

NEWMOA



EMFACT

Energy & Materials Flow and Cost Tracker

Introduction to EMFACT™

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Association (NEWMOA)

- What is EMFACT™?
- EMFACT™ features
- What reports can EMFACT™ produce?
- How to get started?

- EMFACT™ - **Energy & Materials Flow & Cost Tracker**
- Collaboration between :
 - Northeast Waste Management Officials' Association (NEWMOA)
 - Massachusetts Office of Technical Assistance & Technology (MA OTA)
- **Free** software tool
 - www.newmoa.org/prevention/emfact/register.cfm



Sponsors:

- NEWMOA
- MA OTA

Consultants:

- Sullivan International
- EMARIC

Funders:

- U.S. EPA ORD Collaborative Science & Technology for Sustainability Network
- EPA Region 2



Environmental Management Accounting or Materials Accounting enhances the ability of manufacturers & others to:

- **make decisions**
- **set priorities**

related to consumption of resources through tracking & analyzing their flow & associated costs

- A fully developed, **easy-to-use, & well-documented** energy, materials, chemicals, releases, & associated costs tracking & data analysis software tool
- Well-developed **training support materials** & a **user's guide**
- Online **downloadable free access**
- **Training**



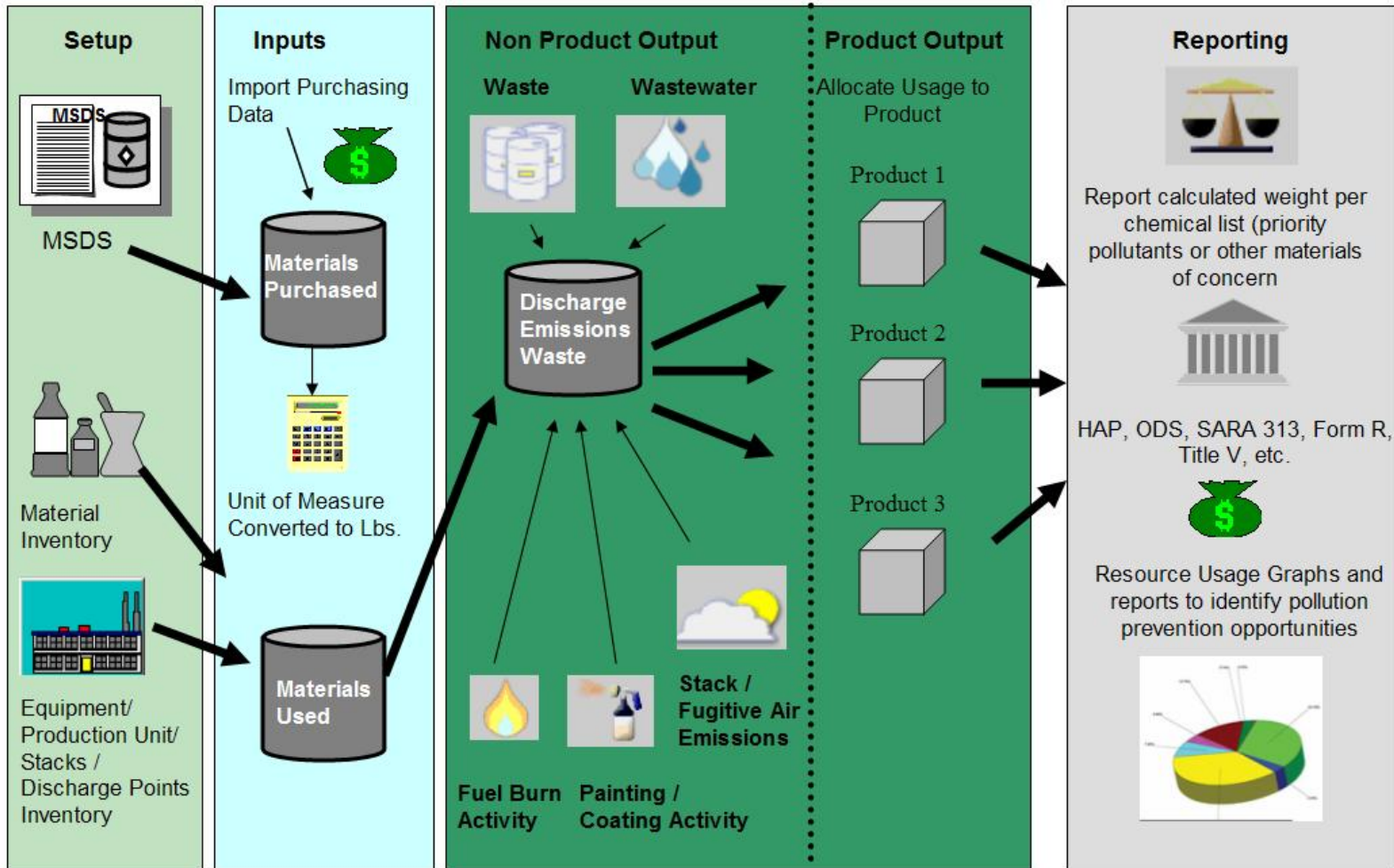
- In Phase 1 - designed to help users understand & analyze their materials (including water & fuels) & chemical use in one or more facilities
- Designed to help track fuels, (i.e., oil, natural gas, coal, or bio-based fuels); treats these material inputs the same as others



Phase 2:

- Enhance to enable users to track & evaluate use & purchasing of electricity & identify GHG emissions & reduction opportunities
- Seeking support for upgrades

EMFACT™ Design Concept





EMFACT - Procedure Flow

The Energy & Materials Flow and Cost Tracker (EMFACT) is an easy-to-use, well-documented tool to assist the small and medium size enterprise manage their fuel, water and materials usage. Using EMFACT, companies can track air emissions, wastewater, solid/hazardous waste, and related costs associated with the day-to-day operations of their business. Several reports are available to assist, along with a calendar to set up due dates and reminders.

The purpose of this document is to provide a high-level overview of the entire EMFACT process. Refer to specific training and documentation for additional details.

1 Install/Set Up EMFACT

- Download EMFACT
- Install
- Initial Setup

2 Set Up Admin

- User List
- Drop Down Lists
- Facility Location List
- Building List
- Department List

3 Define Materials

- Material List
- Material Detail
- CAS Number List

4 Define Equipment

- Equipment List
- Equipment Detail
- Production Unit List
- Production Unit Detail

5 Define Outputs

- Products List
- Intermediate Products List
- Air Source List
- Air Source Detail
- Water Discharge Point List
- Waste Type List
- EPA Codes per Waste Type

6 Define Regulations

- Permits List
- Permit Details
- Chemicals of Concern

7 Link Equipment, Prod Units, & Products

- Link Equipment
- Link Production Unit
- Link Product

8 Enter Inputs

Materials Purchased

- Prepare Electronic Data File
- Import Purchases (*electronically*)
- View Data List
- Manage List
- Enter Purchases (*manually*)

Material Usage

- Enter Water Use
- Enter Fuel/Paint/Other Air Use
- Enter Other Materials Use
- View List
- Manage List

9 Compute/Determine Outputs

Product Output

- Enter Product Volume

Non Product Output

- Compute Air Emissions
- Enter Wastewater Discharge
- Wastewater Discharge with Pollutants
- Waste Management List
- Waste Management Detail

10 Run Reports

Materials

- Materials Defined List
- Materials Purchased or Materials Used (*by Dept, Weight per Material, or Weight per CAS Number*)

Product

- Product: Weight per CAS Number

Air

- Usage (*Weight per Material, Weight per Material with 12 Month Rolling*)
- Emissions (*Weight per Pollutant with 12 Month Rolling, by MSDS VOC%*)

Water

- Usage (*Weight per Material*)
- Discharge (*Weight per Material, Weight per Pollutant*)

Waste Management

- Activity Costs
- Chargeback Costs

Mass Balance

- Mass Balance Purchased

11 Set Up / View Reminders

Materials

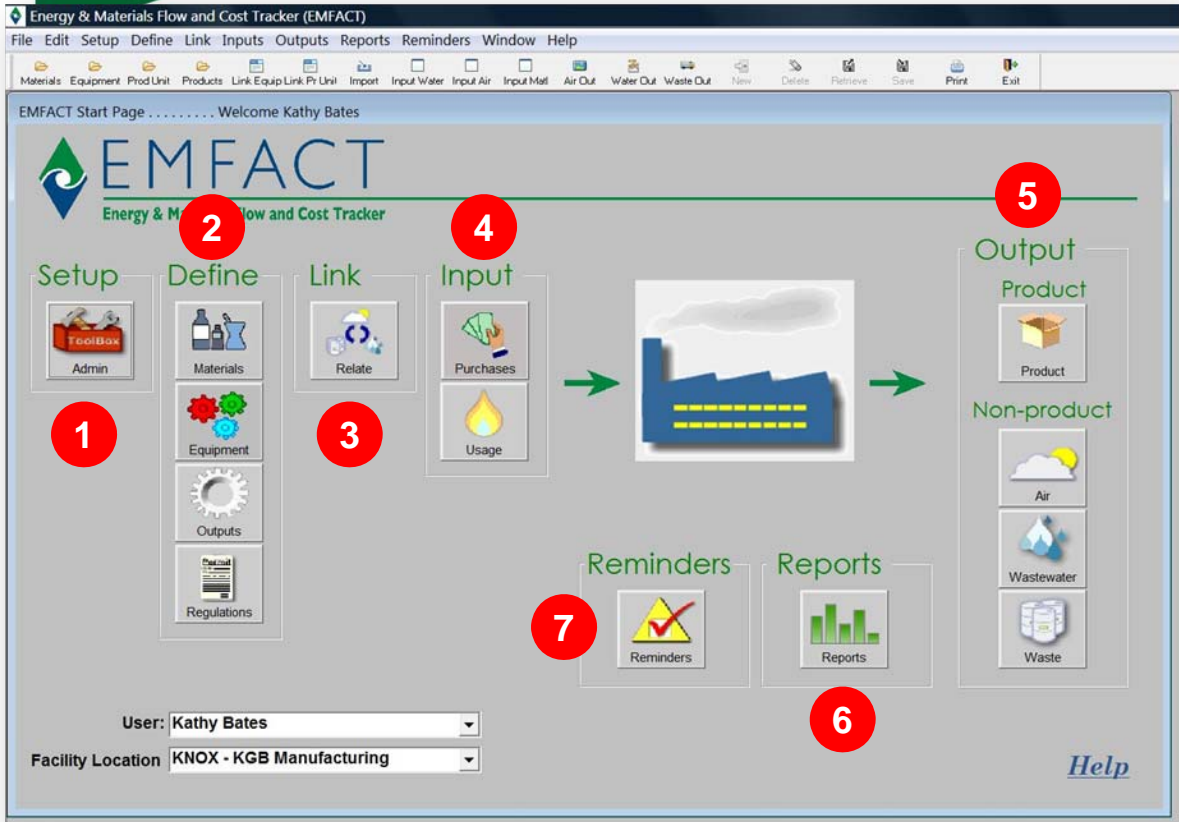
- Calendar Reminder List
- Calendar Reminder Details
- View Calendar Events Coming Due

- Designed to enable data input & data analysis & reports based on equipment, production unit, or entire facility – maximizes **flexibility** depending on user interests & needs
- **Manages lists** of equipment, materials, & chemicals
- **Pre-populated** with numerous lists – focusing on federal regulatory lists & thousands of CAS numbers

- Includes **21 boiler plate reports** to help users track products, air, water, & waste
- Filters enable user to define report parameters
- **SEARCH** window enables searching by a variety of fields - output can be saved to Excel
- **Reports Procedure Guide:**
www.newmoa.org/prevention/emfact/ReportGuide.pdf

EMFACT™ Dashboard



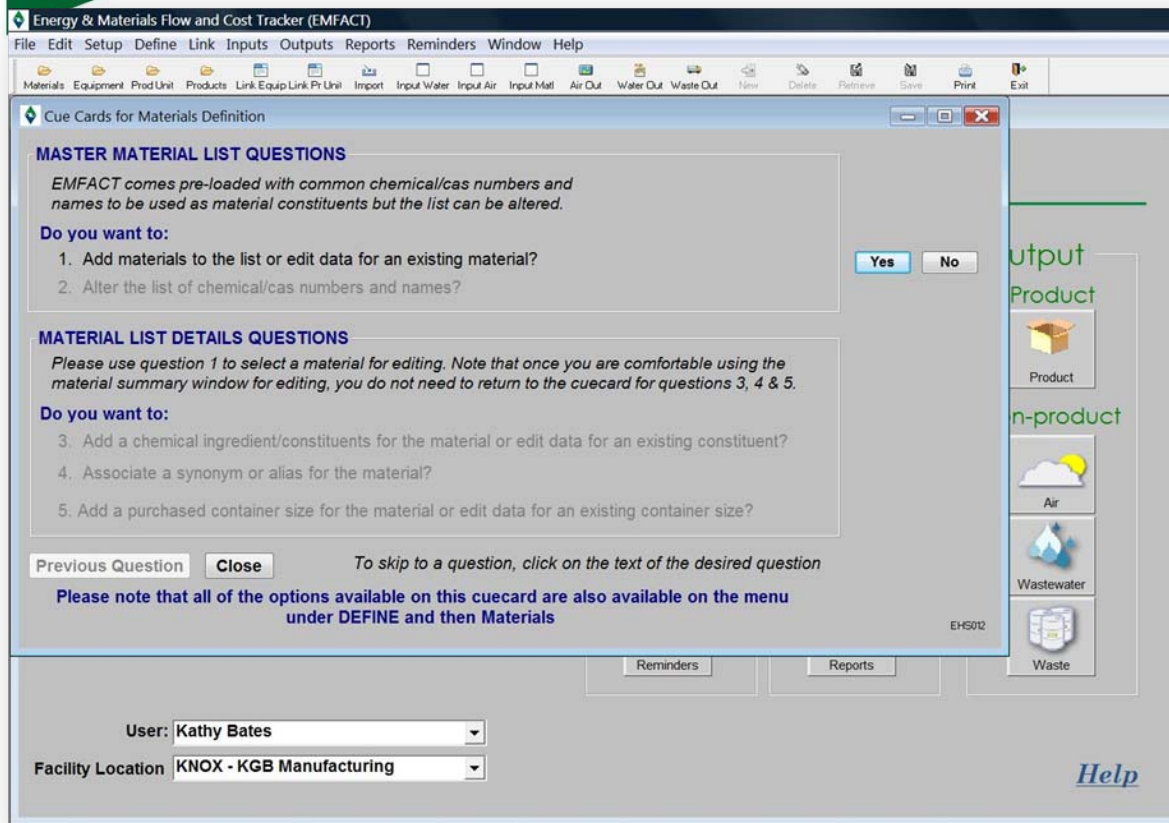


The EMFACT™ **Dashboard** displays seven distinct areas of functionality accessed via **icons** or **Toolbar** menus:

1. **Setup**
2. **Define**
3. **Link**
4. **Input**
5. **Output**
 - **Product**
 - **Non-product**
6. **Reports**
7. **Reminders**

EMFACT™ Toolbar





“**Cue Cards**” are provided for users to guide them through the logical series of tasks associated with EMFACT™ windows

Cue Cards are displayed when users click a **dashboard** icon

To access a window **without** using Cue Cards, select the desired functionality from the **Toolbar** menus

Each Cue Card contains a series of questions. Users click **Yes** or **No** to the questions. When answering **Yes**, the appropriate EMFACT™ window will display. If answering **No**, the prompt advances to the next question.

- Online tutorial/paint line example –
www.newmoa.org/prevention/emfact/elearning/03_training/emf/index.html
- Training slides –
www.newmoa.org/prevention/emfact/EMFACTWorkshopIntrotoEMFACT.pdf
- All support materials –
www.newmoa.org/prevention/emfact/register.cfm

- Developing case studies – seeking companies in NY
 - Can provide onsite training & assistance
 - Follow-up after ~6 months to write -up results
- Seeking funding for Phase 2 expansions & upgrades



- More on what is EMFACT™
newmoa.org/prevention/emfact/about.cfm
- Downloading (including registration)
newmoa.org/prevention/emfact/register.cfm

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