U.S. DEPARTMENT OF ENERGY | Energy Efficiency & Renewable Energy

VEHICLE TECHNOLOGIES PROGRAM

Alternative Compliance Tutorial

Module 4: Assembling a Waiver Request

April 2008

Prepared by the National Renewable Energy Laboratory (NREL), a national laboratory of the U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy; NREL is operated by the Alliance for Sustainable Energy, LLC.

Alternative Compliance Tutorial

Module 4

Assembling a Waiver Request

Alternative Compliance Tutorial

There are five modules in this training package:

- Module 1: Alternative Compliance Overview
- Module 2: Submitting an Intent to Apply for a Waiver
- Module 3: Maintaining Your Alternative Compliance Vehicle Inventory
- Module 4: Assembling a Waiver Request
- Module 5: Completing an Annual Report

You are starting Module 4. When you are finished, please proceed to the next module for additional instructions on how to participate in the Alternative Compliance option.

Module 4: Assembling a Waiver Request

In this module, you will learn about the components required in an Alternative Compliance waiver request. This section answers the following questions:

- What is a waiver request?
- What is an Alternative Compliance vehicle (ACV)?
- How do I calculate my fleet's petroleum reduction requirement?
- How do I make a plan for achieving my fleet's petroleum reduction requirement?
- How do I use the Alternative Compliance Planning Tool?
- What are my options if my fleet isn't granted a waiver?
- When is the waiver request due?

What is a waiver request?

The waiver request serves as an application to participate in the Alternative Compliance option. The waiver request must be applicable to your entire fleet for the full model year and include:

- Your fleet's Alternative Compliance Vehicle (ACV) inventory
- The calculated total petroleum reduction requirement, which is the ACV inventory multiplied by the average per vehicle fuel use in your fleet's light-duty vehicles (LDVs)
- A detailed plan of the measures the fleet intends to take to reduce petroleum consumption. Measures include:
  - Alternative fuels
  - Hybrid electric vehicles (HEVs)
  - Biodiesel blends
  - Fuel economy improvement
  - Vehicle miles traveled (VMT) reduction
  - Truck stop electrification
  - Idling time reduction
  - Onboard idle reduction
- Certification by a senior official that your fleet is in compliance with all applicable vehicle emission standards

➔ *For more information, see p. 4 of the Guidance and Module 3: Maintaining Your Alternative Compliance Vehicle Inventory.*

How do I calculate my fleet's petroleum reduction requirement?

Step 1: Calculate the Petroleum Reduction Requirement

Once the total number of vehicles in your ACV inventory is determined, multiply this number by the average per vehicle fuel use, in gasoline gallon equivalents (GGE), in your fleet LDVs.

Petroleum Reduction Requirement =
ACV inventory x Average fuel use per covered fleet LDV

For average LDV fuel-use data, the U.S. Department of Energy (DOE) will accept:

- Fuel-use data collected from covered LDVs (preferred)
- Estimates based on actual mileage data and fuel economy values published on *www.fueleconomy.gov*
- General fleet or industry statistics supplemented with statistical sampling of the fleet

→ *For more information, see p. 5 of the Guidance.*

How do I calculate my fleet's petroleum reduction requirement?

After an average-fuel-use-per-LDV value is developed for your fleet's first year of Alternative Compliance, this value is used to calculate your requirement in all subsequent years. The following timeline shows how a fleet will determine its petroleum reduction over a five-year period.

Example for an Alternative Fuel Provider Fleet

YEAR 1

- 25 pre-waiver required AFVs in the fleet previously reported to DOE in an annual report (DOE/FCVT/101) and still in the fleet
- 9 requirements (90% of 10 planned LDV acquisitions)*
- ACV inventory: 34 (25 + 9 = 34)
- Average annual fuel use per LDV: 500 GGE
- Petroleum reduction requirement amount: 17,000 GGE (500 GGE x 34 vehicles)

YEAR 2

- 15 pre-waiver required AFVs remaining in the fleet (10 were retired and no longer included)
- 9 requirements (90% of 10 planned LDV acquisitions for Year 2)*
- 9 requirements in the first year
- ACV inventory: 33 (15 + 9 + 9 = 33)
- Average annual fuel use per LDV: 500 GGE
- Petroleum reduction requirement amount: 16,500 GGE (500 GGE x 33 AFVs)

* Identifying data on LDVs representing requirements acquired during a waiver year should be reported in the ACV inventory.

Years 3 through 5 on next slide.

How do I calculate my fleet's petroleum reduction requirement?

YEAR 3

- 5 pre-waiver required AFVs in the fleet (10 more were retired from the previous year)
- 9 requirements (90% of planned 10 LDV acquisitions in Year 3)*
- 18 requirements from previous two Alternative Compliance years (9 from first year plus 9 from second year)
- ACV inventory: 32 (5 + 9 + 9 + 9 = 32)
- Average annual fuel use per LDV: 500 GGE
- Petroleum reduction requirement amount: 16,000 GGE (500 GGE x 32 AFVs)

YEAR 4

- 0 pre-waiver required AFVs in the fleet (remaining 5 were retired)
- 9 requirements (90% of 10 planned LDV acquisitions in Year 4)*
- 27 requirements from previous three Alternative Compliance years (9 each from Years 1, 2, and 3)
- ACV inventory: 36 (9 + 9 + 9 + 9 = 36)
- Average annual alternative fuel use per AFV: 500 GGE
- Petroleum reduction requirement amount: 18,000 GGE (500 GGE x 36 AFVs)

YEAR 5

- 0 pre-waiver required AFVs
- 9 requirements (90% of 10 planned LDV acquisitions in Year 5)*
- 27 requirements from previous three Alternative Compliance years (9 each from years 2, 3 and 4)
- 9 LDV retirements from Year 1
- ACV inventory: 36 (9 + 9 + 9 + 9 = 36)
- Average annual alternative fuel use per AFV: 500 GGE
- Petroleum reduction requirement amount: 18,000 GGE (500 GGE x 36 AFVs)

* Identifying data on LDVs representing requirements acquired during a waiver year should be reported in the ACV inventory.

How do I make a plan for achieving my fleet's petroleum reduction requirement?

Step 2: Develop a Plan for Achieving the Annual Petroleum Reduction Requirement

After determining your petroleum reduction requirement, you must develop a plan for achieving it. Your plan can include many different strategies:

- AFVs or fuel-efficient technologies in any-sized, on-road vehicle
- Biodiesel blends
- HEVs
- Idle reduction technologies
- Replacement fuels in qualified non-road vehicles
- Reduced VMT

How do I make a plan for achieving my fleet's petroleum reduction requirement?

There are two ways to develop a petroleum reduction plan:

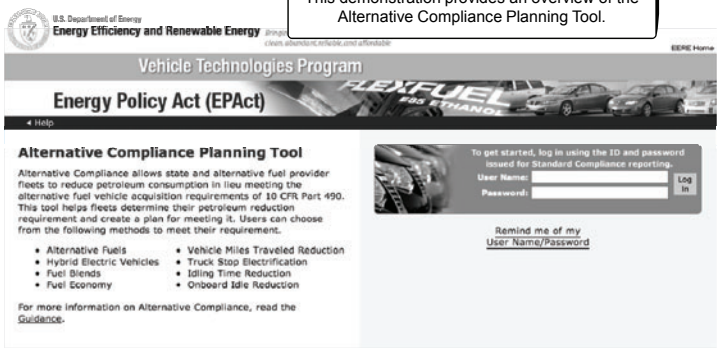
- Use the automated Alternative Compliance Planning Tool (preferred)
- Use the petroleum reduction calculation methodology outlined in *Appendices E and F in the Guidance*.

How do I use the Alternative Compliance Planning Tool?

DOE created the interactive, online Alternative Compliance Planning Tool (*www.eere.energy.gov/vehiclesandfuels/epact/state/acp_tool*) to help fleets calculate their petroleum reduction requirement and develop their plans to achieve it.

Following is a series of slides demonstrating how to use the Alternative Compliance Planning Tool. Each slide has one or more pop-up text boxes. In the full-screen mode, the text boxes will appear automatically, and you will be prompted when it's time to proceed to the next page. In the window mode, you will need to click to make each text box appear and proceed to the next page.

This demonstration provides an overview of the Alternative Compliance Planning Tool.

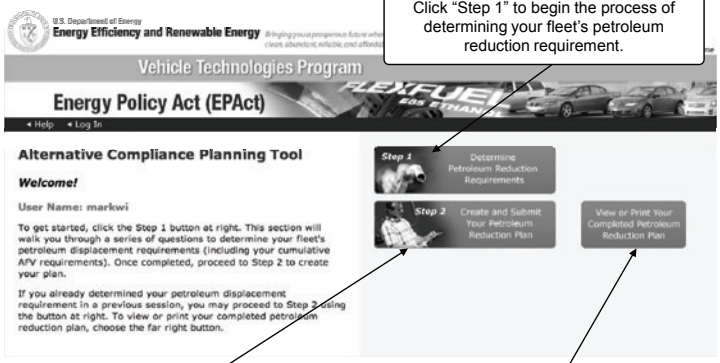


Go to *www.eere.energy.gov/vehiclesandfuels/epact/state/acp_tool/*, and log in using your fleet ID and password.

Alternative Compliance Tutorial

Module 4: Assembling a Waiver Request

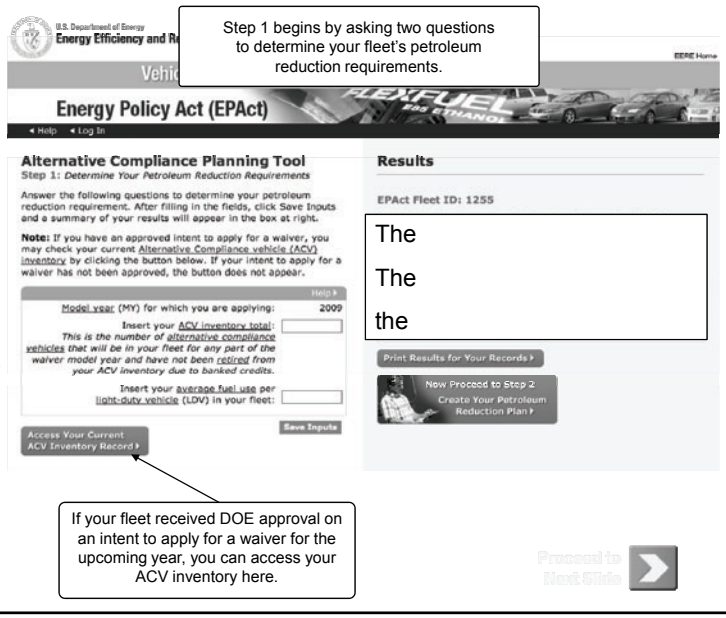
Click "Step 1" to begin the process of determining your fleet's petroleum reduction requirement.



If you have already completed Step 1, you can create and submit your petroleum reduction plan by clicking the "Step 2" button.

OR

You can click this button to view or print your petroleum reduction plan.



Step 1 begins by asking two questions to determine your fleet's petroleum reduction requirements.

The

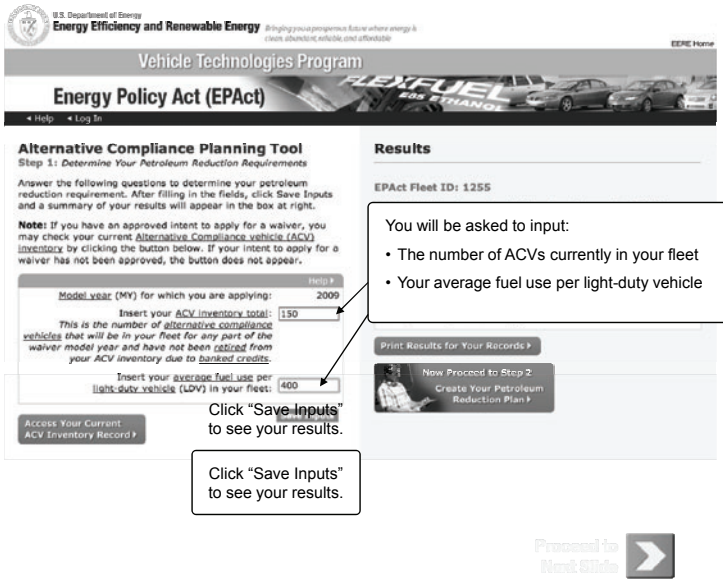
The

the

If your fleet received DOE approval on an intent to apply for a waiver for the upcoming year, you can access your ACV inventory here.

Alternative Compliance Tutorial

Module 4: Assembling a Waiver Request

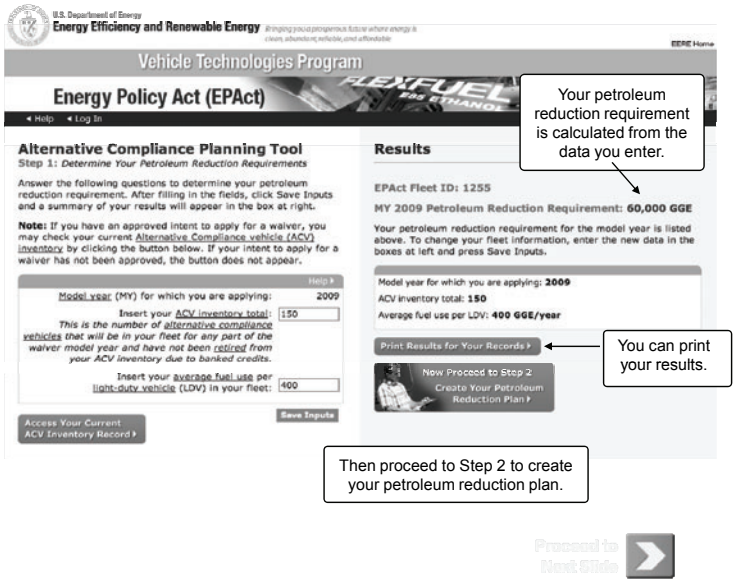


You will be asked to input:

- The number of ACVs currently in your fleet
- Your average fuel use per light-duty vehicle

Click "Save Inputs" to see your results.

Click "Save Inputs" to see your results.



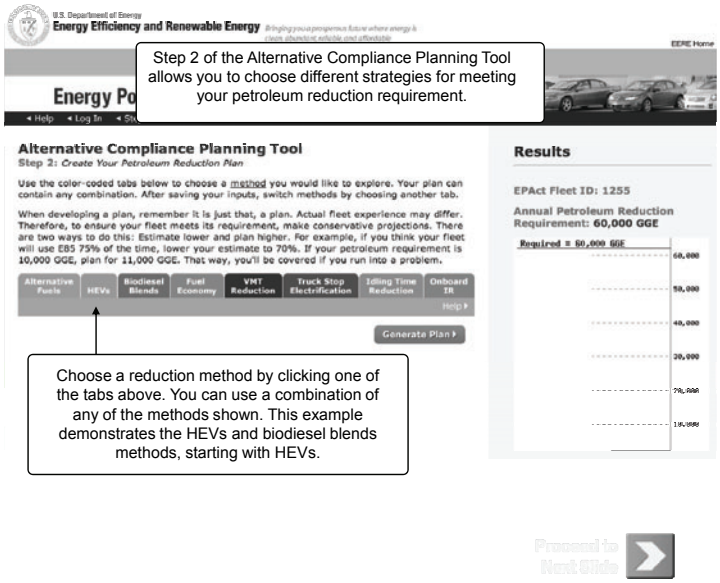
Your petroleum reduction requirement is calculated from the data you enter.

You can print your results.

Then proceed to Step 2 to create your petroleum reduction plan.

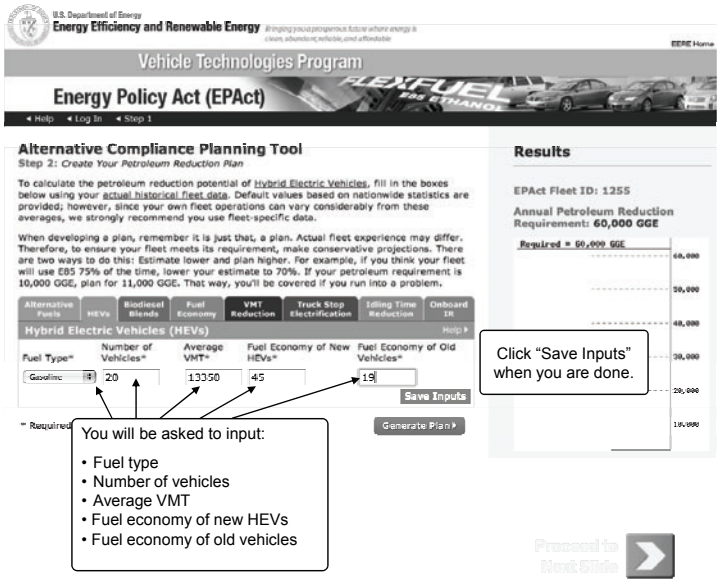
Alternative Compliance Tutorial

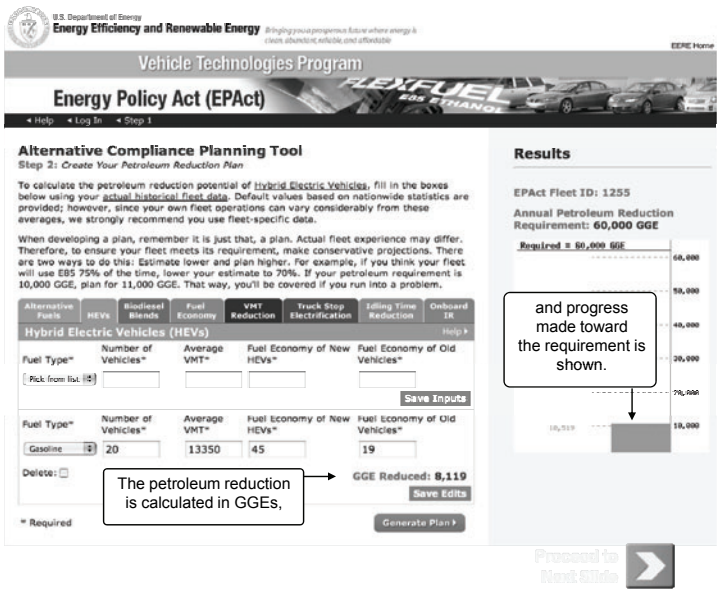
Module 4: Assembling a Waiver Request

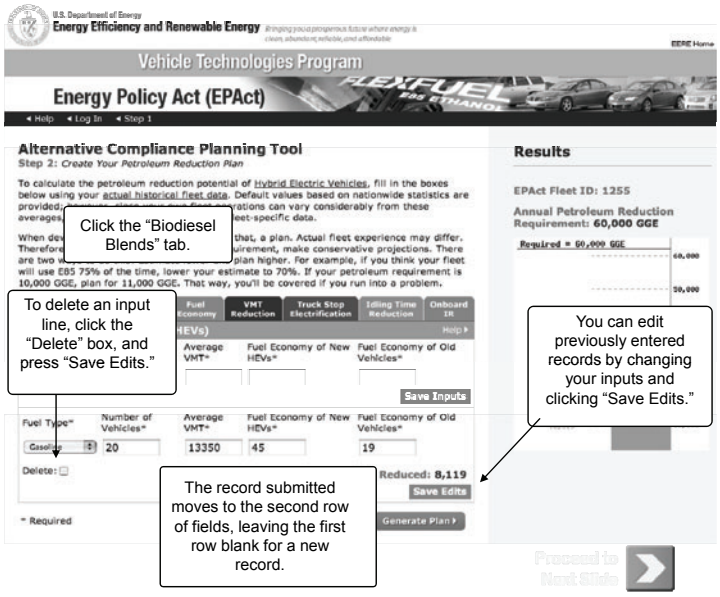


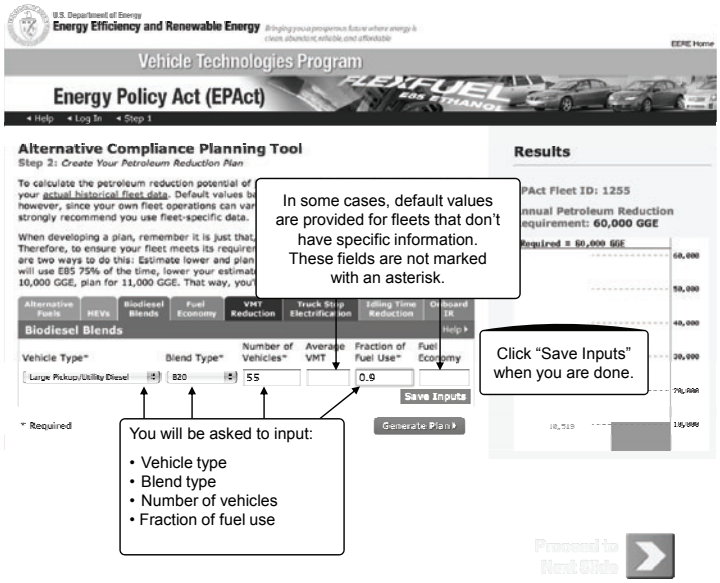
Step 2 of the Alternative Compliance Planning Tool allows you to choose different strategies for meeting your petroleum reduction requirement.

Choose a reduction method by clicking one of the tabs above. You can use a combination of any of the methods shown. This example demonstrates the HEVs and biodiesel blends methods, starting with HEVs.


Energy Efficiency and Renewable Energy
Vehicle Technologies Program
Energy Policy Act (EPAct)
Alternative Compliance Planning Tool
Step 2: Create Your Petroleum Reduction Plan
Hybrid Electric Vehicles (HEVs)
Fuel Type*
Number of Vehicles*
Average VMT*
Fuel Economy of New HEVs*
Fuel Economy of Old Vehicles*
Gasoline
20
13350
45
19
Save Inputs
Generate Plan
Results
EPAct Fleet ID: 1255
Annual Petroleum Reduction Requirement: 60,000 GGE
Required = 60,000 GGE
Click "Save Inputs" when you are done.
You will be asked to input:
• Fuel type
• Number of vehicles
• Average VMT
• Fuel economy of new HEVs
• Fuel economy of old vehicles


Energy Efficiency and Renewable Energy
Vehicle Technologies Program
Energy Policy Act (EPAct)
Alternative Compliance Planning Tool
Step 2: Create Your Petroleum Reduction Plan
Hybrid Electric Vehicles (HEVs)
Fuel Type*
Number of Vehicles*
Average VMT*
Fuel Economy of New HEVs*
Fuel Economy of Old Vehicles*
Pick from list
Save Inputs
Gasoline
20
13350
45
19
Delete:
GGE Reduced: 8,119
Save Edits
Generate Plan
Results
EPAct Fleet ID: 1255
Annual Petroleum Reduction Requirement: 60,000 GGE
Required = 60,000 GGE
and progress made toward the requirement is shown.
The petroleum reduction is calculated in GGEs,


Energy Efficiency and Renewable Energy
Vehicle Technologies Program
Energy Policy Act (EPAct)
Alternative Compliance Planning Tool
Step 2: Create Your Petroleum Reduction Plan
Results
EPAct Fleet ID: 1255
Annual Petroleum Reduction Requirement: 60,000 GGE
Save Inputs
Save Edits
Generate Plan
Reduced: 8,119
Click the "Biodiesel Blends" tab.
To delete an input line, click the "Delete" box, and press "Save Edits."
You can edit previously entered records by changing your inputs and clicking "Save Edits."
The record submitted moves to the second row of fields, leaving the first row blank for a new record.


Energy Efficiency and Renewable Energy
Vehicle Technologies Program
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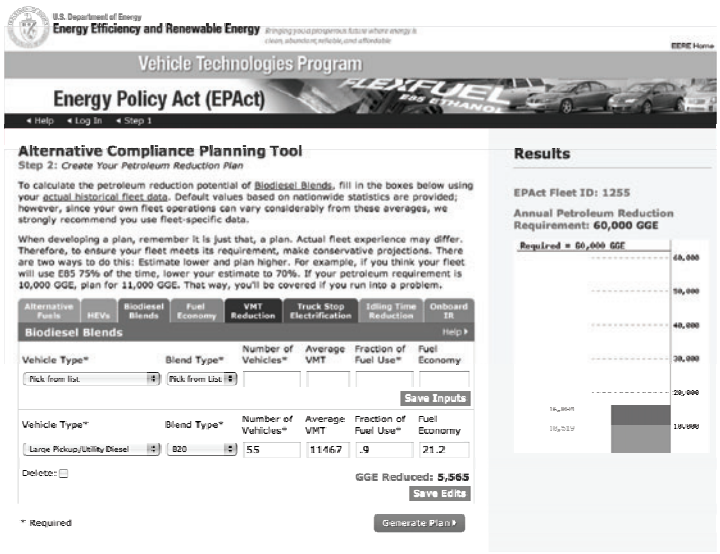
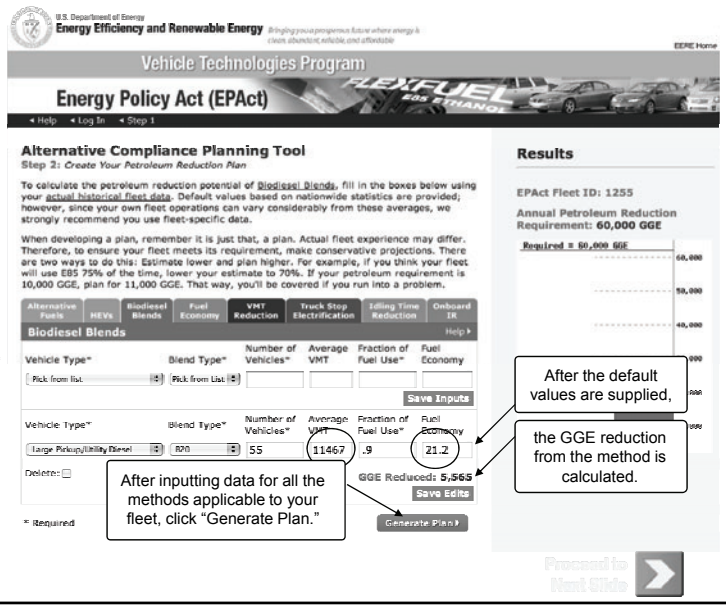
Alternative Compliance Planning Tool
Step 2: Create Your Petroleum Reduction Plan
Results
Biodiesel Blends
Save Inputs
Generate Plan
In some cases, default values are provided for fleets that don't have specific information. These fields are not marked with an asterisk.
Click "Save Inputs" when you are done.
You will be asked to input:
• Vehicle type
• Blend type
• Number of vehicles
• Fraction of fuel use


U.S. Department of Energy
Energy Efficiency and Renewable Energy
Vehicle Technologies Program
Energy Policy Act (EPAct)
Alternative Compliance Planning Tool
Step 2: Create Your Petroleum Reduction Plan
Biodiesel Blends
Vehicle Type*
Blend Type*
Number of Vehicles*
Average VMT
Fraction of Fuel Use*
Fuel Economy
Save Inputs
Large Pickup/Utility Diesel
B20
55
11467
.9
21.2
GGE Reduced: 5,565
Save Edits
Generate Plan
Results
EPAct Fleet ID: 1255
Annual Petroleum Reduction Requirement: 60,000 GGE


U.S. Department of Energy
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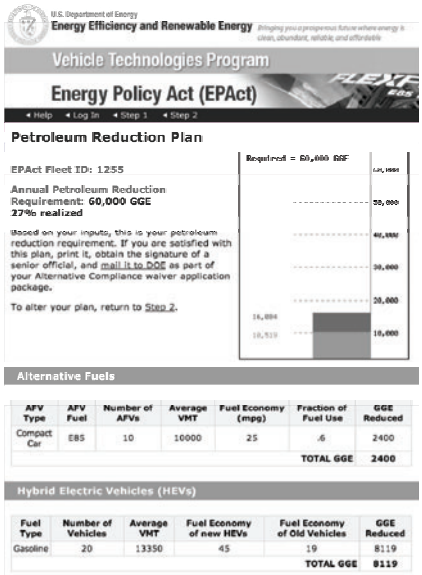
Step 2: Create Your Petroleum Reduction Plan
Biodiesel Blends
Vehicle Type*
Blend Type*
Number of Vehicles*
Average VMT
Fraction of Fuel Use*
Fuel Economy
Save Inputs
Large Pickup/Utility Diesel
B20
55
11467
.9
21.2
GGE Reduced: 5,565
Save Edits
Generate Plan
Results
EPAct Fleet ID: 1255
Annual Petroleum Reduction Requirement: 60,000 GGE
After the default values are supplied,
the GGE reduction from the method is calculated.
After inputting data for all the methods applicable to your fleet, click "Generate Plan."



The plan summarizes all the methods your fleet will use to meet its petroleum reduction requirement.

End of demonstration.

Proceed to Next Slide

When is the waiver request due?

Waiver requests are due to DOE no later than June 30 or July 31 before the model year for which a waiver is being requested.

June 30	July 31
If the waiver request ***is not*** dependent on the availability of new model vehicles from manufacturers	If the waiver request ***is*** dependent on availability of new model vehicles from manufacturers

➔ *For more information on the waiver request procedure, go to Module 4: Completing an Annual Report.*

Where do I send my completed waiver request?

Send your completed waiver request package no later than the June 30 or July 31 deadline to:

Mr. Dana O'Hara
Regulatory Manager
U.S. Department of Energy
EE-2G/Forrestal Building
1000 Independence Ave., SW
Washington, D.C. 20585

➔ *For more information on what is included in a waiver request, see p. 18 of the Guidance.*

Once it receives your ***completed*** waiver request, DOE has 45 days to review it. If DOE determines it needs more information to approve your waiver request, the 45-day review period will start from the time DOE receives the additional information.

➔ *For more information on DOE's waiver approval process, see p. 9 of the Guidance.*

What are my options if my fleet isn't granted a waiver?

Appeals

If your fleet's waiver request is rejected, you may appeal the decision to DOE's Office of Hearings and Appeals using procedures documented in 10 CFR 490.204(h) and 490.308(g).

Appeals must be filed within 30 days of notification that DOE rejected your waiver request.

If your fleet's waiver request is rejected and you choose not to appeal the decision, your fleet must comply with the Standard Compliance option during the upcoming model year.

How long should I hold on to my records?

Fleets granted Alternative Compliance waivers must keep documentation to verify petroleum reduction claims for three years after the end of the subject model year. The same three-year rule applies to fleets under the Standard Compliance requirements.

Records include, but are not limited to, documents such as vehicle and fuel purchase receipts, inventory records, and vehicle retirement dates.

Alternative Compliance Tutorial

Module 4: Assembling a Waiver Request

Congratulations!

You have completed Module 4: Assembling a Waiver Request.

Please proceed to: Module 5: Completing an Annual Report.