

H-GAC Clean Vehicles Program Project Scope of Work
Congestion Mitigation / Air Quality (CMAQ) Improvement Funds Attachment

Funding Source

CMAQ funds come from the Federal Highway Administration (FHWA), and are passed through the Texas Department of Transportation (TxDOT) before coming to H-GAC. Ultimate oversight of these funds resides with TxDOT.

A direct cost fee will be assessed to projects supported with CMAQ funds. The fee is calculated as a percentage of the size of the grant amount, and is used to cover the cost of TxDOT oversight. The fee is required to be paid in full prior to grant reimbursement. See Section 1 - "Compensation" of the Special Provisions for more information.

Funding Attribute Definitions

Funding attributes reflect requirements that any funded vehicle, equipment, or infrastructure facility must meet in order to qualify for a particular funding type (i.e. CMAQ, SEP, etc.). Attributes are defined as follows:

Minimum Usage: The minimum level of usage which must be achieved by current and future vehicles, equipment, or infrastructure in order to be eligible for funding. For vehicles/equipment undergoing a tiered analysis, the collective average annual usage of the group as a whole must meet this requirement; however, individual vehicles/equipment included in the tiered analysis are not subject to this restriction.

Emission Calc. Methodology: This specifies which procedures listed in Technical Supplement #1 will be utilized to determine the projected and actual emission reductions achieved as a result of a CVP project. It also specifies whether or not a tiered analysis can be performed for that particular funding type and CFA.

Eligible Areas: This lists any restrictions on where the applicant is located and/or where the vehicles, equipment, or infrastructure are in/will be in operation.

Project Life: Describes the period over which emission reductions will be credited and monitoring will be required.

Required Certifications/Standards: Describes any certifications, verifications, minimum standards, or other external criteria which is required for a given vehicle, equipment, or infrastructure project.

Eligible Applicants: Specifies any limitations on who may apply for and receive the funding. For example, if "school districts" is listed, only school districts may apply for or receive the funding.

Eligible Vehicles/Equipment: Specifies any additional restrictions on the type of vehicles, equipment, or infrastructure that may be funded beyond those listed for the applicable CFA. These additional restrictions may include vehicle weights, engine horsepower, or specific applications/sectors.

Eligible Fuels: Describes any restrictions on the types of fuels that may be considered for the project. For example, “Qualifying alternative fuel” means that only those projects involving the deployment of an alternative fuel in accordance with the CVP definition (See Section 1.1) may be considered for funding.

Match Requirements & Restrictions: Any CVP project may receive a *total grant package* that covers up to 75-100% of the eligible project costs (depending on entity type; see Section 2.0 for more information), assuming that the project meets the applicable cost-effectiveness criteria. However, *individual funding type(s)* contained within the total grant package may have matching requirements and restrictions describing how the funds should or should not be utilized in combination with other funding types.

Destruction: Specifies what vehicle, equipment, or infrastructure component(s) must be destroyed as part of a replacement project.

Diesel-Based Cost-Effectiveness: Per the definitions listed in Section 1.1 of the Clean Vehicles Program Guidelines, this specifies the target cost-effectiveness factor for diesel-based vehicle and equipment project, broken out by the technological level of the project.

Gasoline-Based Cost-Effectiveness: Per the definitions listed in Section 1.1 of the Clean Vehicles Program Guidelines, this specifies the target cost-effectiveness factor for gasoline-based vehicle and equipment project, broken out by the technological level of the project.

Funding Attribute Matrix for CMAQ Funds

Table 1a for Clean Autos CFAs

Attribute	Light-Duty	Heavy-Duty
Min. Usage of Eligible Vehicles	Must be in current use (>500 miles/year)	Must be in current use (>500 miles/year)
Emission Calc. Method	Traditional Analysis; Tiered Analysis	Traditional Analysis; Tiered Analysis
Eligible Areas	HGB Region	HGB Region
Project Life	3 years	3 years
Required Certifications/ Standards	<u>Retrofits:</u> EPA/CARB-certified <u>EPA Replacement:</u> Tier 2 std., Bin 3 min. <u>CARB Replacement:</u> LEV II std, ULEV II min.	<u>Retrofits:</u> EPA/CARB-certified <u>EPA/CARB Replacements:</u> 0.2 g/bhp-hr NOx or better
Eligible Applicants	Any qualifying organization	Any qualifying organization
Eligible Vehicles	Any qualifying vehicle	Any qualifying vehicle
Eligible Fuels	Any qualifying fuels	Any qualifying fuels
Match Requirements & Restrictions	Minimum 25% Match Required Federal funds cannot match CMAQ funds	Minimum 25% Match Required Federal funds cannot match CMAQ funds

Attribute	Light-Duty	Heavy-Duty
	CMAQ grant capped at \$3 million/year for any entity	CMAQ grant capped at \$3 million/year for any entity
Destruction Requirements	Engine & Chassis	Engine & Chassis
Diesel-Based Cost-Effectiveness	<u>Traditional</u> : \$15,000 ton NOx <u>Innovative</u> : \$35,000 ton NOx	<u>Traditional</u> : \$15,000 ton NOx <u>Innovative</u> : \$35,000 ton NOx
Gasoline-Based Cost-Effectiveness	<u>Traditional</u> : \$15,000 ton NOx <u>Innovative</u> : \$35,000 ton NOx	<u>Traditional</u> : \$15,000 ton NOx <u>Innovative</u> : \$35,000 ton NOx

Table 1b for Clean Machines CFAs

Clean Machine projects are not eligible to receive CMAQ funds.

Table 1c for Clean Technologies CFAs

Attribute	Refueling Station	Vehicle/Equipment Demonstrations	Idle Reduction Infrastructure
Min. Usage of Eligible Vehicles/Equipment	<u>Publicly Accessible</u> : 10,000 GGE/year ¹ <u>Restricted Access</u> : 100,000 GGE/year ²	The Demonstrations CFA is not eligible for CMAQ funds	50,000 hours/year
Emission Calc. Method	Traditional Analysis		Traditional Analysis
Eligible Geographic Areas	HGB Region		HGB Region
Project Life	10 years		10 years
Required Certifications/	Fulfillment of all applicable Federal, State, & Local laws; Fulfillment of all		Fulfillment of all applicable Federal, State, & Local laws; Fulfillment of all

¹ Stations funded under this CFA must sell a minimum of 10,000 gasoline gallons equivalent (Gasoline gallon equivalent conversions can be found here: http://www.nafa.org/Content/NavigationMenu/Resource_Center/Alternative_Fuels/Energy_Equivalents/Energy_Equivalents.htm) per year per alternative fuel/technology included in the application, averaged over the minimum 5-year operational term of the project. For example, if a station is constructed that will sell E85 and B20, the average sales volume for EACH of these fuels over the first five years must be 10,000 gasoline gallons equivalent per year. Reductions in the blend percentages sold (i.e. going from B20 to B5) must be compensated with an increase in sales volume, such that the petroleum displacement level assumed during the application analysis is maintained.

² Stations funded under this CFA that are not open to the public must consume a minimum of 100,000 gasoline gallons equivalent per year per alternative fuel/technology included in the application, averaged over the life of the project. Averaging is performed in the same manner as for publicly accessible stations.

Attribute	Refueling Station	Vehicle/Equipment Demonstrations	Idle Reduction Infrastructure
Standards	applicable industry standards (i.e. ASTM)		applicable industry standards (i.e. ASTM)
Eligible Applicants	Any qualifying organization		Any qualifying organization
Eligible Vehicles/Equipment	May serve any qualifying vehicle/equipment type		May serve any qualifying vehicle/equipment type
Eligible Fuels	Any qualifying alternative fuel		Any qualifying fuel
Match Requirements & Restrictions	25% Match Required Ineligible project costs (see Table 2) cannot be used as match Federal funds cannot match CMAQ CMAQ grant capped at \$3 million/year for any entity		25% Match Required Ineligible project costs (see Table 2) cannot be used as match Federal funds cannot match CMAQ CMAQ grant capped at \$3 million/year for any entity
Destruction Requirements	N/A		N/A
Diesel-Based Cost-Effectiveness	<u>Traditional:</u> \$15,000 ton NOx <u>Innovative:</u> \$35,000 ton NOx		<u>Traditional:</u> \$15,000 ton NOx <u>Innovative:</u> \$35,000 ton NOx
Gasoline-Based Cost-Effectiveness	N/A		N/A

Table 2 for Eligible Project Costs

Project Cost	Eligibility
The cost of a new vehicle/piece of equipment	Eligible
The cost of a new engine	Eligible
The cost of a new retrofit	Eligible
The cost of an alternative fuel conversion kit or other equipment	Eligible
The cost of purchasing an ancillary retrofit system (i.e. filter cleaning equipment)	Eligible
The cost of purchasing/installing alternative fuel/advanced technology system components (i.e. pumps, tanks, etc.)	Eligible
Registration Fee (up to \$500) for one Alt. Fuel/Advanced Tech. Training Course ³	Ineligible

³ Applicants may elect to send 1 representative to one alternative fuel/advanced vehicle technologies management or maintenance course ONLY if the implementation of the project will result in a first-time introduction of that alternative fuel/advanced vehicle technology to the organization within this region.

Project Cost	Eligibility
The cost of verifying or certifying new technologies (associated with Demonstration & Pilot Project PFA)	Ineligible
The cost of fuel	Ineligible
The costs associated with recurring maintenance items/service (i.e. filters, tank cleaning, etc.)	Ineligible
The cost of performing market research, site assessments, or other studies	Ineligible
The cost of obtaining permits or complying with other ordinances or legal obligations	Ineligible
The cost of overhead and/or administrative costs	Ineligible