

Draft GVRD Air Quality Management Plan

Canadian Petroleum Products Institute

Presentation To

**Chair of the GVRD Planning and
Environment Committee**

May 11-2005

John Skowronski

Agenda

Purpose:

- Recommend approval of the Greater Vancouver Regional District draft Air Quality Management Plan be delayed until a thorough business and economic assessment is incorporated into the plan. This plan must be coordinated with the *Sustainable Region Initiative Growth Strategy*.

Discussion Points:

- Who is CPPI?
- Realities
- Opportunities
- Recommendations
- Back up



Who is CPPI?

- The Canadian Petroleum Products Institute (CPPI) is an industry association representing Petroleum Refiners and Marketers in Canada.
- CPPI member companies operate over 80% of Canadian domestic refining capacity and supply in excess of 80% of fuel sold in Canada.
- CPPI western Refinery members are Chevron, Husky, Esso, Petrocan, and Shell. The three Edmonton based refineries supply over two-thirds of BC's demand for petroleum products.
- The majority of Distribution and Marketing facilities in BC are operated by CPPI member companies.

Realities

- Air quality in the GVRD is best in class, improved markedly over time, and will continue to improve over time. It meets the ambient air quality objectives /principles outlined in the Canada Wide Standards (CWS) and agreed to by the Canadian Council of Ministers for the Environment (CCME).
- CPPI supports the air quality principle of Continuous Improvement (CI). Current known fuel regulations enable continuous improvement of air quality.
- There is no need for the GVRD to haphazardly pick ambient air quality objectives from other jurisdictions that are more stringent and may not have applicability or relevance to the conditions within GVRD.
- Non defensible objectives will add unnecessary costs for minimal benefits; create unnecessary public alarm; and add burden to the drivers of the economy in the GVRD.

 **GVRD clean air reality creates the opportunity to look at long term sustainability rather than short term fixes.**

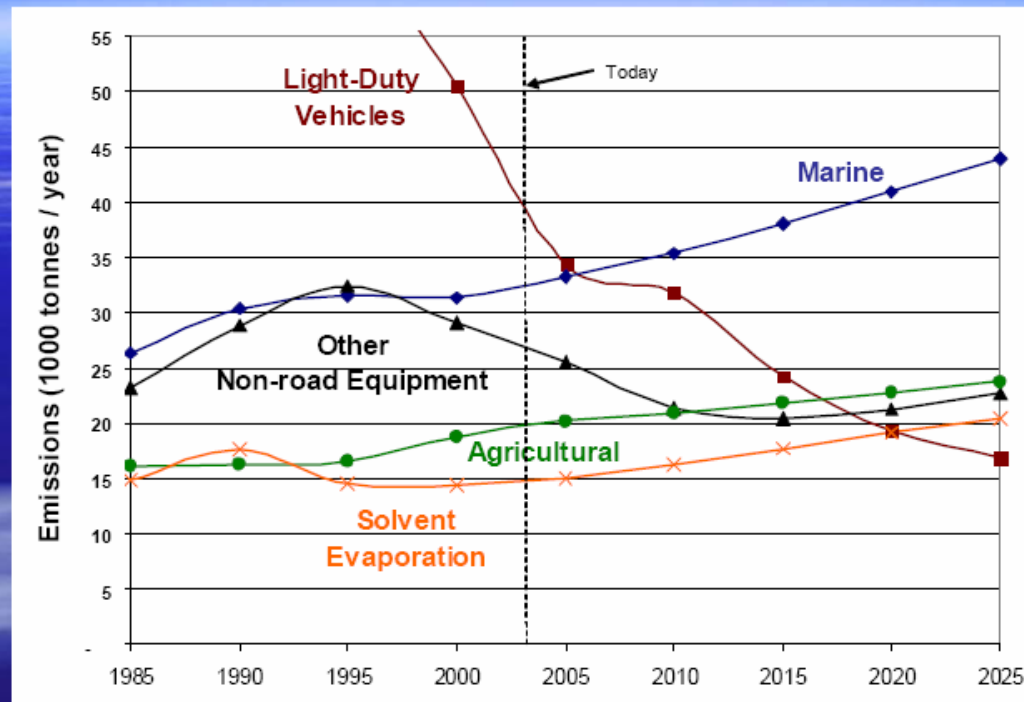
Realities

- The GVRD clean air strategy focus is *to ultimately reduce the use of fossil fuels for combustion*. The measures in the AQMP are to use clean fuels, burn fuels cleanly, and to reduce fuel use.
- CPPI supports the efficient use of our products and the need for conservation.
- Current regulatory requirements for clean fuels and clean burning of fuels have evolved over the past 20 years and specific requirements and actions are underway for the next decade. (eg. product specifications and engine technology)
- Initiatives to advance the implementation of these known requirements are not cost effective nor progressive. In fact, they may be regressive towards the economic development of the GVRD.

 **GVRD has skewed the cost effectiveness measure with an undue focus on PM without adequate scientific basis. CI is the answer.**

GVRD Emission Forecast Over Predicts Future Emissions

Top 5 Smog-Forming Emission Sources in LFV



Smog-Forming Pollutants = $\text{NO}_x + \text{SO}_x + \text{VOC} + \text{PM}_{2.5} + \text{NH}_3$



Forecast looks only at regulated future reductions. Other emission reductions are planned already for non road / marine emissions.

Diesel Fuels Continue to Become Clean

Canada's regulatory schedule for Ultra Low Sulphur Diesel

- **On Road**
 - 15 ppm S max June 2006 Refinery
 - 15 ppm S max September 2006 POS

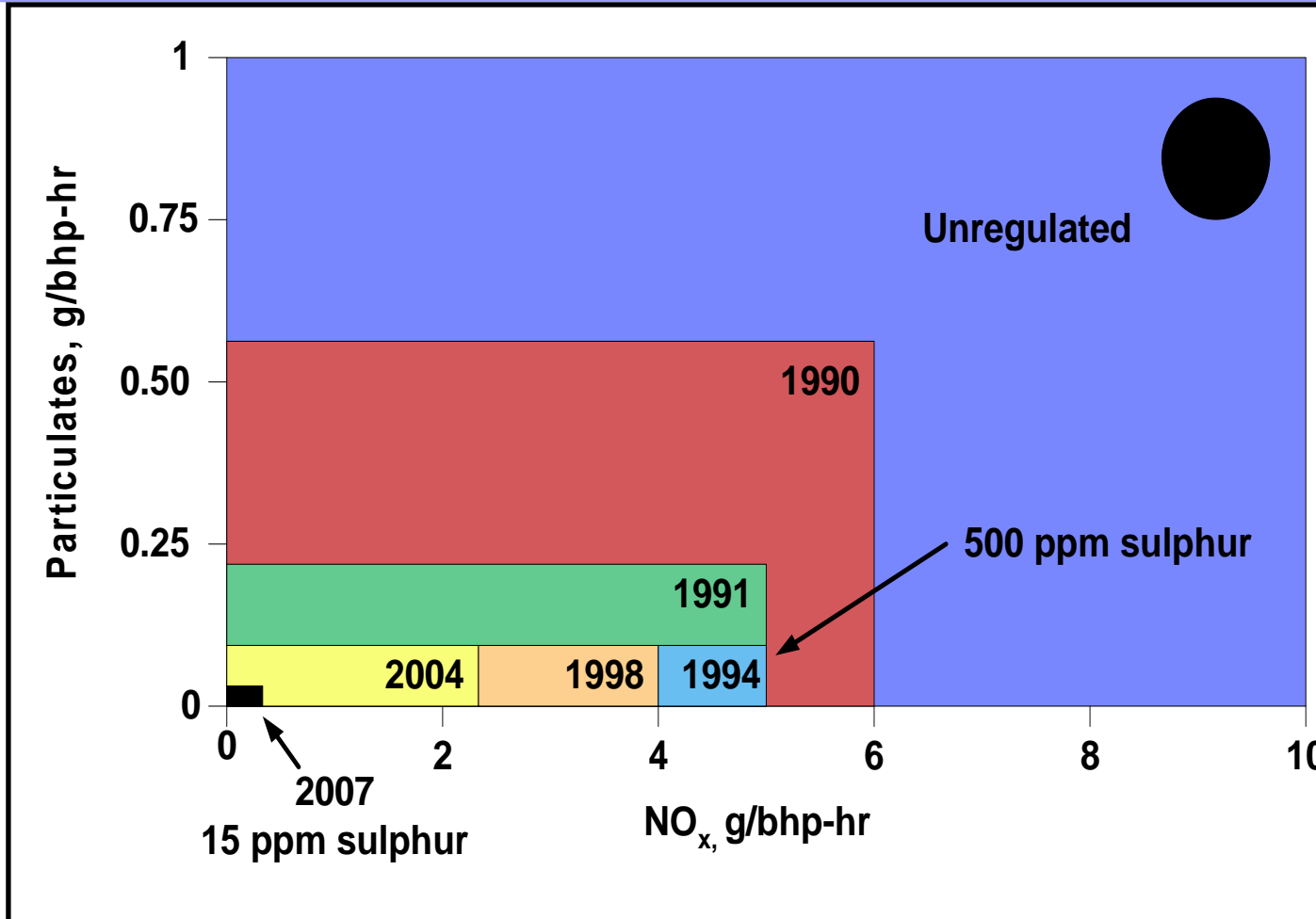
- **NRLM (Non Road, Locomotive and Marine)**
 - Non Road & Marine/Rail - 500 ppm S max June 2007 Refinery
 - Non Road - 15 ppm S max June 2010 Refinery
 - Marine/Rail - 15 ppm S max June 2012 Refinery

- **Timing is aligned with US regulation**



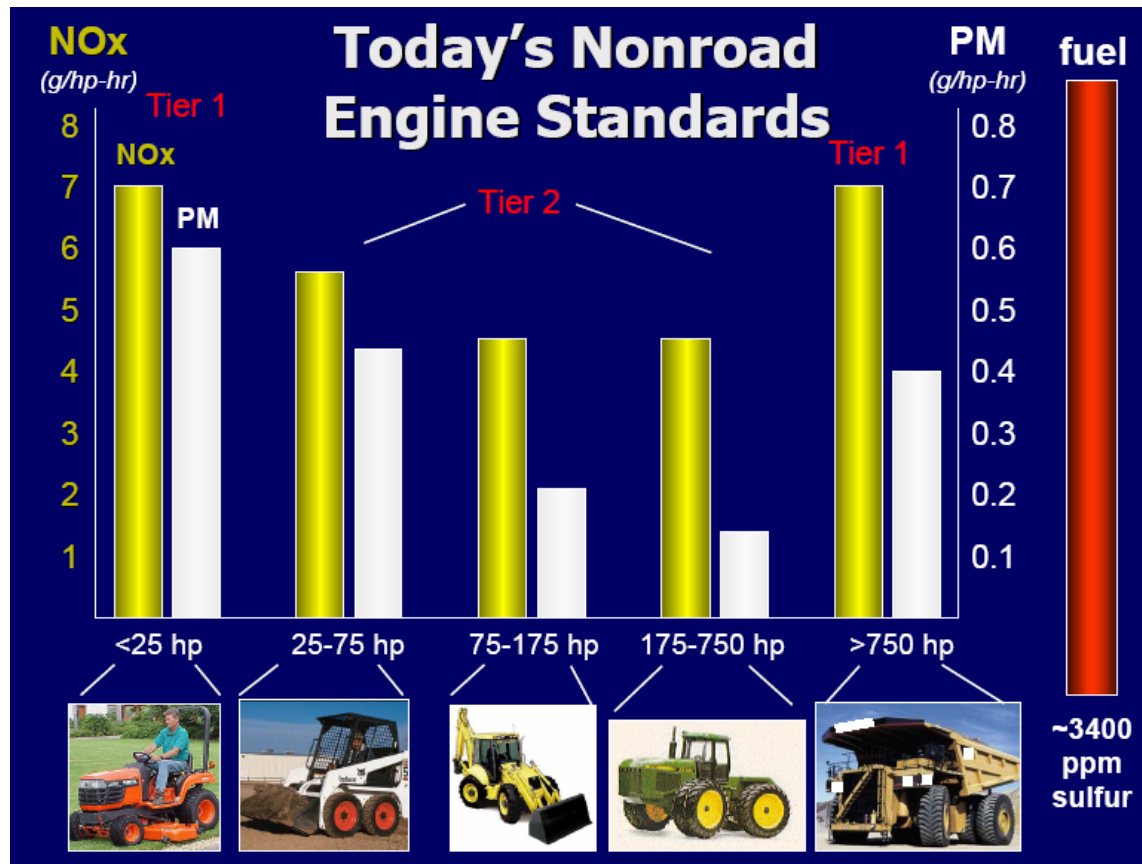
These near future fuels will enable virtually emission free diesel powered vehicles. (90+ % reductions from already low 2004 vehicles)

Heavy Duty Vehicle (On-road) Emissions Standards



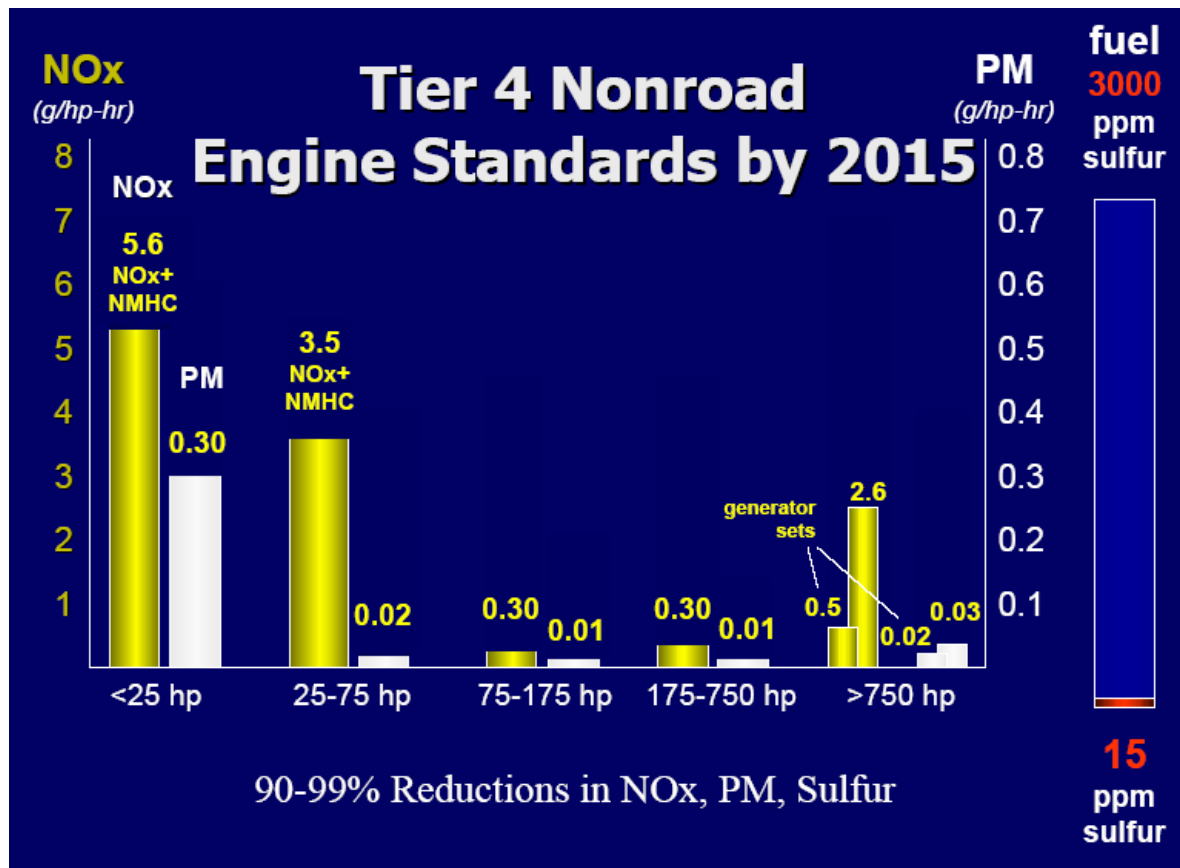
Non Road Diesel Emissions Standards – Today

(MarfyManners US EPA office)



Non Road Diesel Emissions Standards – Future

(MarfyManners US EPA office)





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On-Road Vehicle Emission Inventories for 1985 - 2030

Vehicle Kilometers - Lower Fraser Valley

Modeling results from CCME EPWG

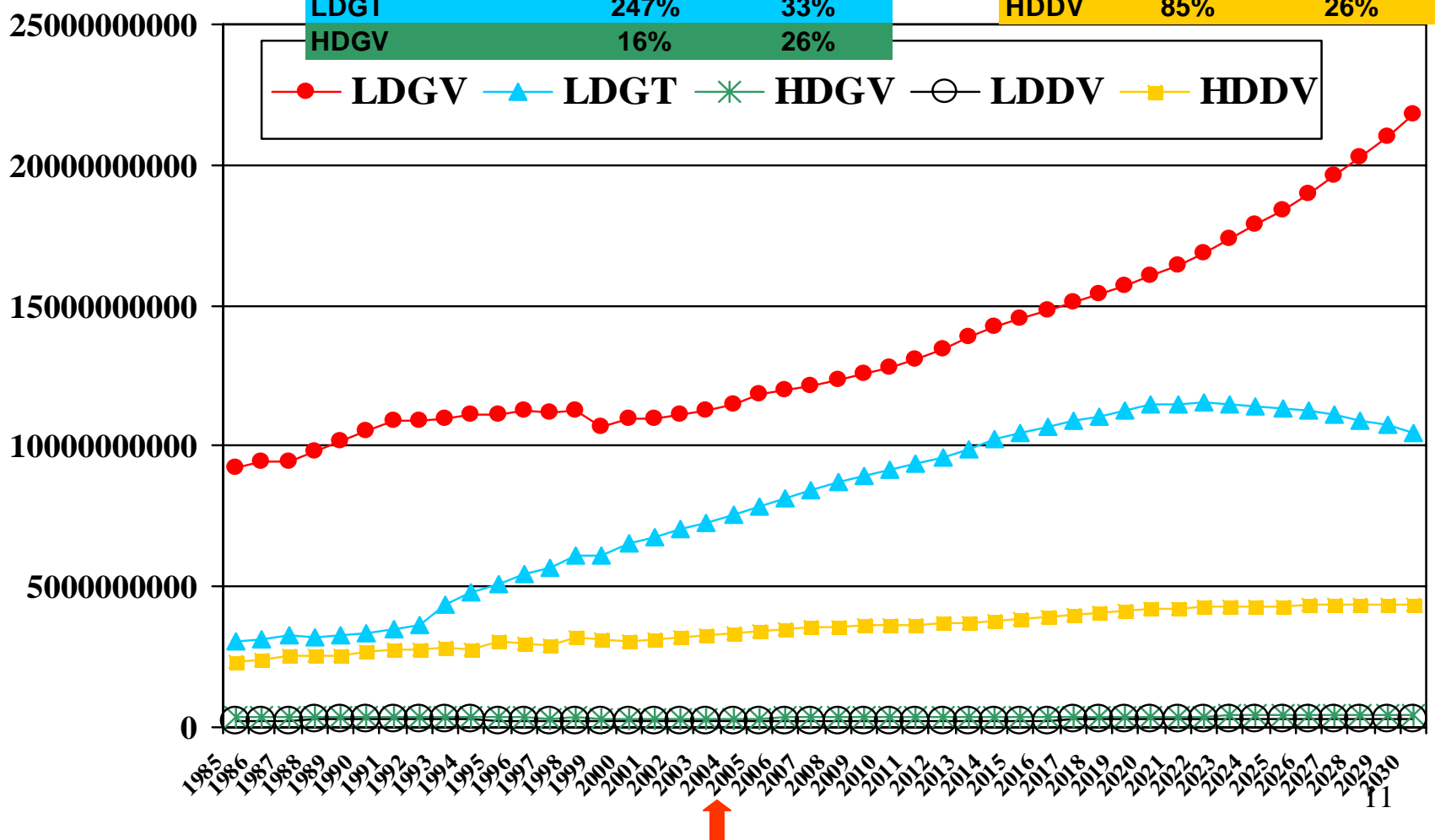
Increases:

(1985-2030) (2005-2030)

(1985-2030) (2005-2030)

LDGV	136%	84%
LDGT	247%	33%
HDGV	16%	26%

LDDV	28%	45%
HDDV	85%	26%

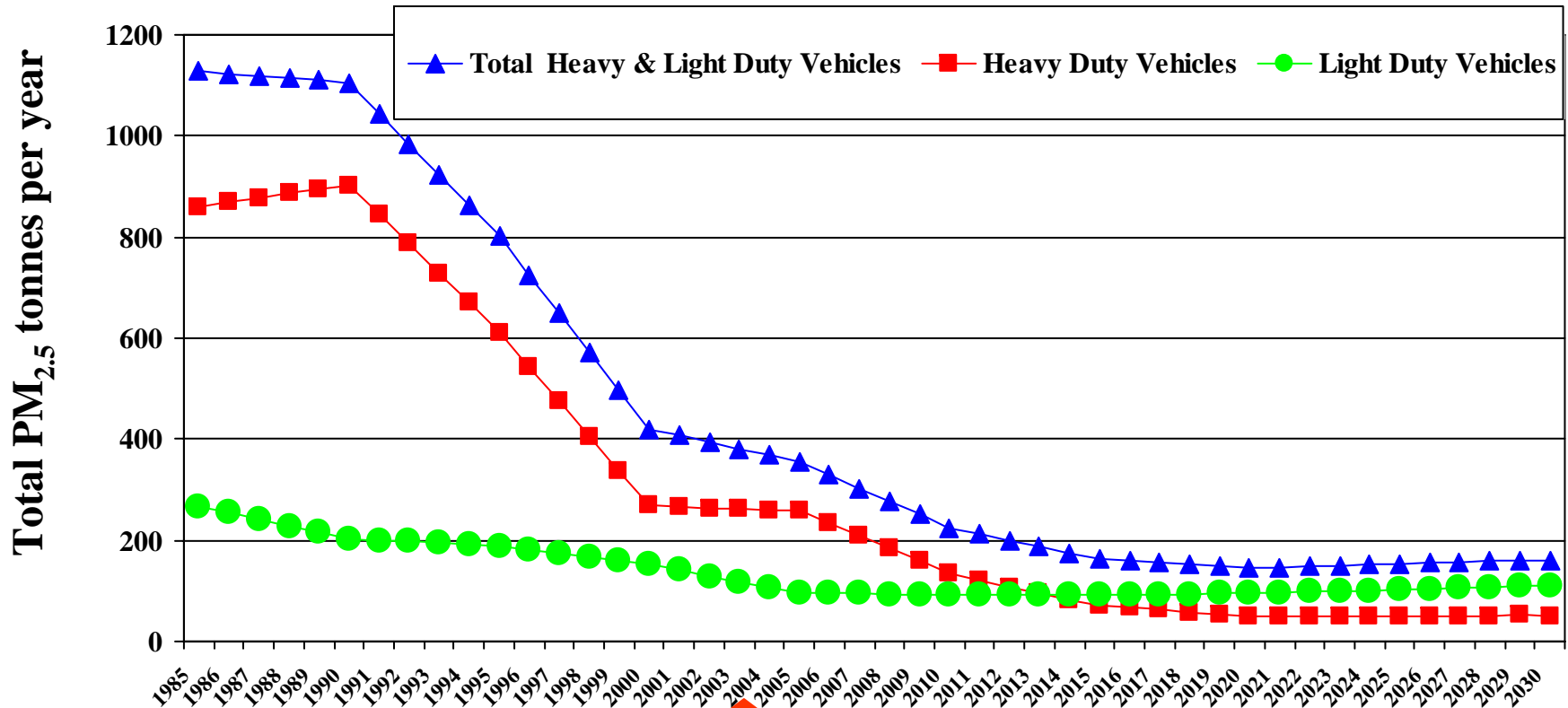


On-Road Vehicle Emission Inventories for 1985 - 2030

TOTAL PM_{2.5}* - Lower Fraser Valley

% Reduction:

(1985 - 2030) ⇒ 86% (2005 - 2030) ⇒ 54%



* (Includes direct sulphate and non-sulphate PM exhaust emissions)

Opportunities

- The realities over the longer term will challenge the social and economic drivers in the GVRD:
 - Population growth will continue
 - Flow of goods through the international ports will grow
 - The infrastructure will continued to be stressed
 - Societal behavior will continue to change
- The draft AQMP focus is reduced emissions from sources that have been recognized and are being addressed.
- The current and forecast air quality in the GVRD allows broader urban planning for the future to sustain economic growth and quality of life. Societal/cultural/educational issues may be target.

 **What is the long term growth management plan for the GVRD? How is the growth strategy coordinated with the AQMP?**

Recommendations

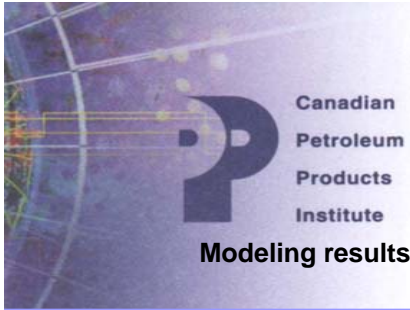
- Do not approve the draft Air Quality Management Plan as currently drafted.
- Restate the ambient air quality objectives to acceptable, rational, and defensible Canada Wide Standards. The principle of Continuous Improvement is in the plan.
- Develop and add an economic and business impact analysis to the Air Quality Management Plan to enable an assessment of the proposed initiatives and fit with the Sustainable Region Initiative growth strategy.



Delay in approval of the plan will not change the pace of emission reduction in the GVRD. The development of clean fuels continues.

THANK YOU.

- **Back up Slides**



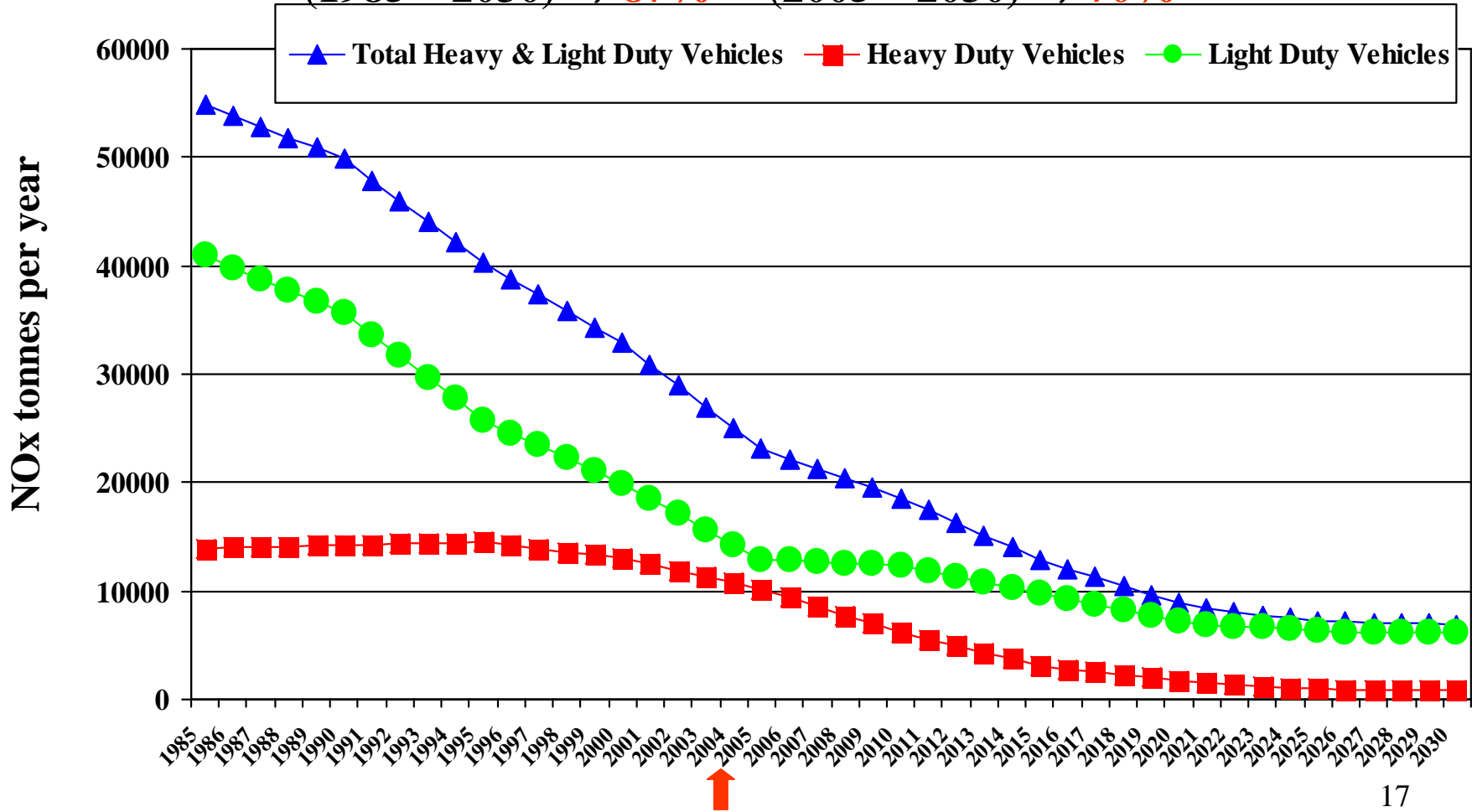
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Modeling results from CCME EPWG

On-Road Vehicle Emission Inventories for 1985 - 2030

NO_x Emissions - Lower Fraser Valley

% Reduction:

(1985 - 2030) ⇒ **87%** (2005 - 2030) ⇒ **70%**

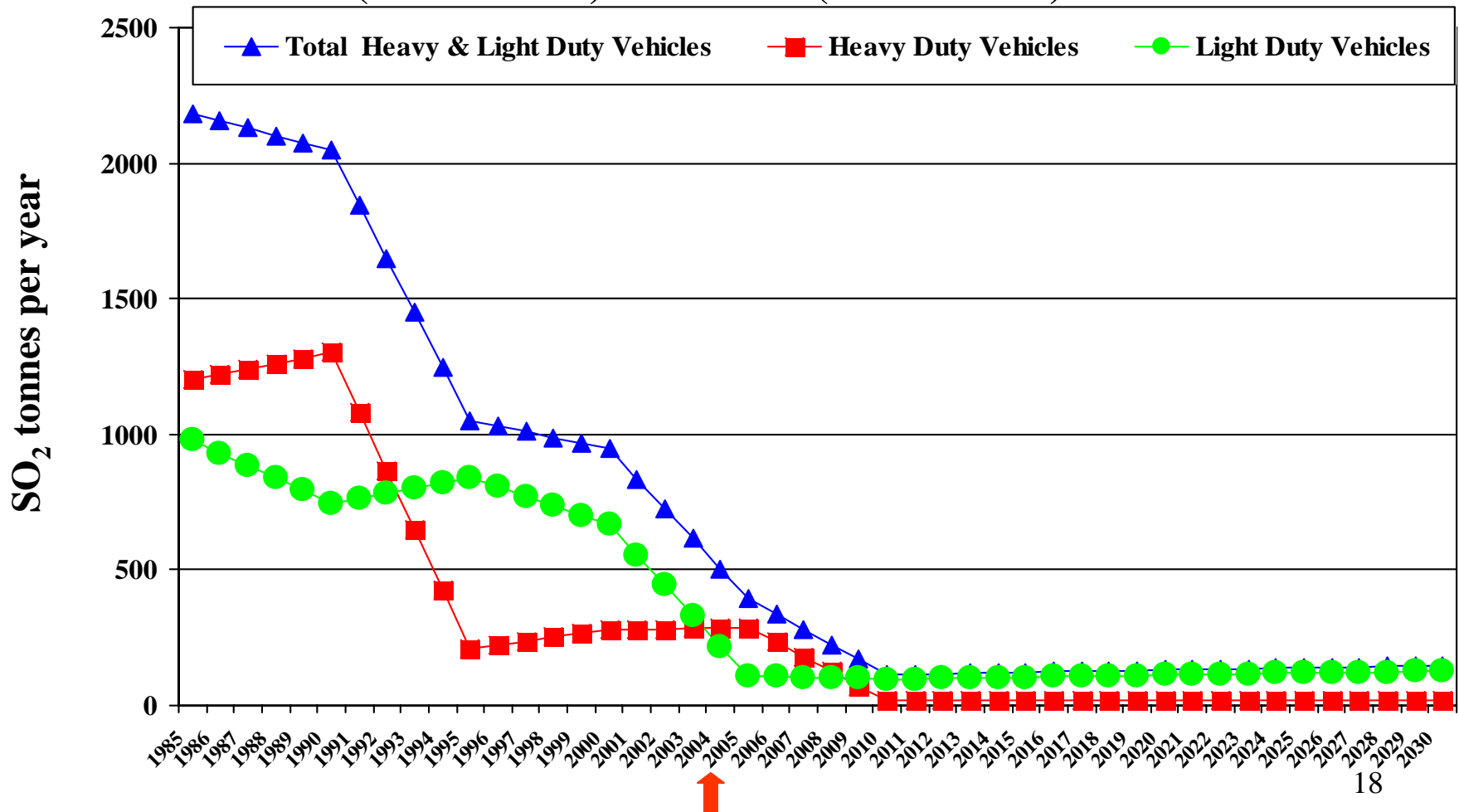


On-Road Vehicle Emission Inventories for 1985 - 2030

SO₂ - Lower Fraser Valley

% Reduction:

(1985 - 2030) ⇒ **93%** (2005 - 2030) ⇒ **63%**



On-Road Vehicle Emission Inventories for 1985 - 2030

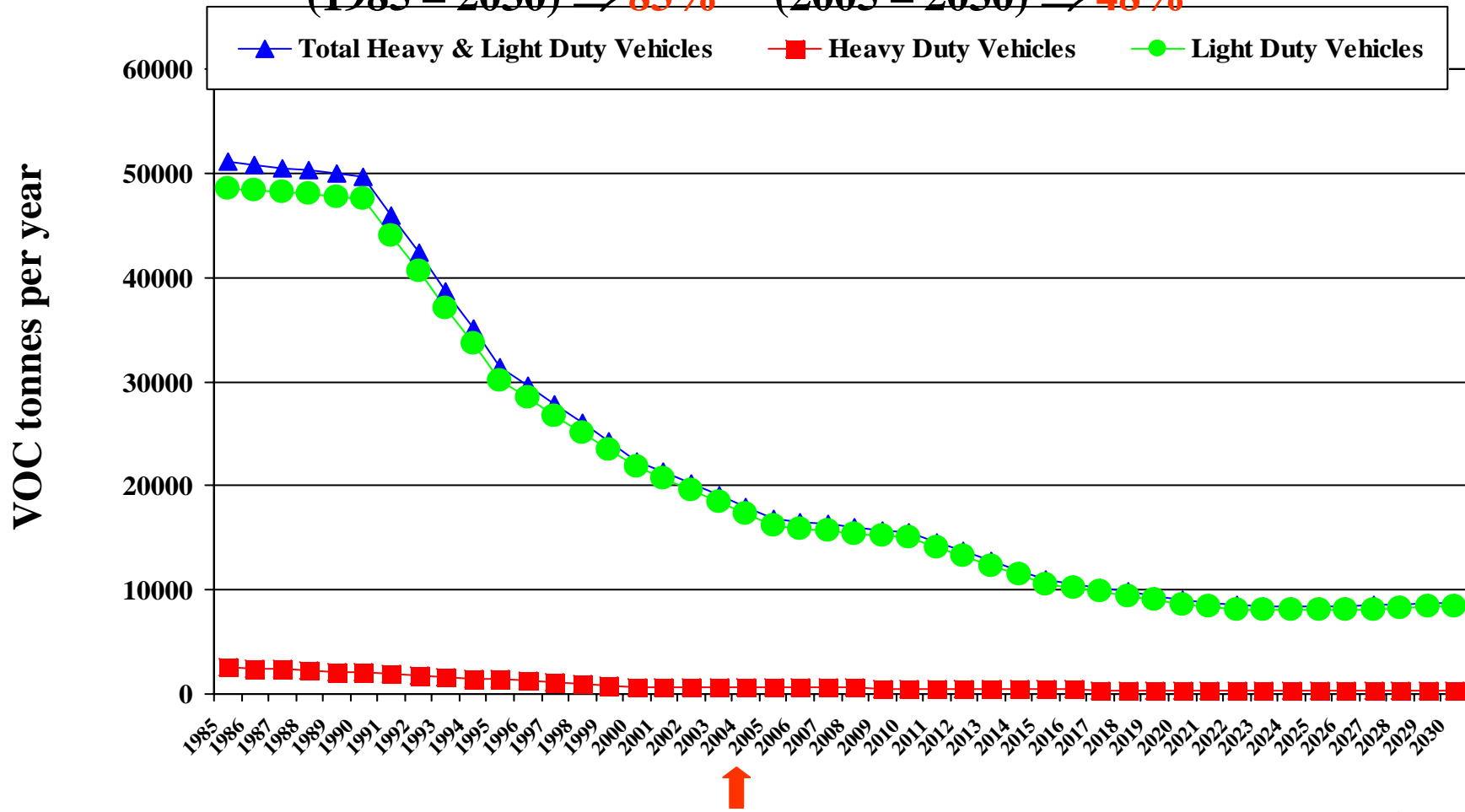
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Modeling results from CCME EPWG

VOC Emissions - Lower Fraser Valley

% Reduction:

(1985 - 2030) ⇒ **83%** (2005 - 2030) ⇒ **48%**



On-Road Vehicle Emission Inventories for 1985 - 2030

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Modeling results from CCME EPWG

CO Emissions - Lower Fraser Valley

% Reduction:

(1985 - 2030) \Rightarrow **64%** (2005 - 2030) \Rightarrow **0%**

