

Greenhouse Gas Thresholds Update

Paul Philley, Program Supervisor Karen Huss, Air Quality Planner/Analyst December 9, 2019



Topics Today

- Welcome & safety
- Current thresholds & need for update
- Strategy for new thresholds
- Thresholds development details
- Best management practices
- Climate Action Plans and beyond 2030
- Discussion
- Next steps

Welcome & Safety

Please sign-in

Coffee & Water in breakroom

 Soda and bottle water for sale in charity fridge

Bathroom off of lobby

• More in Southwest corner of building

Evacuation Route \rightarrow



Current Thresholds

- Regional effort to develop
- Sac Metro Board adopted in 2014
 - Construction 1,100 metric tons/year
 - Operational land use 1,100 metric tons/year (21.7% mitigation from BAU)
 - Operational stationary source 10,000 metric tons/year

Goal: capture 90% of emissions, review for mitigation



Need for Update

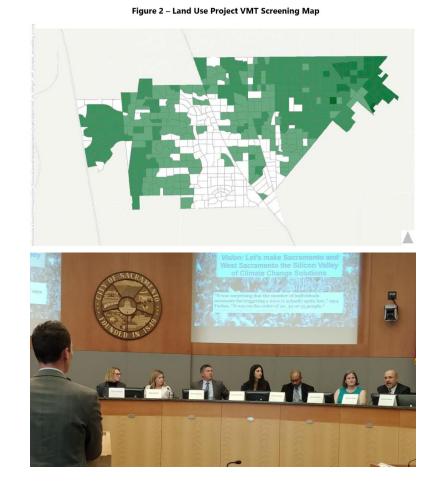
- Newhall: 21.7% mitigation from BAU removed January 2016
- SB 32: 2030 GHG reduction target codified September 2016
- Scoping Plan: December 2017 update
- Golden Door: Threshold adoption, local data, project type

CEQA practitioners warn about using thresholds developed to meet AB32 goals



Overall Principles for Update

- Ensure Thresholds are defensible
 - local data, support statewide goals, sectors, new v. existing
- Align with other planning efforts
 - SB 743, Mayors' Climate
 Commission
- Exempt small projects
 - 1,100 mt/yr with BMPs
- Allow flexibility





New Threshold Strategy

- 1. Determine Sacramento County share of 2030 statewide GHG emissions by sector consistent with CARB Scoping Plan
- 2. Divide emission by existing development vs. new development
- 3. Allocate new development 2030 GHG emissions among land uses and place types to set numeric thresholds
- 4. Set best management practices by land use and place types that achieve numeric thresholds

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2030 Inventory Consistent with Scoping Plan

Table 1. Localized Greenhouse Gas Emissions by Sector, 2030						
	Statewide (MT CO2e)ª	Sacramento County 2030 Emissions for Residential & Commercial Development Consistent with Scoping Plan ^b				
Sector	Updated Scoping Plan	% of Statewide	Emissions (MT CO2e)			
Agriculture	23,854,810	N/A	N/A			
Residential and Commercial	38,078,729	1.4%	548,714			
Electric Power	53,014,776	3.4%	1,817,830			
High GWP	10,655,327	0.7%	70,523			
Industrial	82,560,459	N/A	N/A			
Recycling and Waste	9,167,237	2.1%	195,538			
Transportation (Incl. TCU)	103,055,723	3.9%	3,967,853			
Total	320,387,064	N/A	6,600,457			

TARGET SET







Sectors: Gas, Electricity, Waste MANAGE

Natural gas – existing development use exceeds 2030 target, leaving no gas use left for new developments

Sacramento County	2015 use (million therms) ³	163	
	2015 Emissions (MT CO ₂ e) ⁴	1,109,800	
	2030 BAU Emissions (MT CO ₂ e) ⁵	1,366,818	
	2030 Sector Target (MT CO ₂ e)	548,714	
	2030 Remaining for New Development ⁶	0	

Electricity – new developments achieve fair share reductions through regulatory compliance (Title 24, Parts 6 and 11)

Waste - new developments achieve fair share reductions through regulatory compliance (Calrecycle)



Sector: Mobile

Mobile – SB743 compliance: 15% reduction in per capita VMT, 15% reduction in worker (office) VMT, and no net VMT increase for retail

See next slide for de minimis VMT

Table 2. VMT per Capita fo	2016 VMT per Capita	VMT per Capita to Shown Consistency with Target				
Туре	(miles/capita)ª	% Reduction	(miles/capita)			
Residential	15.9	15%	13.5			
Worker	17.2	15%	14.6			
Notes: a Data provided by SACOG as used in the 2020 MTP/SCS. Abbreviations: MTP/SCS – Metropolitan Transportation Plan/Sustainable Communities Strategy VMT – vehicle miles traveled						



De Minimis VMT

Guidance for de minimis VMT - generally follows OPR

- Small projects that generate/attract <110 trips per day
- Residential & office projects in areas with low/below threshold VMT incorporating features like density, mix of uses, transit accessibility, including infill affordable housing
- Residential, retail, office, or mixed-use projects within ½ mile walking distance of an existing major transit stop or existing stop along a high-quality transit corridor. Primary use cannot be auto-oriented.



Sector: High GWP Gases

High GWP gases – new developments achieve their fair share of reductions through regulatory compliance.

However, if low-GWP refrigeration substitutes become available prior to their regulatory requirement, new developments would be expected to use these substitutes.

Feedback needed



Best Management Practices

Tier 1 for all new projects

- BMP 1: No natural gas (or mitigate emissions from using gas)
- BMP 2: EV Ready (CalGreen Tier 2, except all uses listed as EV "Capable" must be EV "Ready")
- ✓ Projects emitting less than 1,100 MT GHG/year and implementing BMPs 1&2 do not have further obligations
- ✓ Projects meeting de minimis VMT and implementing BMPs 1&2 do not have further obligations



Best Management Practices

Tier 2 for large or inefficient projects

- BMP 3: 15% reduction per capita VMT, 15% reduction per worker VMT, no net increase in retail VMT
- BMP 4: Use natural refrigerants (low GWP) where available and feasible for refrigeration and air conditioning, complying with SB1013. Natural refrigerants include ammonia, CO2, or hydrocarbons
 Feedback needed



Reducing VMT

• Locate in a low VMT area

Adopt Sac Metro Land Use reduction measures

• Promote electric bicycle or other micro-mobility options

• VMT reduction fund



Best Management Practices

- If a project cannot incorporate the BMPs
 - Obtain other equivalent reductions
 - Pay into a GHG mitigation fund



Quantification

Only Tier 2 projects need quantified unless a Tier 1 project doesn't include the BMPs

Use CalEEMod

- Model with natural gas and without
- Add increased electricity due to no natural gas
- Apply adjustment factor to calculate VMT (look up maps)
- Adjust other sectors as needed if project exceeds statutes

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Quantification Residential VMT



2012 data being used as an example only.



Applying the Thresholds

Thresholds do not apply if project is:

- ✓ CEQA Exempt
- ✓ Consistent with adopted/qualified CAP [§15183.5(b)]

If thresholds apply:

- ✓ Implement applicable BMPs
- ✓ Conduct analysis as needed
- ✓ Commit to mitigation measures and/or conditions of approval



Climate Action Plans Status

- City of Sacramento
- Elk Grove
- Folsom
- Galt
- Citrus Heights
- County of Sacramento
- Isleton, Rancho Cordova

Climate Action Plans in Sacramento Region by Jurisdiction							
Jurisdiction Information			Status		Targets (baseline year)		
Name	Туре	Link	Status	Date adopted	2020	2035	2050
City of Sacramento	CAP	Link	Adopted	2012	15% (2005)	49% (2005)	83% (2005)
Elk Grove	САР	Link	Adopted	2019	7.6 MT CO2e/capita (2013)	4.1 MT CO2e/capita by 2030 (2013)	1.4 MT CO2e/capita (2013)
Citrus Heights	GHG Reduction Plan	Link	Adopted	2011	10-15% (2005)		
County of Sacramento	CAP	Link	Adopted	2012	15% (2005)		
Galt	-		Planned				
Folsom	GHG Reduction Stragey	Link	Adopted	2018	2.4% (2014)	4.6 MT CO2e/capita (2014)	2.0 MT CO2e/capita (2014)

Beyond 2030 Thresholds

2045 statewide carbon neutrality goal consistency (action)

- Eliminate natural gas or require all pre-wiring necessary for a future retrofit to all-electric
- Provide electrical capacity so 100% of vehicles can be zeroemission

Do not impede 2045 statewide carbon neutrality goal (qualitative)



Questions & Feedback





- Documentation posted on <u>www.airquality.org</u>
- Comments due January 17, 2020
 - Send to pphilley@airquality.org and khuss@airquality.org
- Board meeting schedule
 - Information item February 27, 2020
 - Action item March 26, 2020



Thank you