What is EMFACT™?

Does your company or facility track how it uses materials and fuels? Are you aware of what happens to the chemicals, fuels, and other materials that your company purchases and how much ends up as a waste or released to the environment? Can you assess the costs associated with losses of materials in the form of waste and emissions? Are you facing the challenge of complying with directives to identify various chemical constituents in your products, or reporting requirements pertaining to their release or transfer? Is your company implementing lean manufacturing, greening your supply chain, developing an environmental management system, implementing pollution prevention/toxics use reduction, conducting environmental management accounting, initiating sustainable production programs, or developing other strategies for optimizing production? If you answered yes to any of these questions, **Energy and Materials Flow and Cost Tracker** (**EMFACT™**) is the tool to help you. In today's economy, using resources as efficiently as possible is essential to success as a business.

EMFACT™ is a software tool designed to be used within small and medium-sized companies for systematically tracking materials and energy use; releases, discharges, and wastes; and associated costs in ways that can create value for their business. The tool can provide a comprehensive picture of resource use and its relation to production and planning that will help improve both business and environmental performance. EMFACT™ is easy-to-use and well-documented.

EMFACT™ is **FREE** and downloadable from
www.newmoa.org/prevention/emfact/register.cfm
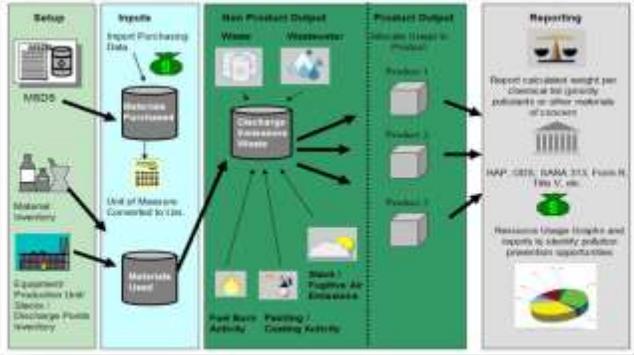
EMFACT™ Concept
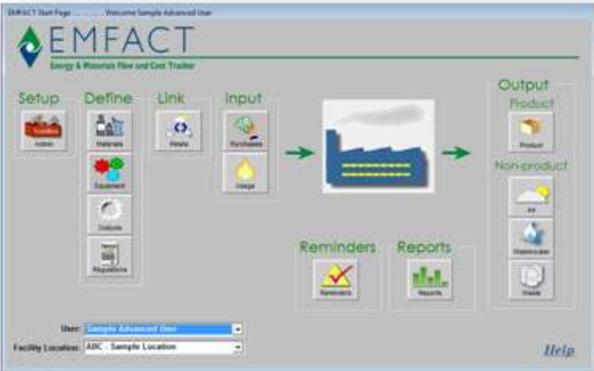
The Northeast Waste Management Officials' Association (NEWMOA) and the Massachusetts Office of Technical Assistance (MA OTA) created EMFACT™ because they recognized the need and opportunity for manufacturers to more effectively implement environmental management accounting as a key tool to aid in setting pollution prevention priorities, identifying value-added opportunities for sustainable production, and implementing materials and energy efficiency improvements.

EMFACT™ logo — Energy & Materials Flow and Cost Tracker

EMFACT™'s benefits to its users are:

- Easy navigation and data management
- Connecting material inputs and all outputs, including products, wastes, and other environmental releases to estimate mass balances and flows
- Effective tracking of all material inputs, including chemicals, commodities, and fuels, and their associated costs
- Effective tracking of all wastes, wastewater discharges, and air emissions
- Effective tracking of fuels, (i.e., oil, natural gas, coal, or bio-based fuels) for use in boilers

EMFACT™ incorporates:

- Lists of regulated chemicals, including:
  - o SARA 313
  - o Hazardous Air Pollutants (HAPs)
  - o Ozone Depleting Substances
  - o Ability for users to add chemical lists
- Reminders, including:
  - o Screens to list/describe permits
  - o A calendar of events
  - o Automated reminders about upcoming reporting and other deadlines
- "Cue Cards" to guide users through the logical series of tasks associated with **EMFACT™** windows
- Easy transfer of data to spreadsheets

EMFACT™ Procedure Flow:
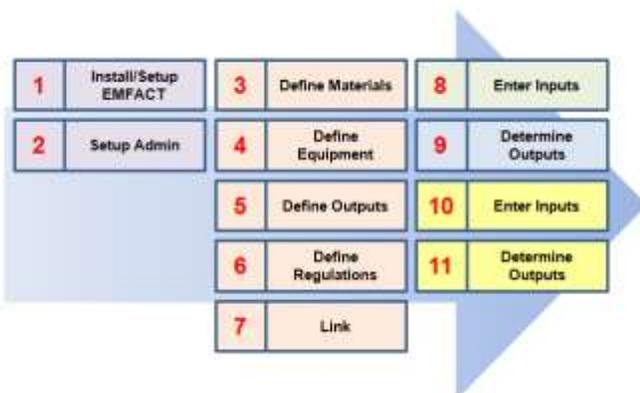
EMFACT™ Reports

Boiler plate reports are available to help track air, water, and waste activities; including:

- Materials Purchased or Used by Department
- Materials Purchased or Used: Weight per Material
- Materials Purchased or Used: Weight per CAS #
- Material Summary
- Equipment Report / Production Unit
- Product Recipe: Weight per CAS Number
- Product Output: Weight per Material
- Usage (Air): Weight per Material
- Air Emissions: Weight per Pollutant or Material with 12 Month Rolling
- Air Emissions: by Material VOC Percent
- Usage (Water): Weight per Material
- Wastewater Discharge: Weight per Material
- Wastewater Discharge: Weight per Pollutant with 12 Month Rolling
- Waste Management – Including Various Costs
- Mass Balance Purchased (or Usage)

Open Source

EMFACT's source code is available at http://sourceforge.net/projects/emfact/. This open source site encourages interested software developers to help improve and enhance EMFACT and enables companies and consultants to customize the tool to address their needs. The site welcomes suggestions and encourages potential developers to share ideas.