Board Hearing
Guidelines for Implementation
Proposition 1B: Goods Movement Emission Reduction Program
February 28, 2008 - Sacramento
Overview

• Statutory basics
• Program structure
  – Local agency projects
  – Equipment projects
• Program implementation
• Issues and recommendations
Goods Movement - Health Impacts

- Premature death
- Asthma and bronchitis
- Heart disease
- Increased cancer risk near facilities
  - Ports, rail yards, high truck traffic roads, distribution centers
Program Authority

• Proposition 1B in 2006
  – $1 billion to reduce freight emissions
  – Reductions not required by law or regulation
• Governor’s Executive Order S-02-07
• Implementing legislation
  – Senate Bill 88 and Assembly Bill 201
  – ARB to adopt Program Guidelines
  – First $250 million in FY2007-08 budget
Funding Flow

- Legislature
- ARB
- Local agency
- Equipment owner

potential for reversion
Basics

Trade Corridors

Central Valley
SJV Air Basin
+ Sac Region

LA/Inland Empire
South Coast Air Basin
+ Port Hueneme

San Diego/Border
San Diego + Imperial Counties

Bay Area
Projects Under SB 88

Reduce diesel PM, NOx, SOx, ROG

- Heavy diesel trucks
- Freight locomotives
- Commercial harbor craft
- Cargo equipment at ports and rail yards
- Shore power for cargo ships
- Truck stops/distribution centers
Funding Direction in SB 88

- Quickly reduce emissions and health risk in heavily impacted communities
- Projects compete within source category based on emission reductions
- Maximize non-State match $ and consider:

<table>
<thead>
<tr>
<th>Emission reductions</th>
<th>Cost-effectiveness</th>
<th>Achieve AQ stds, cut toxics</th>
<th>Greenhouse gas reductions</th>
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</thead>
<tbody>
<tr>
<td>Health benefits</td>
<td>Leveraging $</td>
<td>Regulatory/ SIP needs</td>
<td>Advanced technology</td>
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<tr>
<td>Category contribution</td>
<td>Reductions/ State $</td>
<td>Attainment status &amp; risk</td>
<td>Location w/high emissions</td>
</tr>
</tbody>
</table>
Public Process to Develop Program

• Sep 2007: Draft concepts paper
• Oct 2007: 5 workshops
• Nov-Dec 2007: Stakeholder consultations
• Jan 2008: Staff report, 5 workshops
• Feb 2008: Proposed Guidelines, 1 workshop
## January Staff Proposal Corridor Funding Targets

<table>
<thead>
<tr>
<th>Factors</th>
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<th>Bay Area</th>
<th>San Diego/Border</th>
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</thead>
<tbody>
<tr>
<td>Population (2007)</td>
<td>51</td>
<td>17</td>
<td>22</td>
<td>10</td>
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<tr>
<td>Freight emissions</td>
<td>45</td>
<td>26</td>
<td>20</td>
<td>9</td>
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<tr>
<td>SIP Needs</td>
<td>70</td>
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<td><strong>Average</strong></td>
<td><strong>55%</strong></td>
<td><strong>25%</strong></td>
<td><strong>14%</strong></td>
<td><strong>6%</strong></td>
</tr>
<tr>
<td>Recommendation</td>
<td><strong>$550M</strong></td>
<td><strong>$250M</strong></td>
<td><strong>$140M</strong></td>
<td><strong>$60M</strong></td>
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</tbody>
</table>
Proposed Category Funding Targets*

* Includes administrative funding
Equipment Project Options (FY2007-08 funds)

- Port/Rail Yard Trucks
- Other Trucks
- Locomotives
- Shore Power
- Harbor Craft
- Cargo Equipment
- Truck Stop Electrification
- Retrofit Repower Replacement
- 3-way truck transaction
- Switcher & Line-haul
- Grid & Non grid infrastructure
- Tugs/tows Other vessels
- Energy storage system
- Electric infrastructure
Specifications for Each Equipment Project Option  
(updated for every funding cycle)

- Eligibility of existing equipment
- Equipment upgrade specifications and deadlines for completion
- Funding caps and project life
- Operating conditions and tracking devices
- Inspection and scrappage requirements
- Recordkeeping and reporting
Match Funding

- Bond funding caps ~ 1/5 to 1/2 of total cost
- Match ratio ranges from 5:1 to 1:1
- Match funds = remaining $ from private or public sources to cover project costs
- Projects using less State dollars have competitive advantage

(State $ = bond plus discretionary Moyer funds)
Local Agency Projects

Other Trucks
- Equipment Project Options
  - Retrofit
  - Replacement

Harbor Craft
- Equipment Project Option
  - Tugs/tows
Local Agency Applications

• Show qualifications as a local agency and ability to run a regional scale program
• By source category, describe/demonstrate:
  – Project proposal and schedule
  – Capacity to administer project, including scope
  – Project implementation plan
  – Full project funding and administration funds
  – Emission reductions and cost-effectiveness
  – Public participation
Administration Funding Caps

- Percent of grant available to local agency:
  - 2% for grid-based shore power
  - 3% for non-grid shore power, locomotives, cargo cranes, truck stop electrification
  - 4% for harbor craft
  - 5% for trucks
- May use across categories, subject to caps
- None for ports/agencies able to impose fees on freight movement sources
Selecting Local Agency Projects

ARB Process

- List of applications being considered
- Competitively ranked project list
  - Emission reductions in California
  - Reductions/State $
- Public workshops
- Recommended funding levels
- Board hearing to adopt projects for funding
- Grant agreements with local agencies
Category: Other Trucks
Local agencies compete within each trade corridor

EXAMPLE
Deadlines

For FY 2007-08

• From grant agreement with ARB:
  – 18 mos to sign contracts with equipment owners
• Then project completion/final payment in:
  1 yr for cargo cranes
  18 mos for trucks
  2 yrs for locomotives, non-grid shore power
  3 yrs for truck stop electrification
  4 yrs for harbor craft, grid-based shore power
Selecting Equipment Projects

Local Agency Process

By funding category

• Solicit applications from equipment owners
• Competitively rank projects (like ARB process)
• Submit request for funds to ARB
• Award funds to top project and continue down the list until funds are exhausted (remainder of list may be backup projects)
• Conduct pre-inspections and sign contracts
Category: Port Trucks
Corridor: LA/Inland Empire
Local Agency: Ports of LA/Long Beach

EXAMPLE
Public Participation

• Input on local proposals
• For local agency and equipment projects:
  – Solicitations and list of applications on web
  – Competitively ranked projects on web
  – Project status information on web
• Input on ARB funding decisions
• Annual progress reports on web
• Annual community meetings in corridors
• Input on updates to Guidelines
Reducing Greenhouse Gases

- Considered in category funding targets
- More efficient power: shore power, truck stop electrification
- Fuel savings: locomotive, cargo cranes
- Local agencies to promote truck efficiency retrofits
Accountability

• Verification of eligibility
• Equipment inspections
• Enforceable legal agreements
• Ongoing project evaluations
• Periodic audits (including financial)
• Regular reporting requirements
Proposed Priorities for $250M in FY2007-08 Funds

- Eligible projects ready for quick implementation
- Truck retrofits to add diesel PM filters
- Truck replacements at the Ports of LA & Long Beach
## Early Grant Recommendations

<table>
<thead>
<tr>
<th>Funds</th>
<th>Air District</th>
<th>Equip. Project Options</th>
</tr>
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</table>
| $13.8M    | South Coast        | • Replace 130 port trucks  
                        | • Replace 130 other trucks                                 |
| $5.7M     | SJ Valley          | • Retrofit 450 trucks  
                        | • Replace 60 trucks                                         |
| $0.8M     | Sac Metro          | • Replace 15 trucks                                          |
| $3.4M     | Bay Area           | • Retrofit 75 port trucks  
                        | • Shore power at 2 berths                                   |
| $1.3M     | San Diego          | • Retrofit/replace port trucks  
                        | • Retrofit 115 Imperial trucks                             |
| $25.0M    |                    |                                                             |
$1 Billion Program Benefits

- About 7,800 tons of diesel PM emissions
- And 190,000 tons of NOx emissions
- SOx emissions through shore power
- 1.3 million tons of carbon dioxide
- Greatest benefits in communities near goods movement facilities
## Program Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>Feb 28</td>
<td>Board considers Guidelines, funding targets, and $25M in early grants</td>
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<tr>
<td>Mar</td>
<td>Notice of Funding availability issued</td>
</tr>
<tr>
<td>Mar/Apr</td>
<td>Local agency applications due</td>
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<tr>
<td>Apr/May</td>
<td>Public process on proposals</td>
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<tr>
<td>May 22</td>
<td>Board considers $225M in projects</td>
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<tr>
<td>May 22-Jun</td>
<td>Grant agreements signed</td>
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<tr>
<td>July +</td>
<td>Local agency implementation begins</td>
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## Implementation: Relationships

### Key ARB Requirements

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<th>Program Benefits</th>
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<td>Drayage Truck Rule</td>
<td>Early &amp; Extra</td>
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<td>Locomotive Agreements</td>
<td>Extra</td>
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<tr>
<td>Shore Power Rule</td>
<td>Early &amp; Extra</td>
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<tr>
<td>Commercial Harbor Craft Rule</td>
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<tr>
<td>Cargo Equipment Rule</td>
<td>Extra</td>
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<tr>
<td>Proposed Truck Rule</td>
<td>Early &amp; Extra</td>
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Carl Moyer Incentive Program

• Draft guideline proposals are complementary for similar equipment

• For a single equipment project
  – Cannot combine funds from both programs (except for discretionary Moyer funds)
  – Cannot apply for bond funds with an active Moyer application

• Equipment owners are encouraged to evaluate the best funding “fit” for projects
Key Stakeholder Issues

- Equipment project specifications
- 100% California operation
- Project funding caps and life
- Early grant for South Coast
- Fund reversion
- Trade corridor funding targets
## Impact of SIP Changes

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Equipment Project Specifications

• Other Heavy Duty Trucks
  – Expand eligibility for oldest trucks

• Locomotives
  – Include locomotive safety device

• Shore Power
  – Align with approved regulation

• Harbor Craft
  – Add pro-rated option
Minor Technical Clarifications

- Align equipment project application requirements
- Clarify equipment specifications
- Ensure internal consistency
Direct staff to

- Evaluate updates to Guidelines for each appropriation
- Develop recommendations for first update to Guidelines
  - Feasibility of loan programs
  - Continuation of 100% CA operation, including tracking devices
Recommendations

Staff recommends that the Board

- Adopt the proposed Guidelines, which include funding targets for trade corridors and categories
- Approve priorities for FY2007-08 funds
- Adopt the list of local agency projects for $25 million in early grants