

# Ports MOU Working Group Meeting #3



December 19, 2019

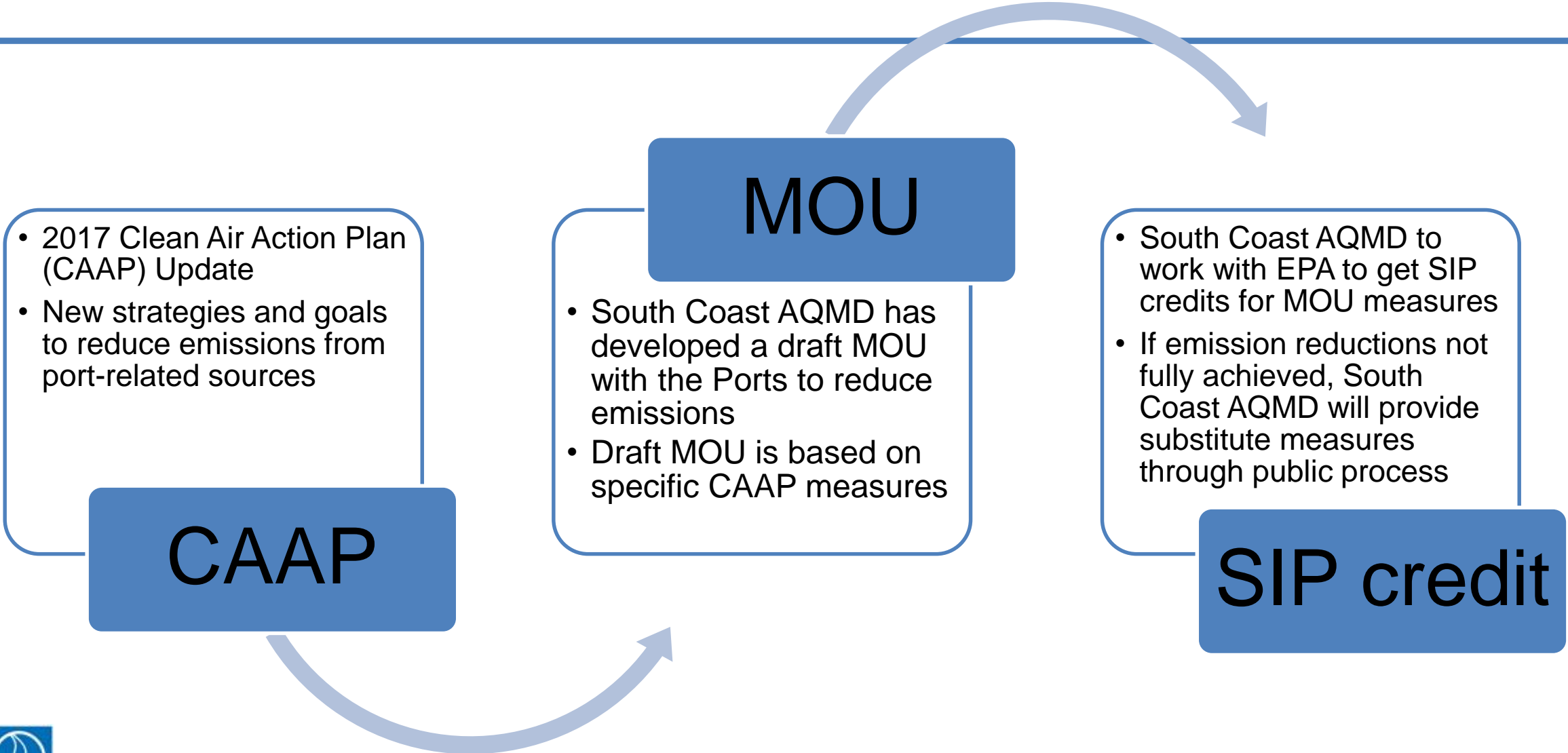


# Public process to develop Ports MOU

- Ports MOU Working Group meetings to date
  - Meeting #1 – March 6, 2019
  - Meeting #2 – July 24, 2019
  - Meeting #3 – December 19, 2019
- Ports MOU Technical Working Group meetings
  - South Coast AQMD, Ports of LA & LB, U.S. EPA, CARB, Coalition for Clean Air, Sierra Club, Pacific Merchant Shipping Association, California Trucking Association
  - Twenty (20) bi-weekly meetings since February 2019
- Several updates to South Coast AQMD Mobile Source Committee & Governing Board in 2019
- Ports MOU subject to approval by Both Ports Harbor Commissioners and South Coast AQMD Board



# SIP credit based on MOU measures





# Draft MOU

## Purpose

- Quantify SIP creditable emission reduction benefits based on implementation of specific 2017 CAAP Update measures in the MOU

## Term

- In effect until December 31, 2035; MOU Interim Assessment in 2023

## Structure

- General commitments by the Ports and South Coast AQMD
- Attached schedules with commitments on specific CAAP measures (e.g., milestones, performance targets, plans, reporting requirements)



# Draft MOU Schedules

## Schedule 1 - Drayage Trucks

- Implement Clean Trucks Program

## Schedule 2 - Cargo Handling Equipment (CHE)

- Accelerate ZE and NZE CHE deployment working with terminal operators with a 100% ZE CHE goal by 2030

## Schedule 3 - Ocean-Going Vessels (OGV)

- Reduce OGV emissions through new and enhanced incentive programs: Vessel Speed Reduction, Green Ship Incentives and Clean Ship Program

## Schedule 4 - Harbor Crafts

- Develop incentive program to upgrade harbor crafts with cleanest engines

## Schedule 5 - Locomotives

- Increase on-dock rail cargo moves to 35% and seek to utilize cleanest locomotives



# Draft MOU commitments

## Ports



- Implement and track CAAP measures specified in the MOU
- Submit annual reports to South Coast AQMD on implementation of CAAP measures in the MOU
  - Vehicle activity data
  - Data on truck replacements
- Seek grant funding and implement incentive programs

## South Coast AQMD



- Quantify SIP creditable emission reductions for CAAP measures in the MOU
- Provide federally enforceable commitments and report emission reduction benefits to U.S. EPA
- Establish metrics/milestones to track implementation progress
- Process to cover potential shortfall
- Provide public access and disclosure

# EPA's requirements for eligibility of emission reductions for SIP credit

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Integrity Elements

Federal  
Enforceability

Technical Support

Funding

Legal Authority

Public Disclosure  
and Tracking



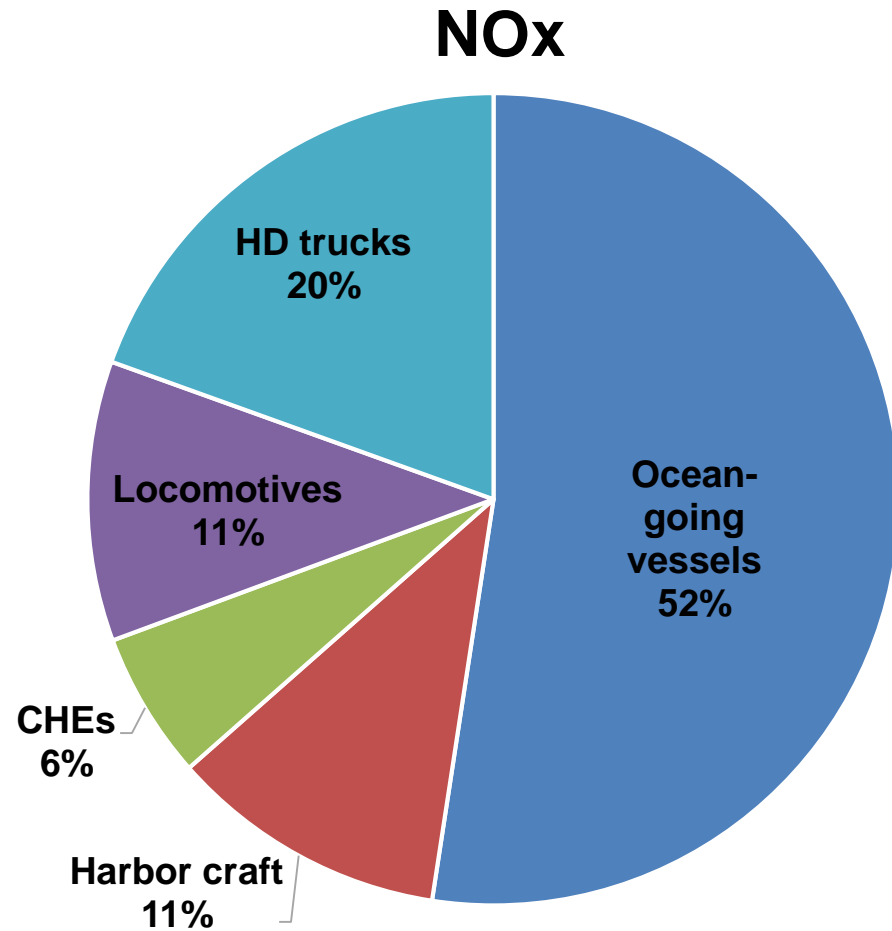
# Clean Trucks Program (CTP)

- Only CAAP measure in the MOU with specific performance target (i.e., \$/TEU)
- SIP creditable reductions in 2023 meeting EPA's integrity elements
  - Contracts for new trucks with enforceable requirements
  - Surplus reductions based on near-zero or zero-emission trucks
  - Quantifiable reductions based on established methodology
  - Scrappage or relocation out of CA for replacement trucks
- Revenues collected from the truck rate will be used to fund truck replacements
- SIP creditable emission reductions for 2031 for CTP (and other CAAP measures) to be calculated based on the proposed interim assessment in 2023

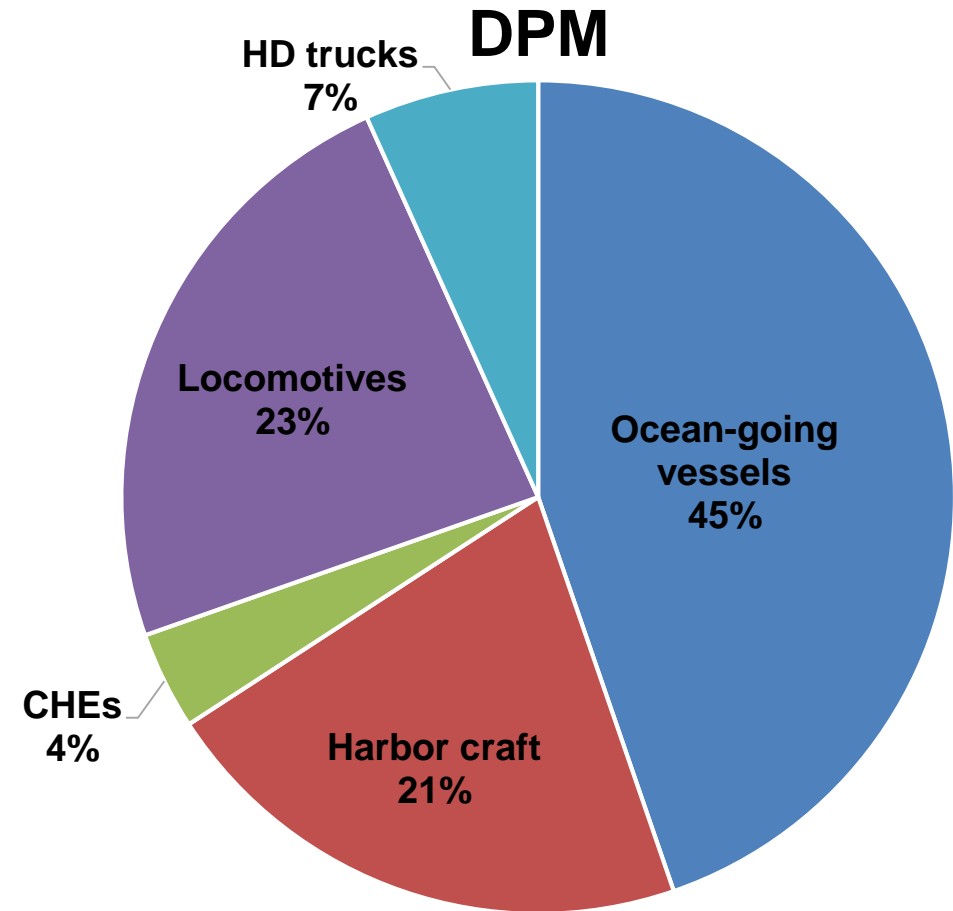




# 2018 Ports Emissions Inventory



Total NOx = 37 tons/day



Total DPM = 0.65 tons/day



# CTP emission reduction methodology

Containers

- Forecast loaded container TEUs based on 2018 statistics and projected container growth rate

Revenue

- Estimate annual revenues from the rate collected from trucks with loaded containers (per TEU basis)

Trucks

- Calculate number of clean trucks that can be funded based on projected annual revenues

Emissions

- Calculate emission reductions based on 2010 MY as baseline



# Preliminary CTP emissions reduction estimates

Container Growth Rate <sup>1</sup>	Incentive for NZE Trucks <sup>2</sup> (\$/truck)	Incentive for ZE Trucks <sup>2</sup> (\$/truck)	# of NZE Trucks Funded	# of ZE Trucks Funded	2023 NOx Reductions <sup>3</sup> (tpd)
Expected	50,000	100,000	3,546	41	3.94
	100,000	200,000	1,886	23	2.10
Low Growth	50,000	100,000	3,511	40	3.90
	100,000	200,000	1,868	23	2.08

- 1. Based on 2016 Mercator Report’s growth rates - Expected Base and Low Growth Base scenarios
- 2. Assuming \$10 per TEU; 95% of annual revenues to be used to fund NZE and 5% for ZE trucks, in 2021-2022
- 3. 2010 MY used as baseline model year to calculate emission reductions

# South Coast AQMD's Enforceable Commitment

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- Commit to achieve projected NO<sub>x</sub> reductions in 2023
- Monitor implementation of the CAAP measures in the MOU based on annual reports submitted by the Ports
- Report to EPA on implementation of SIP creditable CAAP measures and actual emission reductions achieved
- Make annual reports and relevant data publicly available
- Adopt and submit substitute measures to EPA in the event of any shortfall through public process





# Next steps

Milestone	Date
<b>Preliminary Draft Staff Report and Notice of Public Consultation Meeting</b>	<b>12/20/2019</b>
<b>Public Consultation Meeting</b>	<b>1/14/2020</b>
<b>Public Comments Due Date</b>	<b>1/23/2020</b>
Mobile Source Committee Meeting	1/24/2019
Ports MOU Working Group Meeting #4	2/12/2020
Mobile Source Committee Meeting	2/21/2020
POLA Board MOU Adoption	February 2020
POLB Board MOU Adoption	February 2020
<b>AQMD Board Hearing for Adoption of MOU and Enforceable Commitment</b>	<b>3/6/2020</b>

