



# **Texas Emissions Reduction Plan (TERP)**

Texas Commission on Environmental Quality



## What is the TERP?

- ◆ TERP was created in 2001 by SB 5
- ◆ Amended in 2003 by HB 1365
- ◆ Voluntary incentives for projects to reduce emissions of nitrogen oxides (NO<sub>x</sub>) in the nonattainment and near-nonattainment areas of Texas



# Funding

based on new HB 1365

- ◆ Average of about \$130 million per fiscal year through 2008
- ◆ Statewide 2% surcharge on the retail sale, lease or rental of new or used off-road heavy-duty equipment (agricultural exempted)
- ◆ Statewide 2% surcharge on the storage, use or other consumption of new or used off-road heavy-duty equipment (agricultural exempted)



# Funding

based on new HB 1365

- ◆ Statewide 2.5% surcharge on every retail sale, lease, or use of every on-road diesel motor vehicle over 14,000 pounds
- ◆ Statewide 10% surcharge on the registration of a truck-tractors and/or semi-trailers
- ◆ Statewide \$225 on the inspection required before registration of truck-tractors and/or semi-trailers



# Two Main Programs

- ◆ Emissions Reduction Incentive Grants
- ◆ New Technology Research & Development Program



# New Technology Research & Development Program

- ◆ Grants for research, development, testing, certification, and demonstration of new technologies
- ◆ \$10 - \$15 million per fiscal year



# **Emissions Reduction Incentive Grants**



# Counties Eligible for Grant Funding

Bastrop, Bexar, Brazoria, Caldwell, Chambers, Collin, Comal, Dallas, Denton, Ellis, El Paso, Fort Bend, Galveston, Gregg, Guadalupe, Hardin, Harris, Harrison, Hays, Jefferson, Johnson, Kaufman, Liberty, Montgomery, Nueces, Orange, Parker, Rockwall, Rusk, San Patricio, Smith, Tarrant, Travis, Upshur, Victoria, Waller, Williamson, Wilson

*Counties added by HB 1365 include: **Henderson, Hood, Hunt.***





# Incremental Costs

- ◆ Grant programs pay for the incremental cost of cleaner equipment
- ◆ Example:
  - The cost to purchase a diesel excavator is \$200,000
  - The cost to purchase an excavator with a reduced-emission engine is \$215,000.
  - TERP might pay \$15,000 towards the purchase of the cleaner equipment



# Eligible Projects

- ◆ New Purchases and Leases
- ◆ Repowers of existing vehicles and equipment
- ◆ Retrofit and Add-On of devices to vehicles and equipment
- ◆ Replacement of old vehicles and equipment with new or newer models
- ◆ Infrastructure for qualifying fuel
- ◆ On-site electrification and idle reduction infrastructure
- ◆ On-vehicle electrification and idle reduction infrastructure
- ◆ Incremental costs for qualifying fuel purchases
- ◆ Demonstration Projects (not currently being accepted)
  
- ◆ All projects, except demonstration and infrastructure projects, must meet a cost effectiveness threshold of \$13,000 per ton of NOx reduced.



# New Purchase or Lease

- ◆ Non-road equipment limited to 25 hp or greater
- ◆ On-road vehicles with GVWR of 8,500 lb and greater
- ◆ Limited to equipment which is self propelled and/or capable of being moved
- ◆ Recreational and competitive equipment excluded
- ◆ Will cover the incremental cost between the baseline and the cleaner equipment cost
- ◆ Will cover cleaner equipment regardless of the fuel type
- ◆ Equipment must operate 75% of the time in an affected county
- ◆ Must be 25% cleaner for NO<sub>x</sub> than current year's standard
- ◆ Must not exceed \$13,000/ton of NO<sub>x</sub> reduced



# Repower of Existing On-Road and Non-Road Equipment

- ◆ Repowers with engines that are at least 25% cleaner than the engine being replaced.
- ◆ Old engine must be scrapped. TCEQ will consider trade-in arrangements, if the dealer can convince us that the engine will be removed from Texas and not returned.
- ◆ Must meet \$13,000 per ton cost effectiveness threshold.



## Retrofit or Add-On

- ◆ At the time of rebuild, retrofitting the engine with a “kit” that will allow it to achieve a 25% reduction from where the engine was originally certified
- ◆ Adding on equipment to an existing engine which allow it to achieve a 25% reduction from where the engine was originally certified
- ◆ Must meet the \$13,000/ton threshold



# New Project Category “Replacement”

- ◆ Replace old vehicle or equipment with new or newer vehicles or equipment.
- ◆ New vehicle or equipment must be 25% cleaner for NOx than the old vehicle or equipment.
- ◆ Old vehicle or equipment must be scrapped. TCEQ will consider trade-in arrangements, if the dealer can convince us that the vehicle/equipment and engine will be removed from Texas and not returned.
- ◆ Incentive amount based on cost effectiveness, not to exceed cost of replacement vehicle or equipment, minus scrappage value.



# New Equipment Category “Stationary Equipment”

- ◆ Stationary equipment with engines 25 hp or greater.
- ◆ Projects may include: lease/purchase; replacement; repower; retrofit/add-on; infrastructure; and qualifying fuel.
- ◆ Many stationary engines are already covered by a rule or permit requirement imposing standards on emissions. Agricultural equipment is exempted from most of these standards. The eligibility of other types of equipment will need to be considered on a case-by-case basis.



# Infrastructure Projects

- ◆ Will pay for the costs of on-site refueling stations for qualifying fuel
- ◆ Will pay for the costs of on-site electrification (charging stations) and idle reduction infrastructure
- ◆ Will pay for the costs of on-vehicle infrastructure projects to reduce propulsion engine emissions (idle emissions)
- ◆ No longer must meet the \$13,000/ton threshold





# Qualifying Fuels Projects

- ◆ Will pay for the incremental cost difference between a conventional fuel and a qualifying fuel
- ◆ Contracts limited to 2 ½ years due to state fiscal policies, but there's no limit on applying for future grants
- ◆ Must meet the \$13,000/ton threshold



# Demonstration Projects

- ◆ Projects for demonstrating practical low emission re-power, retrofit and other advanced technologies for on-road heavy-duty vehicles and off road equipment
- ◆ May include use of qualifying fuels for new engines and vehicles which have the potential to produce very low NOx emissions
- ◆ Will pay for most costs associated with the project limited to a case by case determination



# New Grant Mechanism “Small Business” Grants

- ◆ Small businesses are defined as an entity that owns only two vehicles or equipment, one of which is either a pre-1994 vehicle or non-road equipment with an uncontrolled engine.
- ◆ Initially, limited to repower and replacement grants for the eligible vehicles or equipment.
- ◆ First-come-first-served processing.



# Technologies funded to date

Some of the technologies funded to date, and which may be considered in the future, include:

- ◆ New purchases of equipment with engines cleaner than current standards
- ◆ Repower with cleaner new or remanufactured engines
- ◆ Retrofit to alternative fuel operation
- ◆ Retrofit with EGR system + Particulate Filter
- ◆ Retrofit with SCR system
- ◆ Use of Emulsified Diesel
- ◆ Use of Texas Low Emission Diesel



# TCEQ Contact Information

Web Site

<http://www.terpgrants.org>

For detailed information about the grants program, contact:

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