



**Alberta
Energy
Regulator**

Climate Policy Implementation Stakeholder Engagement

Alberta Energy Regulator

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Agenda

- Introduction / Background
- Conceptual Plan
 - Regulatory Enhancement
 - Platform
- Next steps

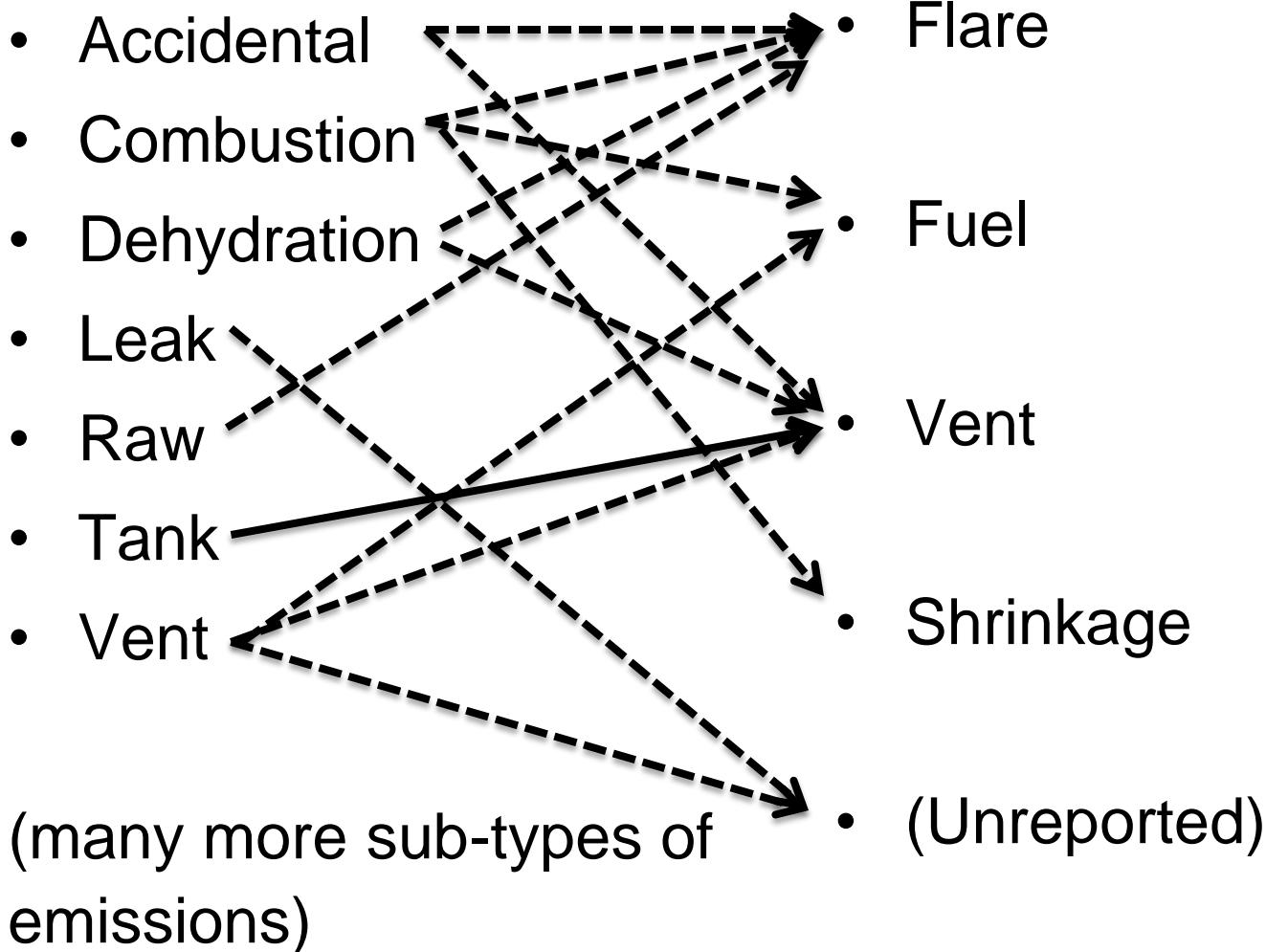
Select Alberta Emissions Regulatory Framework

- » Alberta Environment and Parks – AR 139/2007 – Specified Gas Emitters/Reporting Regulation
- » Alberta Energy Regulator / Alberta Energy – AR 151/71 – Oil and Gas Conservation Regulation
 - Directive 060 - Upstream Petroleum Industry Flaring, Incinerating, and Venting
 - Directive 007 – Volumetric and Infrastructure Requirements
 - Directive 017 - Measurement Requirements for Oil and Gas Operations
 - Directive 039: Revised Program to Reduce Benzene Emissions from Glycol Dehydrators
 - Manual 011 - How to Submit Volumetric Data to the AER
 - ID2003 – 01 - ...2) Surface Casing Venting Flow/Gas Migration Testing, Reporting, and Repair Requirements;...
 - IL-98-01 – Release Notification Requirements
 - Draft Directive - Requirements for Hydrocarbon Emission Controls and Gas Conservation in the Peace River Area

Activity Codes

Data incompatibility

Emission Categories



National Inventory Report Information Flow

Government of Alberta

>50,000 tonnes CO₂e/yr

Specified Gas Reporting Regulation

~94 O&G facilities

~represents 50% CO₂e total emissions

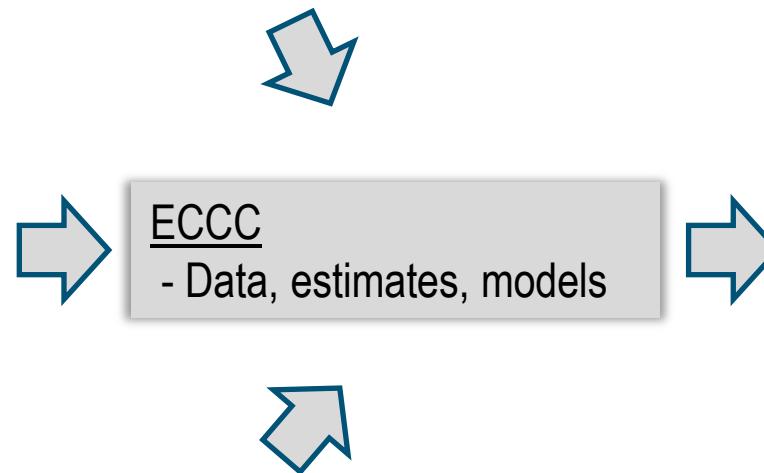
but only 8% methane emissions

Clearstone Engineering

- Quinquennial (every 5 yrs)
survey and analysis

Other Sources

- EPA / API, etc

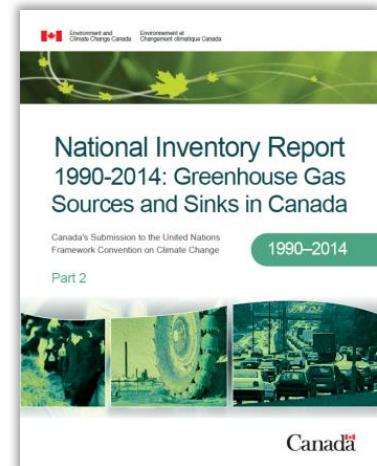


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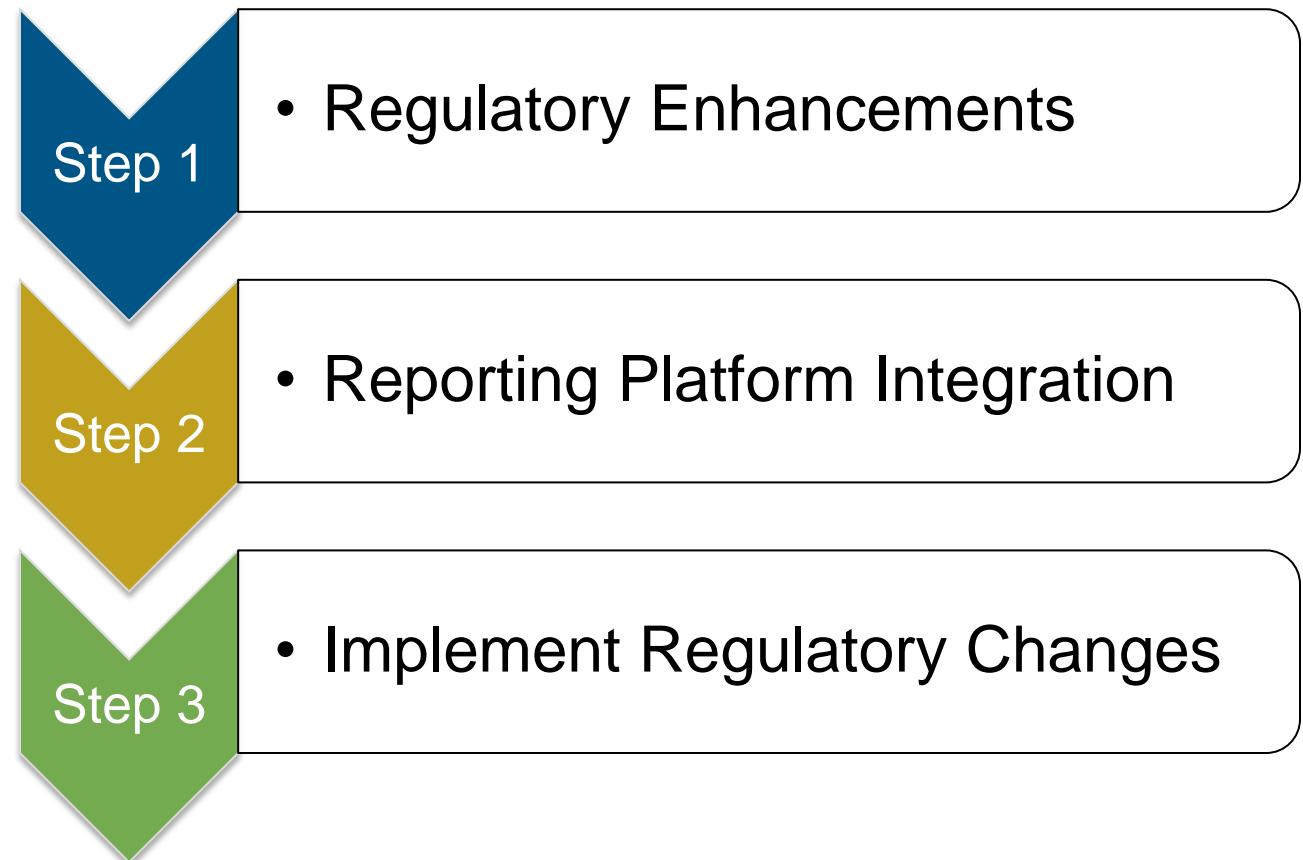
D060 and Publications – ST60B

~60,000+ O&G facilities

~represents only 20% methane emissions



Conceptual plan



Conceptual Plan – Step 1

Current State: Select Western Canada Emission Reporting Activities

Reg / Dir	Location - Branch	Activity		
		Fuel Gas to Flare (enhance combustion)	Vented Fuel Gas	Continuous Acid Gas Flaring
D060	AB - AER	Fuel	Fuel	Shrinkage
SGRR	AB – ACCO	Flare*	Vent*	Flare*
F&V Red. Guide.	BC - OGC	Fuel	Vent	Shrinkage
GGERR	BC - CAS	Flare*	Vent*	Flare*
D-10	SK- ECON	Fuel	Fuel	Flare
GHGRP	Canada - ECCC	Flare*	Vent*	Flare*

* Values denoted are not categorized by activity type, rather report emissions by individual gas species

Conceptual plan – Step 1

- » Improved guidance for emission reporting
 - to calculate material balances and flows
 - to accommodate innovations for methane reducing technologies
- » Regulatory enhancements
 - Definitions of Fuel / Vent Gas
 - D060 / D007 / Manual 011 / D017
 - Emission Report Changes
 - ST60B
 - **Regulatory enhancements drafts in 2017**

Conceptual plan – Step 2

Current State: Select Alberta Emission Reporting Requirements

Reg / Dir	Department	System
D060 / D017 / D007	AER	Petrinex
GHGRP	Canada - ECCC	SWIM
SGRR	ACCO	SWIM
D-039	AER	Template - Email
NPRI	Canada – ECCC	SWIM
IL-98-01	AER / AEP	<i>Phone Field Center</i>
ID2003-01	AER	DDS

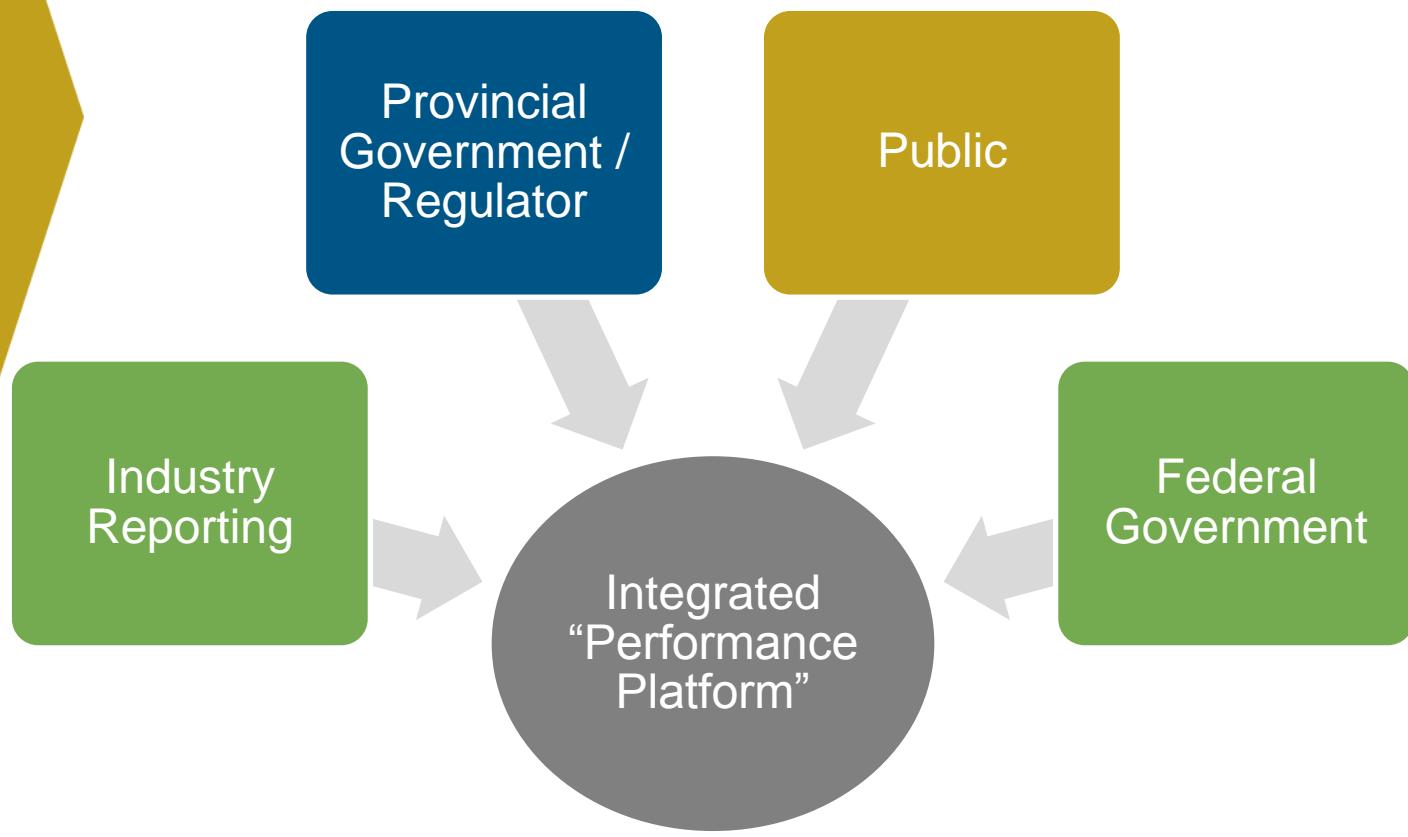
Conceptual plan – Step 2

- » A clear baseline is required so emission reductions can be discerned
- » Revision / Integration to Reporting Systems
 - Petrinex
 - Other emission reporting systems

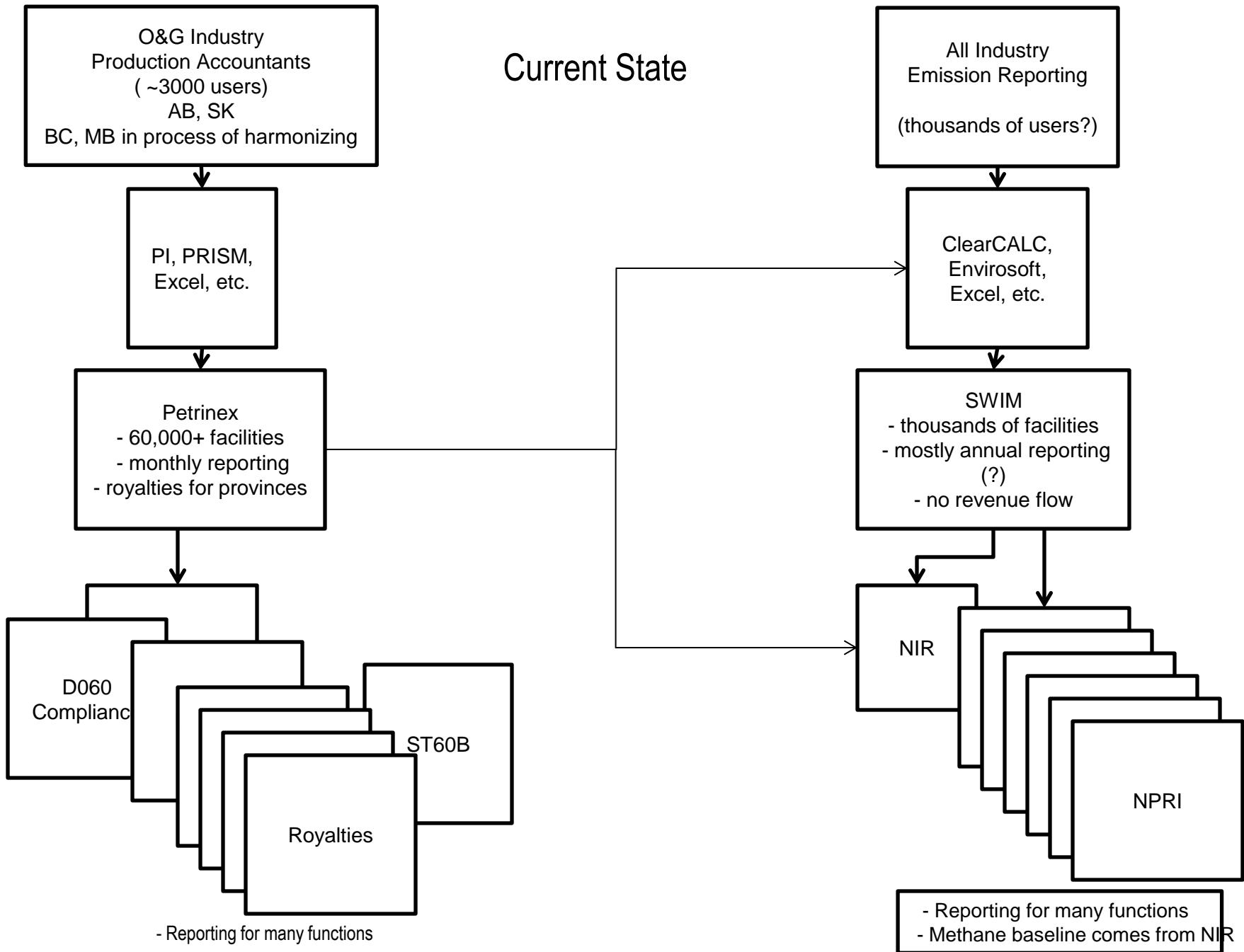
» Vision - an integrated system that:

- Improves extent and accuracy of activity data
- Simplifies reporting for industry
- Harmonizes inter-jurisdictional overlap

Conceptual Plan – Step 2



Current State



O&G Industry
Production Accountants

Desired State

All Industry
Emission Reporting

PI,
PRISM,
Excel, etc.

- Equipment counts
- emission factors

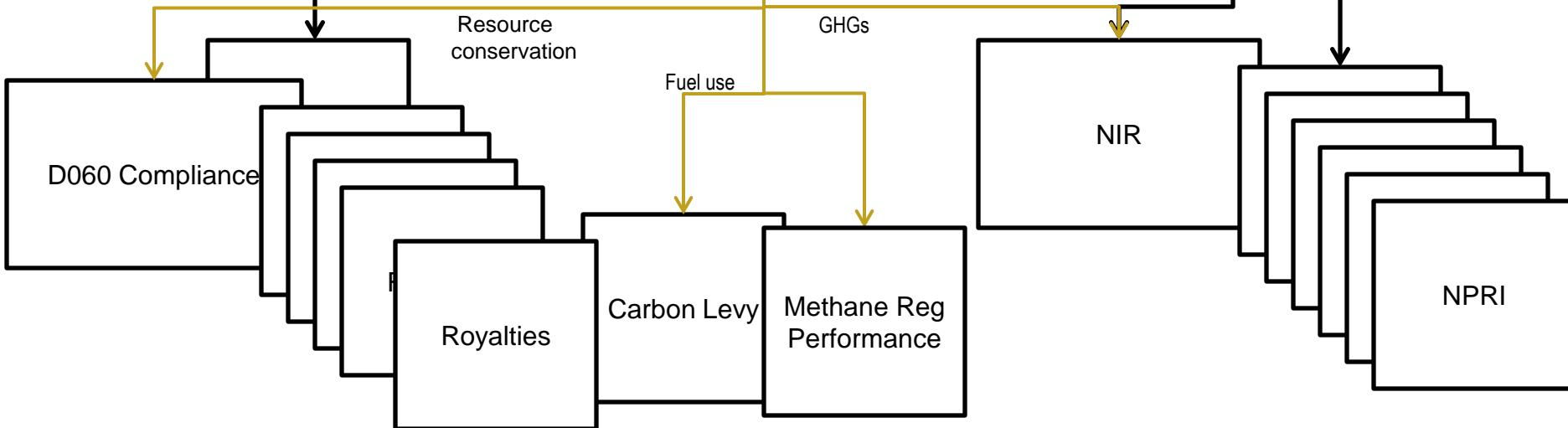
ClearCALC,
Envirosoft,
Excel, etc.

Petrinex

- Fuel / flare /
vent data
- Production
- Facility counts

Methane
Data

SWIM





Conceptual plan – Step 3

» Regulatory Changes

- New directives or updates to existing directives:
 - D007 - Reporting
 - D017 – Measurement
 - D060 – Venting and Flaring
 - Manual 11 – Data Submission
 - Other?
- Distinct from ‘Regulatory Enhancements’ in Step 1
- Potential for phased requirements
- **Targeting drafts for stakeholder review in 2017**



Questions



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