

Primary Energy Source and Sector Behavior Over Time Graphs

The United States depends on a mix of primary energy sources to provide the energy required by the various sectors of our economy. You have been provided with graphics from the Energy Information Administration showing data related to Primary Energy Consumption by Source and Sector from 2008-2014.

Task 1 – What do all the numbers represent?

With your group, look at the graphics and determine what all the numbers are telling you about how the Sources are connected to the Sectors and vice versa. Make statements out loud communicating what the data represents to be sure everyone is on the same page and understands how what kind of information is represented in the graphics. Which sectors are powered by each source? Which sources power each sector?

Task 2 – What trends do you notice?

As you look at the Sources and Sectors over the years, what kinds of changes do you notice? How has our dependence on different Sources changed over time? How has the mix of Sources powering different Sectors changed over time? Using the Behavior Over Time Graphs on the following pages, indicate a trend you notice is changing over time, complete the data table and sketch out a behavior over time graph to show the trend.

Task 3 – What causes these changes over time?

Have a discussion with your group about the factors that drive changes to the Primary Energy Sources we depend upon as well as the Sectors they power.

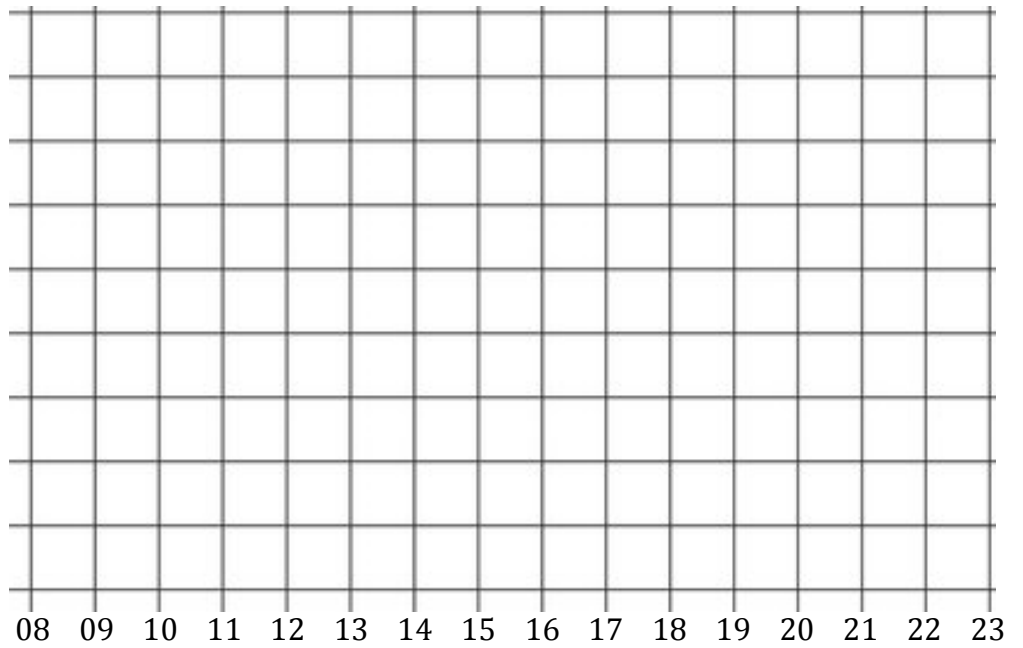
Task 4 – What should the mix be?

As a group, create your own Primary Energy Consumption by Source and Sector graphic for the year 2050 if the United States moves toward a more sustainable energy system. First, discuss as a group what the percentages should be for the various primary energy sources. Then, discuss how the Sectors might use more, less or the same amount of energy as compared to 2014. Fill in the connections between the Sources and Sectors. If you have time, show how the percentages will support the changes you have decided upon for 2050.

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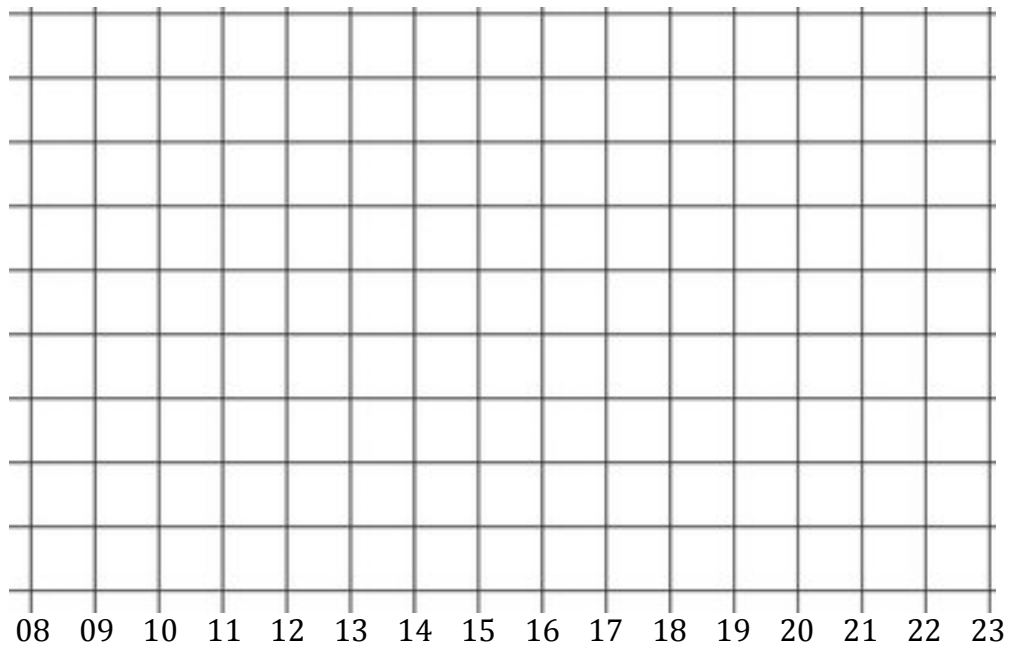
Trend: _____

Year	Data
2008	
2009	
2010	
2011	
2012	
2013	
2014	
2015	
2016	
2017	



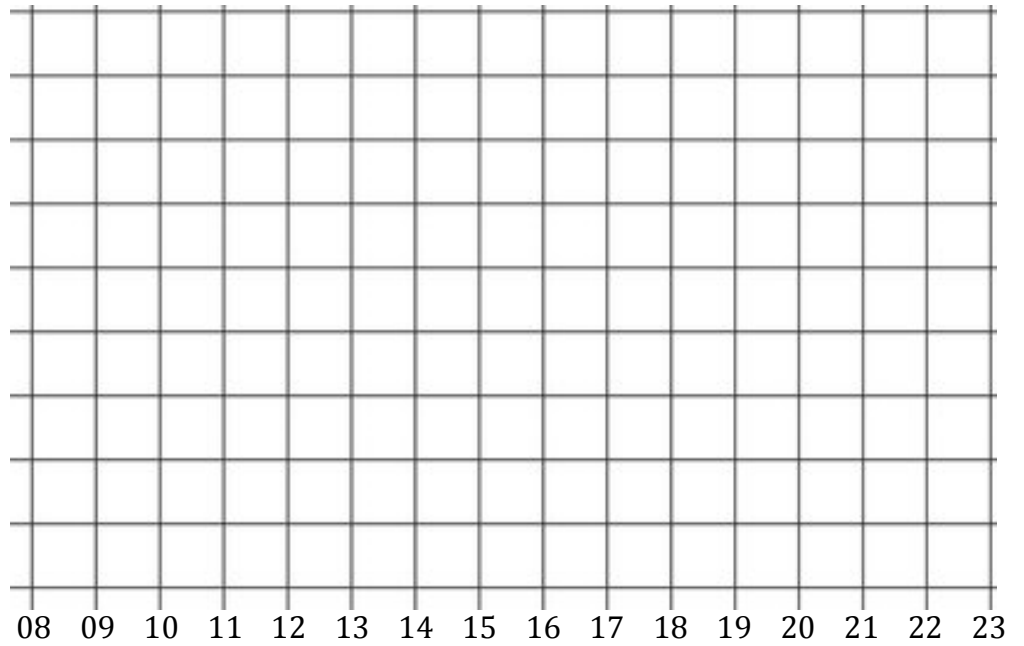
Trend: _____

Year	Data
2008	
2009	
2010	
2011	
2012	
2013	
2014	
2015	
2016	
2017	



Trend: _____

Year	Data
2008	
2009	
2010	
2011	
2012	
2013	
2014	
2015	
2016	
2017	



Trend: _____

Year	Data
2008	
2009	
2010	
2011	
2012	
2013	
2014	
2015	
2016	
2017	

