Combined Air Emissions Reporting (CAER):
A Collaborative Effort between State, Local, Tribal and EPA programs to Streamline Air Emissions Reporting

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Overview

- **Brief Background on E-Enterprise**
- **CAER Project Overview**
- **CAER Product Design Team Update**
  - Summary of five completed "First Round" R&D projects
  - "Second Round" R&D projects and next steps
- **Questions/Discussion**
- **Contact Points**

E-Enterprise

- **E-Enterprise for the Environment is jointly governed by state/local/tribes (SLTs) and the EPA to collaboratively modernize business processes:**
  - To improve **environmental results**
  - To **reduce burden** for all stakeholders
  - To **enhance services** to the regulated community and the public
- **A completely new way of working together among EPA and SLTs**
- **Key E-Enterprise values integrated into all aspects of the project**
  - Streamlining of processes
  - Modernization of business practices
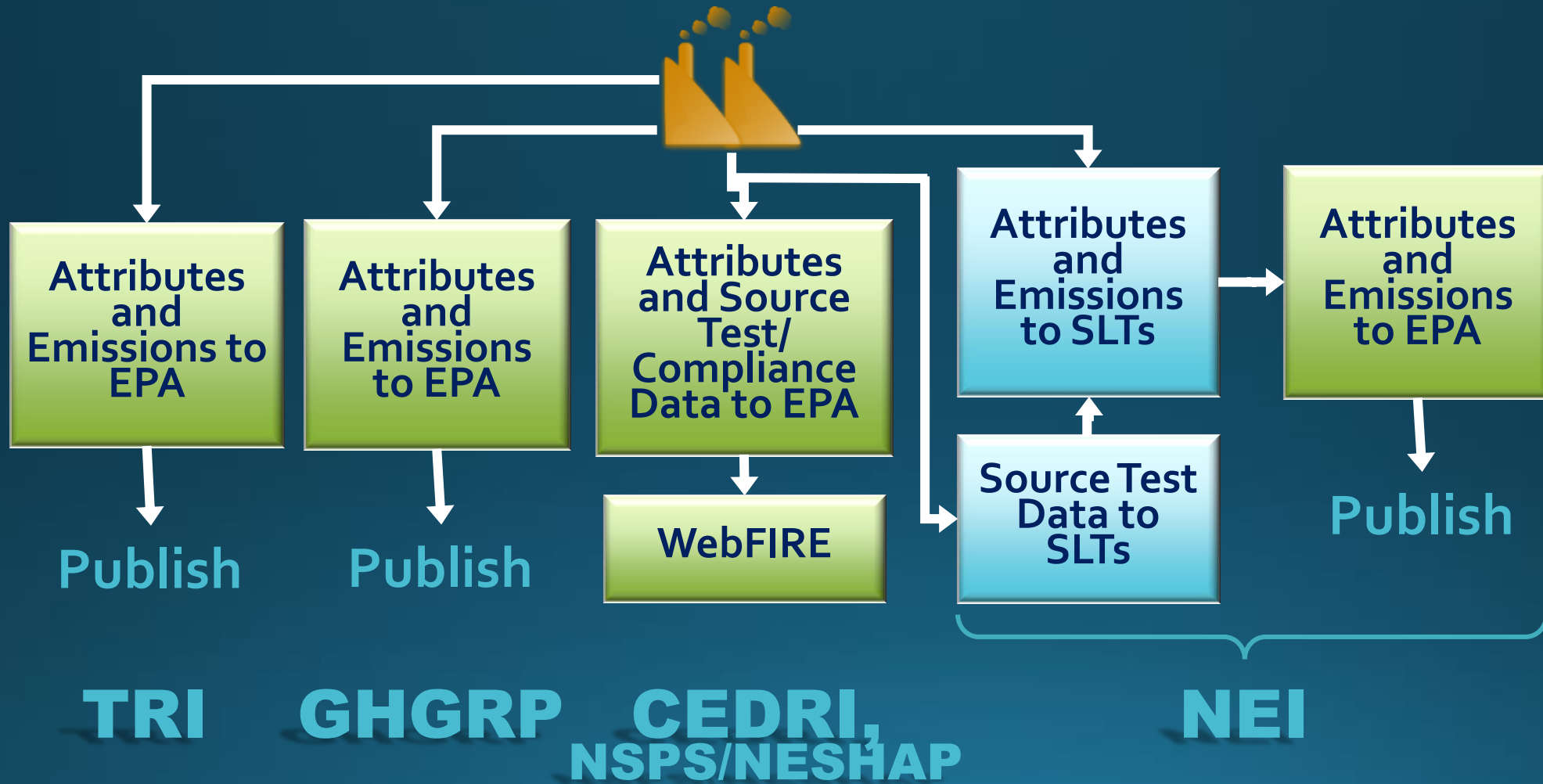 - Trust and accessibility to regulated community

CAER Goals

- **Basic purpose:**
  - To consolidate emissions reporting activities through modern data sharing technologies and streamlined program collaboration
- **Expected benefits would include:**
  - Reduce industry burden for point source reporting
  - Improve timeliness and data transparency
  - Create consistent information across air emissions programs
  - Improve data quality
  - Improve accessibility and usability of data
  - Support more timely decision-making

CAER Basics

- **Focuses on point sources**
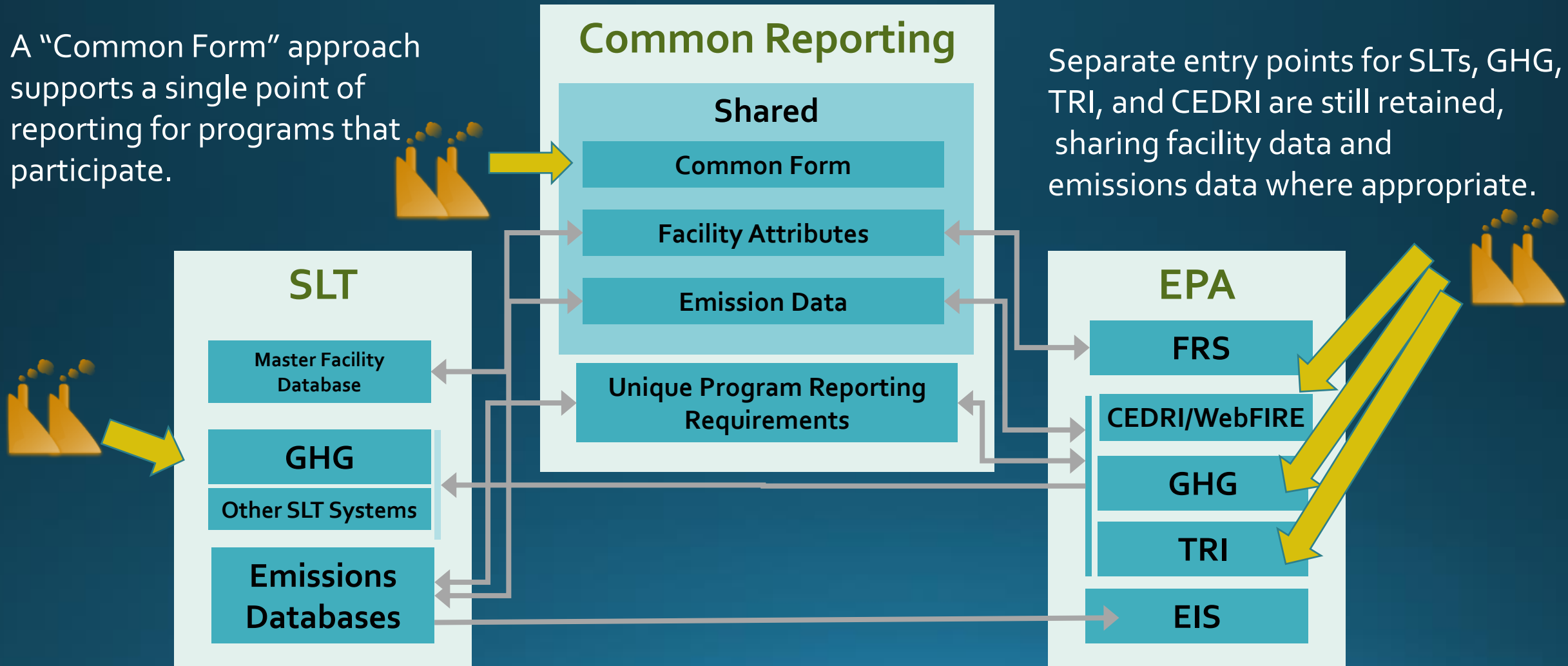
- **Focus on *emissions* reporting (not facility attributes)**
  - Facility attributes are central to CAER, but part of a separate E-Enterprise effort to provide shared services to many programs

- **Continuous collaboration with co-regulators at state, local, and tribal (SLT) agencies**

- **Look at process improvements first, not regulations**

- **Use information technology to help**

Air Emissions Reporting "As is" State

Attributes and Emissions to EPA → Publish — **TRI**

Attributes and Emissions to EPA → Publish — **GHGRP**

Attributes and Source Test/Compliance Data to EPA → WebFIRE — **CEDRI, NSPS/NESHAP**

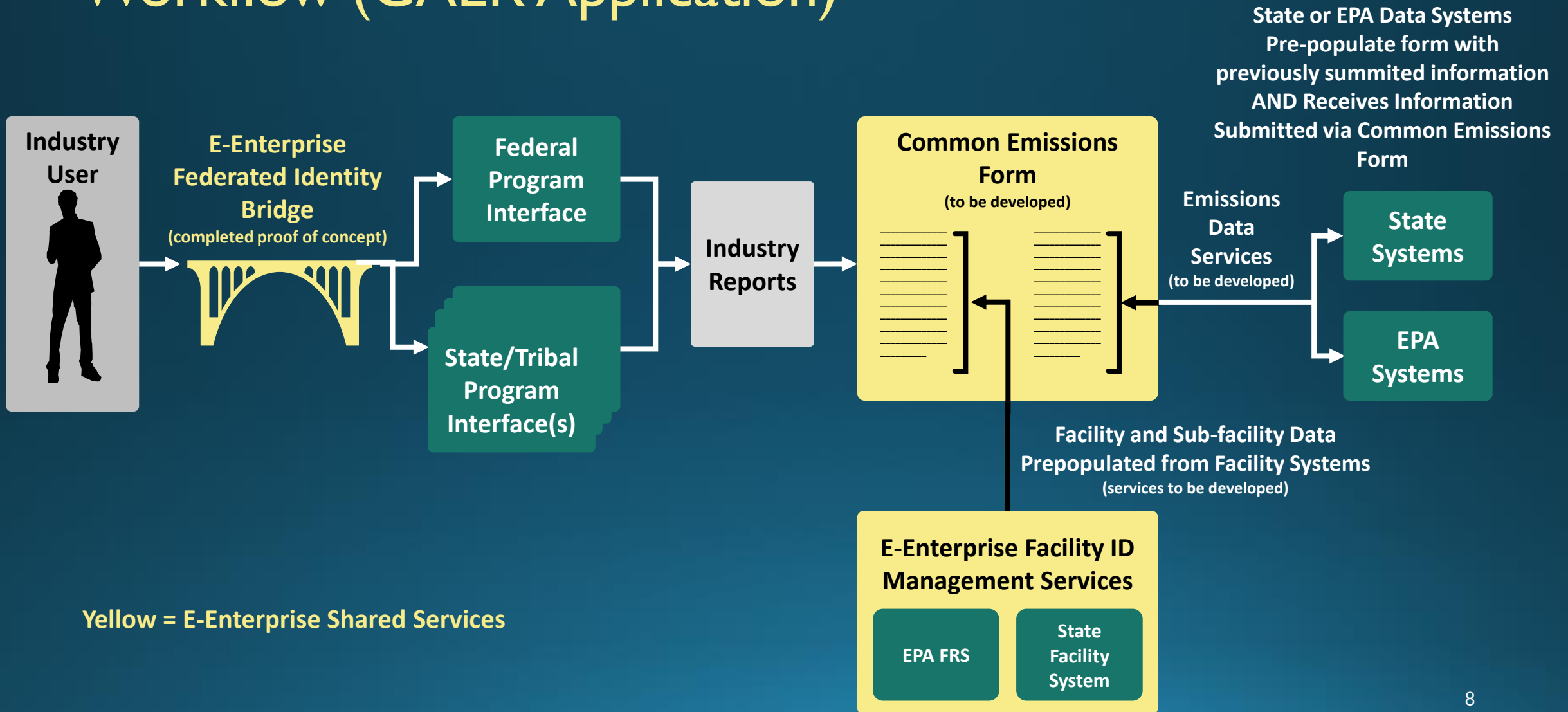Attributes and Emissions to SLTs ← Source Test Data to SLTs → Attributes and Emissions to EPA → Publish — **NEI**

Proposed "Future State" Concept

A "Common Form" approach supports a single point of reporting for programs that participate.

Common Reporting

Shared

Common Form

Facility Attributes

Emission Data

Unique Program Reporting Requirements

Separate entry points for SLTs, GHG, TRI, and CEDRI are still retained, sharing facility data and emissions data where appropriate.

SLT

Master Facility Database

GHG

Other SLT Systems

Emissions Databases

EPA

FRS

CEDRI/WebFIRE

GHG

TRI

EIS

E-Enterprise Conceptual Electronic Reporting Workflow (CAER Application)

Industry User

E-Enterprise Federated Identity Bridge
(completed proof of concept)

Federal Program Interface

State/Tribal Program Interface(s)

Industry Reports

Common Emissions Form
(to be developed)

State or EPA Data Systems Pre-populate form with previously summited information AND Receives Information Submitted via Common Emissions Form

Emissions Data Services
(to be developed)

State Systems

EPA Systems

Facility and Sub-facility Data Prepopulated from Facility Systems
(services to be developed)

E-Enterprise Facility ID Management Services

EPA FRS

State Facility System

Yellow = E-Enterprise Shared Services

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CAER PDT Completed Activities

- **R&D teams completed five "First Round" enabling projects in 2017**
  - *TRI/NEI/SLT Program Crosswalk*
  - *Quality Assurance / Quality Control Procedures*
  - *Emissions Data Model Design (data element mapping)*
  - *Needs Assessment for Reporting Codes and Emission Factors*
  - *GHG Emissions Mapping Study*

Generating information to be used in the design of the Common Form

- **"Second Round" R&D projects defined/teams formed at end of 2017 and started in Jan. 2018**

- **Outreach (ongoing)**

CAER Current R&D Projects

- **Five "Second Round" R&D projects began in Jan. 2018 with target completion dates of late summer 2018**

  - *TRI/NEI/SLT Program Crosswalk (Phase 2):* Research consistency and possible workflows for sharing of emissions data between TRI, SLTs and NEI

  - *Emissions Data Model Design (Phase 2):* Documentation of SLT emissions data needed to support creation of a common emissions form (CEF) that can be used by SLT emission reporting programs/systems

  - *GHG Mapping Study (Phase 2):* Analysis of national SLT GHG emissions data needs, program types, and cross-walk to EPA's GHG Reporting Rule requirements

  - *CBI Procedures Study:* Study of SLT and EPA program business cases and practices for handling confidential business information (CBI) as it relates to emission reporting information

  - *Emission Factors Compendium:* Development of a compendium of SLT emission factors and associated guidelines for use

CAER Next Steps

- **Complete "Second Round" R&D Projects by end of summer 2018**

- **Initiate basic steps forward for testing a "Common Emissions Form" approach:**
  - Retain IT support for prototyping ($325K allocated by EPA in early 2018 to support securing an IT expert and initiate building of a CEF prototype)
  - Decision on specific IT approach for a prototype CEF
  - Prototyping a pilot project at a candidate SLT program, incorporating results of R&D projects where applicable into CEF design

- **Coordination with other CAER-related projects**

Questions?
for more information…..

- **E-Enterprise Websites:**

  https://www.epa.gov/e-enterprise/about-e-enterprise-environment

  http://e-enterprisefortheenvironment.net/

  https://e-enterprisefortheenvironment.net/our-projects/air-quality-projects/combined-air-emissions-reporting/

- **CAER website: FAQ, R&D projects, and webinar recordings:**

  https://www.epa.gov/e-enterprise/e-enterprise-combined-air-emissions-reporting-caer

- **CAER listserv:**

  join-caer@lists.epa.gov

Contact Points

- **CAER project contacts:**
  - Kelly Poole at kpoole@ecos.org , Michael Burton at burton.michael@azdeq.gov, Mark Wert at mark.wert@state.ma.us, and Julia Gamas at gamas.Julia@epa.gov
- **The Facility Integrated Planning Team (IPT) contacts:**
  - Joshua Kalfas at: joshua.kalfas@deq.ok.gov; Ben Way at: ben.way@wyo.gov; Susan Joan Smiley at smiley.susan@epa.gov, and Ron Evans at evans.ron@epa.gov
- **Help us learn more about what functionalities can help you most:**
  - We want "user stories" of the form:
    I am a <role> and I need <some capability> so that I can <some objective>
  - Send comments and user stories to: CAER@epa.gov
  - Individual comments only (group comments cannot be used)