



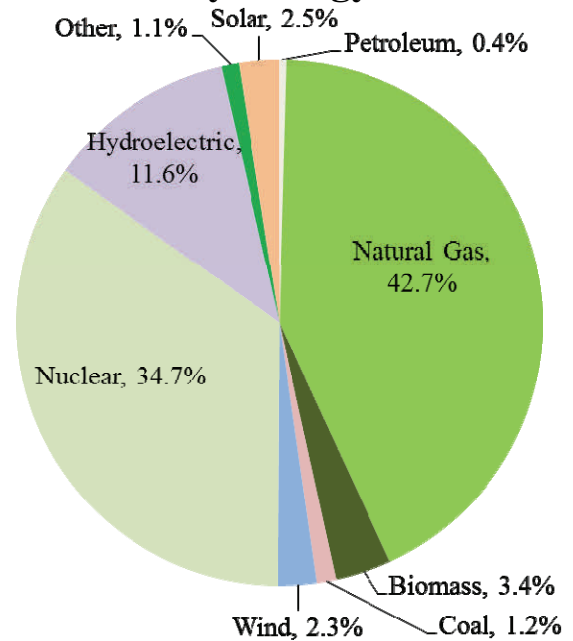
Northeast Region

(MA, ME, NH, RI, CT, NY, NJ, VT)

Economic Data

Supply Chain Members	1,231+
State/Local Tax (\$M)	84.19
Direct Rev (\$M)	489
Direct Jobs	1,937
Direct Labor Income (\$M)	274
Indirect Rev (\$M)	503
Indirect Jobs	2,169
Indirect Labor Income (\$M)	192
Induced Revenue (\$M)	421
Induced Jobs	2,514
Induced Labor Income (\$M)	149
Total Revenue (\$M)	1,412
Total Jobs	6,620
Total Labor Income (\$M)	615

2017 Electric Power Generation by Primary Energy Source



*EIA 2017 Electric Generation Data

Assessment Summary

Potential Stationary Fuel Cell Sites	#
Schools and Institutions	424
Food Sales/Services	10,467
Healthcare and Lodging	367
Retail	233
Public Order and Safety	519
Energy Intensive Industries	288
GSA Operated Buildings	183
Wireless Telecommunication Towers	400
Wastewater Treatment Plants/Landfills	40
Commercial Airports, Military & Ports	160
Total	13,081

Potential Hydrogen Refueling Sites	#
Current Gasoline Stations	12,204
Existing/Planned Stations	5/11

Registered Fleet Vehicle Inventory	#
Registered Fleet Vehicles	152,710
Directly Operated Transit Buses	13,828
Total	166,538

Deployment Goals	#
Hydrogen Refueling Stations	66/81
FCEV Passenger Vehicles/ Buses	7,706

Deployment Goals	#
Fuel Cell Electric Generation	2,036 MW

Potential Emissions Reduction	CO ₂	NO _x
Stationary (metric tons/year)	NA	3,790
Transportation (metric tons/year)	90,545	31
Total	90,545	3,821

State Policies/Incentives

State Incentives for Fuel Cells	
• Performance-Based	• Public Benefit Fund
• State Grant Program	• RPS
• State Loan Program	• Net Metering
• Property /Sales Tax Incentive	• Microgrid Eligibility
• Utility Ownership/Investment	• PACE Financing

State Incentives for Hydrogen Fuel
• Zero Emission Vehicle (ZEV) Program
• ZEV Purchase Target for State Government Fleets
• Purchase Incentives/"Point-of-Purchase" Rebates
• Public/Private Infrastructure Partnership
• Tax Incentives
• Refueling Infrastructure Incentives

1. Economic data based on analysis from 2017 IMPLAN Model with 2016/2017 data for the regional economy.



Connecticut

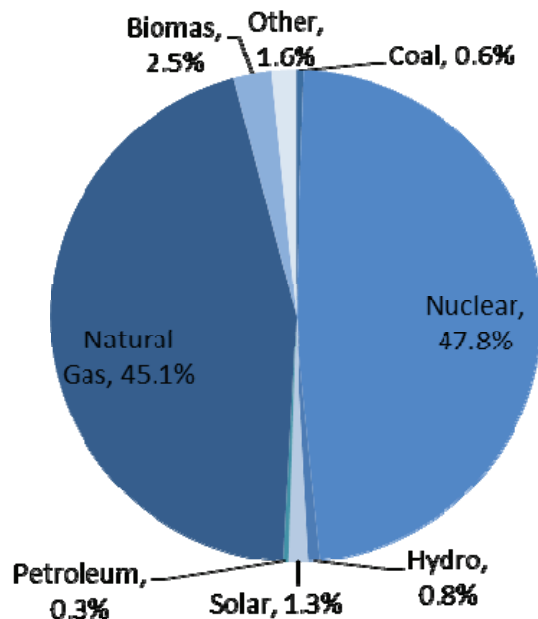
2018 Summary



Economic Data

Supply Chain Members	600+
State/Local Tax (\$M)	31+
Direct Rev (\$M)	261.9
Direct Jobs	983
Direct Labor Income (\$M)	160.1
Indirect Rev (\$M)	164.2
Indirect Jobs	773
Indirect Labor Income (\$M)	63.4
Induced Revenue (\$M)	174.7
Induced Jobs	1,078
Induced Labor Income (\$M)	62.5
Total Revenue (\$M)	600.8
Total Jobs	2,834
Total Labor Income (\$M)	286

2017 Electric Power Generation by Primary Energy Source



*EIA 2017 Electric Generation Data

Assessment Summary

Potential Stationary Fuel Cell Sites	#
Schools and Institutions	54
Food Sales/Services	857
Healthcare and Lodging	51
Retail	23
Public Order and Safety	62
Energy Intensive Industries	34
GSA Operated Buildings	7
Wireless Telecommunication Towers	31
Wastewater Treatment Plants/Landfills	5
Commercial Airports, Military & Ports	15
Total	1,139

Potential Hydrogen Refueling Sites	#
Current Gasoline Stations	1,067
Existing/Planned Stations	1/2

Registered Fleet Vehicle Inventory	#
Connecticut Registered Fleet Vehicles	11,725
Directly Operated Transit Buses	921
Total	12,646

Deployment Goals	#
Hydrogen Refueling Stations	6 to 7
FCEV Passenger Vehicles/ Buses	591

Deployment Goals	#
Fuel Cell Electric Generation	170 MW

Potential Emissions Reduction	CO ₂	NO _x
Stationary (metric tons/year)	NA	160
Transportation (metric tons/year)	6,400	2.2
Total	6,400	162.2

State Policies/Incentives

State Incentives for Fuel Cells	
• Performance-Based	• Industry Recruitment/Support
• Public Benefits Fund	• RPS
• State Loan Program	• Net Metering
• Property Tax Incentive	• Microgrid Eligibility
• Utility Ownership/Investment	• CPACE Financing

State Incentives for Hydrogen Fuel
• Zero Emission Vehicle (ZEV) Program
• ZEV Purchase Target for State Government Fleets
• Purchase Incentives/"Point-of-Purchase" Rebates
• Public/Private Infrastructure Partnership
• Refueling Infrastructure Incentives

1. Economic data based on analysis from 2017 IMPLAN Model with 2016/2017 data for the regional economy.

Maine

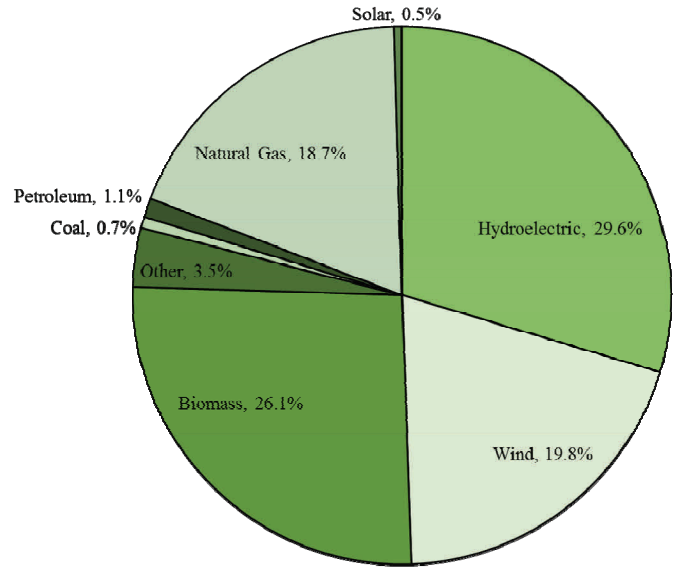
2018 Summary



Economic Data

Supply Chain Members	26+
Indirect Rev (\$M)	3.4
Indirect Jobs	18
Indirect Labor Income (\$M)	1
Induced Revenue (\$M)	1.7
Induced Jobs	12
Induced Labor Income (\$M)	0.5
Total Revenue (\$M)	5.1
Total Jobs	30
Total Labor Income (\$M)	1.5

2017 Electric Power Generation by Primary Energy Source



*EIA 2017 Electric Generation Data

Assessment Summary

Potential Stationary Fuel Cell Sites	#
Schools and Institutions	22
Food Sales/Services	344
Healthcare & Lodging	20
Retail	13
Public Order and Safety	12
Energy Intensive Industries	10
GSA Operated Buildings	41
Wireless Telecommunication Towers	51
Wastewater Treatment Plants/Landfills	4
Commercial Airports, Military & Ports	23
Total	540

Deployment Goals	#
Fuel Cell Electric Generation	87 MW

Potential Hydrogen Refueling Sites	#
Current Gasoline Stations	768
Existing/Planned Stations	0/0

Registered Fleet Vehicle Inventory	#
Maine Registered Fleet Vehicles	2,918
Directly Operated Transit Buses	153
Total	3,071

Deployment Goals	#
Hydrogen Refueling Stations	1 to 2
FCEV Passenger Vehicles/ Buses	144

Potential Emissions Reduction	CO ₂	NO _x
Stationary (metric tons/year)	NA	160
Transportation (metric tons/year)	1,265	0.5
Total	1,265	160.5

State Policies/Incentives

State Incentives for Fuel Cells	
• Performance-Based	• Public Benefit Fund
• Net Metering	• RPS

State Incentives for Hydrogen Fuel
• Fuel-Efficient Vehicle Acquisition Requirements

1. Economic data based on analysis from 2017 IMPLAN Model with 2016/2017 data for the regional economy.

Massachusetts

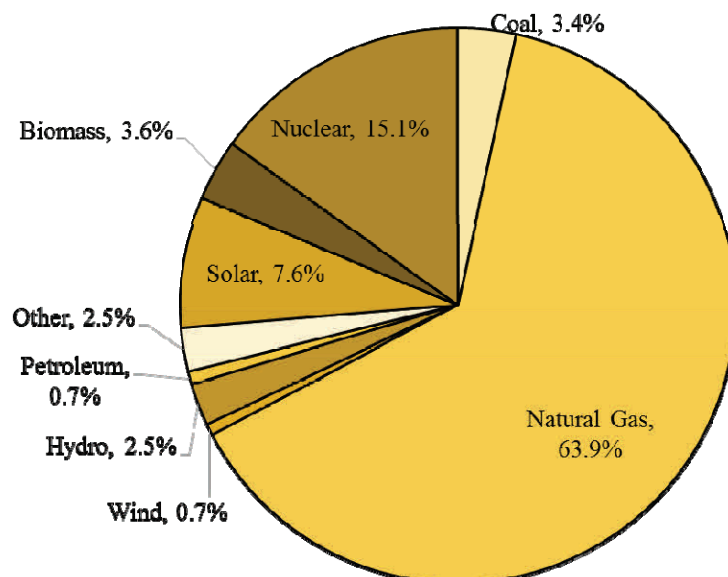
2018 Summary



Economic Data

Supply Chain Members	333+
Direct Rev (\$M)	129.1
Direct Jobs	410
Direct Labor Income (\$M)	48.2
Indirect Rev (\$M)	139.4
Indirect Jobs	598
Indirect Labor Income (\$M)	55.3
Induced Revenue (\$M)	97.6
Induced Jobs	597
Induced Labor Income (\$M)	35.1
Total Revenue (\$M)	366.1
Total Jobs	1,605
Total Labor Income (\$M)	138.5

2017 Electric Power Generation by Primary Energy Source



*EIA 2017 Electric Generation Data

Assessment Summary

Potential Stationary Fuel Cell Sites	#
Schools and Institutions	62
Food Sales/Services	1,698
Healthcare & Lodging	65
Retail	40
Public Order and Safety	73
Energy Intensive Industries	46
GSA Operated Buildings	16
Wireless Telecommunication Towers	59
Wastewater Treatment Plants/Landfills	6
Commercial Airports, Military & Ports	33
Total	2,098

Deployment Goals	#
Fuel Cell Electric Generation	250 MW

Potential Hydrogen Refueling Sites	#
Current Gasoline Stations	1,988
Existing/Planned Stations	2/3

Registered Fleet Vehicle Inventory	#
Massachusetts Registered Fleet Vehicles	17,602
Directly Operated Transit Buses	1,796
Total	19,398

Deployment Goals	#
Hydrogen Refueling Stations	7 to 9
FCEV Passenger Vehicles/ Buses	907

Potential Emissions Reduction	CO ₂	NO _x
Stationary (metric tons/year)	NA	450
Transportation (metric tons/year)	11,300	3.7
Total	11,300	453.7

State Policies/Incentives

State Incentives for Fuel Cells

- Net Metering
- RPS
- Public Benefit Fund

State Incentives for Hydrogen Fuel

- Zero Emission Vehicle (ZEV) Program
- ZEV Purchase Target for State Government Fleets
- Purchase Incentives/"Point-of-Purchase" Rebates
- Refueling Infrastructure Incentives
- Fuel Efficiency Standard

New Hampshire

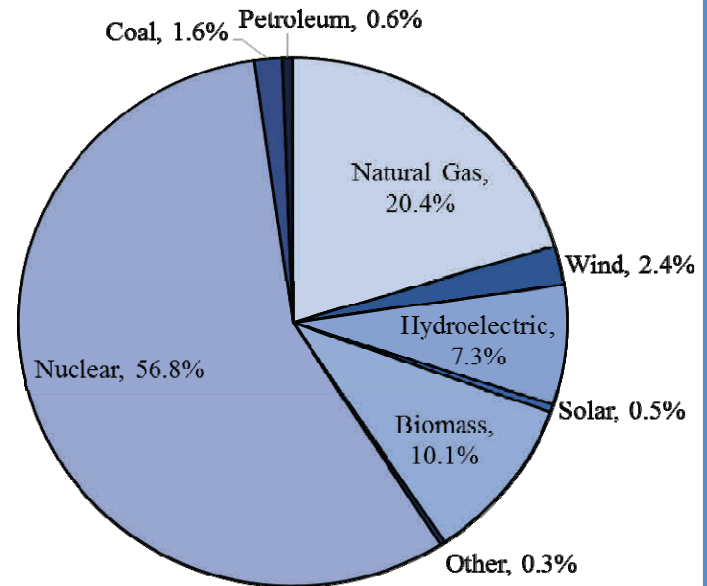
2017 Summary



Economic Data

Supply Chain Members	26+
Indirect Rev (\$M)	10.3
Indirect Jobs	50
Indirect Labor Income (\$M)	3.9
Induced Revenue (\$M)	4.5
Induced Jobs	31
Induced Labor Income (\$M)	1.5
Total Revenue (\$M)	14.8
Total Jobs	81
Total Labor Income (\$M)	5.4

2017 Electric Power Generation by Primary Energy Source



*EIA 2017 Electric Generation Data

Assessment Summary

Potential Stationary Fuel Cell Sites	#
Schools and Institutions	16
Food Sales/Services	342
Healthcare & Lodging	19
Retail	14
Public Order and Safety	13
Energy Intensive Industries	13
GSA Operated Buildings	5
Wireless Telecommunication Towers	25
Wastewater Treatment Plants/Landfills	4
Commercial Airports, Military & Ports	4
Total	455

Deployment Goals	#
Fuel Cell Electric Generation	74 MW

Potential Hydrogen Refueling Sites	#
Current Gasoline Stations	572
Existing/Planned Stations	0/0

Registered Fleet Vehicle Inventory	#
New Hampshire Registered Fleet Vehicles	2,023
Directly Operated Transit Buses	153
Total	2,176

Deployment Goals	#
Hydrogen Refueling Stations	1 to 2
FCEV Passenger Vehicles/ Buses	25

Potential Emissions Reduction	CO ₂	NO _x
Stationary (metric tons/year)	NA	80
Transportation (metric tons/year)	540	0.15
Total	540	80.15

State Policies/Incentives

State Incentives for Fuel Cells	
• State Grant Program	• RPS
• Net Metering	

State Incentives for Hydrogen Fuel
• N/A

New Jersey

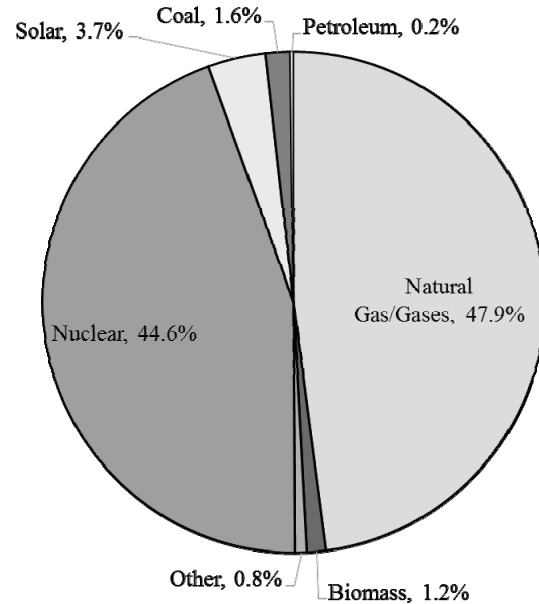
2017 Summary



2017 Electric Power Generation by Primary Energy Source

Economic Data

Indirect Rev (\$M)	37.3
Indirect Jobs	138
Indirect Labor Income (\$M)	14.3
Induced Revenue (\$M)	17
Induced Jobs	90
Induced Labor Income (\$M)	5.6
Total Revenue (\$M)	54.4
Total Jobs	228
Total Labor Income (\$M)	20



*EIA 2017 Electric Generation Data

Assessment Summary

Potential Stationary Fuel Cell Sites	#
Schools and Institutions	105
Food Sales/Services	1,908
Healthcare & Lodging	32
Retail	44
Public Order and Safety	50
Energy Intensive Industries	72
GSA Operated Buildings	11
Wireless Telecommunication Towers	60
Wastewater Treatment Plants/Landfills	7
Commercial Airports, Military & Ports	20
Total	2,309

Deployment Goals	#
Fuel Cell Electric Generation	214 MW

Potential Hydrogen Refueling Sites	#
Current Gasoline Stations	2,372
Existing/Planned Stations	0/2

Registered Fleet Vehicle Inventory	#
New Jersey Registered Fleet Vehicles	69,194
Directly Operated Transit Buses	2,970
Total	72,164

Deployment Goals	#
Hydrogen Refueling Stations	31 to 34
FCEV Passenger Vehicles/ Buses	3,371

Potential Emissions Reduction	CO ₂	NO _x
Stationary (metric tons/year)	NA	240
Transportation (metric tons/year)	27,500	11
Total	27,500	251

State Policies/Incentives

State Incentives for Fuel Cells	
• State Grant Program	• Public Benefits Fund *
• Utility Ownership/Incentives	• RPS *
• Net Metering *	• PACE Financing *

State Incentives for Hydrogen Fuel
• Fuel Efficiency Standard
• Tax Incentives
• HOV Lanes and Parking Incentives

* Fuel cells using renewable fuels

New York

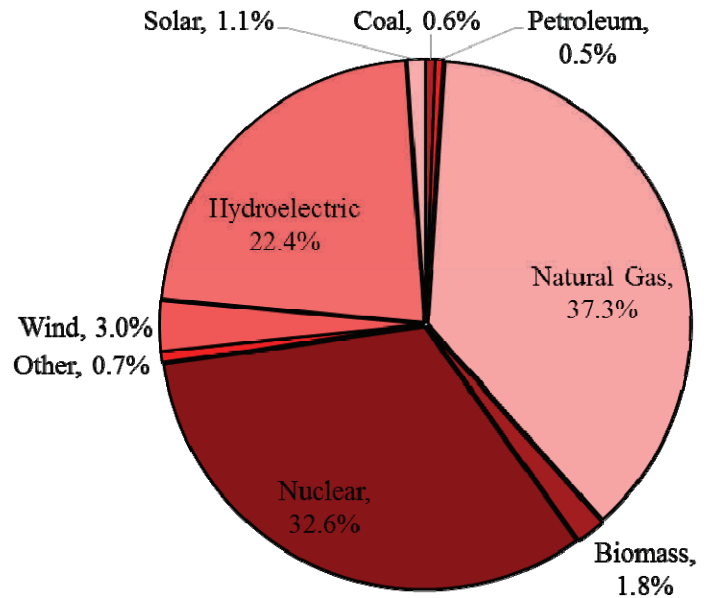
2017 Summary



Economic Data

Supply Chain Members	183+
Direct Rev (\$M)	97.8
Direct Jobs	544
Direct Labor Income (\$M)	66
Indirect Rev (\$M)	135.1
Indirect Jobs	546
Indirect Labor Income (\$M)	50.2
Induced Revenue (\$M)	120.4
Induced Jobs	674
Induced Labor Income (\$M)	41.9
Total Revenue (\$M)	353.3
Total Jobs	1,764
Total Labor Income (\$M)	158.1

2017 Electric Power Generation by Primary Energy Source



*EIA 2017 Electric Generation Data

Assessment Summary

Potential Stationary Fuel Cell Sites	#
Schools and Institutions	133
Food Sales/Services	4,863
Healthcare & Lodging	155
Retail	88
Public Order and Safety	293
Energy Intensive Industries	97
GSA Operated Buildings	62
Wireless Telecommunication Towers	152
Wastewater Treatment Plants/Landfills	10
Commercial Airports, Military & Ports	51
Total	5,904

Deployment Goals	#
Fuel Cell Electric Generation	1,131 MW

Potential Hydrogen Refueling Sites	#
Current Gasoline Stations	4,678
Existing/Planned Stations	1/4

Registered Fleet Vehicle Inventory	#
New York Registered Fleet Vehicles	43,631
Directly Operated Transit Buses	7,458
Total	51,089

Deployment Goals	#
Hydrogen Refueling Stations	18 to 23
FCEV Passenger Vehicles/ Buses	2,387

Potential Emissions Reduction	CO ₂	NO _x
Stationary (metric tons/year)	NA	2,600
Transportation (metric tons/year)	40,700	12
Total	40,700	2,612

State Policies/Incentives

State Incentives for Fuel Cells
• RPS
• Net Metering
• Public Benefits Fund
• PACE Financing
• Microgrid Reliability Program

State Incentives for Hydrogen Fuel	
• Zero Emission Vehicle (ZEV) Program	• Refueling Infrastructure Incentives
• ZEV Purchase Target for State Government Fleets	• Fuel Efficiency Standard
• Purchase Incentives/"Point-of-Purchase" Rebates	• Tax Incentives
• Public/Private Infrastructure Partnership	• HOV Lanes and Parking Incentives

1. Economic data based on analysis from 2017 IMPLAN Model with 2016/2017 data for the regional economy.

Rhode Island

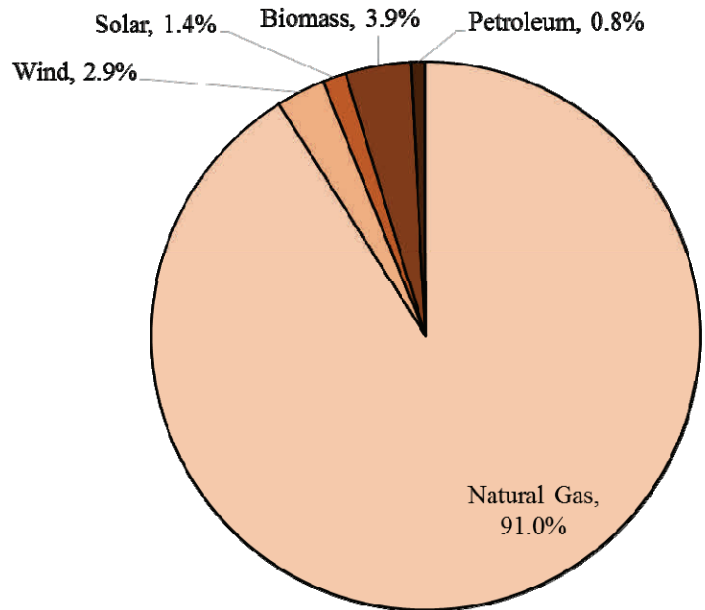
2017 Summary



Economic Data

Supply Chain Members	18+
Indirect Rev (\$M)	9.6
Indirect Jobs	30
Indirect Labor Income (\$M)	2.4
Induced Revenue (\$M)	3.2
Induced Jobs	21
Induced Labor Income (\$M)	1.1
Total Revenue (\$M)	12.8
Total Jobs	51
Total Labor Income (\$M)	3.5

2017 Electric Power Generation by Primary Energy Source



*EIA 2017 Electric Generation Data

Assessment Summary

Potential Stationary Fuel Cell Sites	#
Schools and Institutions	13
Food Sales/Services	302
Healthcare & Lodging	14
Retail	5
Public Order and Safety	8
Energy Intensive Industries	9
GSA Operated Buildings	3
Wireless Telecommunication Towers	13
Wastewater Treatment Plants/Landfills	2
Commercial Airports, Military & Ports	10
Total	379

Potential Hydrogen Refueling Sites	#
Current Gasoline Stations	318
Existing/Planned Stations	1/0

Registered Fleet Vehicle Inventory	#
Rhode Island Registered Fleet Vehicles	3,651
Directly Operated Transit Buses	291
Total	3,942

Deployment Goals	#
Hydrogen Refueling Stations	1 to 2
FCEV Passenger Vehicles/ Buses	185

Deployment Goals	#
Fuel Cell Electric Generation	52 MW

Potential Emissions Reduction	CO ₂	NO _x
Stationary (metric tons/year)	NA	30
Transportation (metric tons/year)	2,050	0.70
Total	2,050	30.7

State Policies/Incentives

State Incentives for Fuel Cells	
• Property Tax Incentive *	• RPS *
• State Grant Program	• Net Metering *
• PACE Financing *	• Public Benefits Fund *
• Utility Ownership/Incentives *	

* Fuel cells using renewable fuels

State Incentives for Hydrogen Fuel
• Zero Emission Vehicle (ZEV) Program
• ZEV Purchase Target for State Government Fleets
• Purchase Incentives/"Point-of-Purchase" Rebates
• Fuel Efficiency Standard
• Tax Incentives
• Identified State "Point" Person

1. Economic data based on analysis from 2017 IMPLAN Model with 2016/2017 data for the regional economy.

Vermont

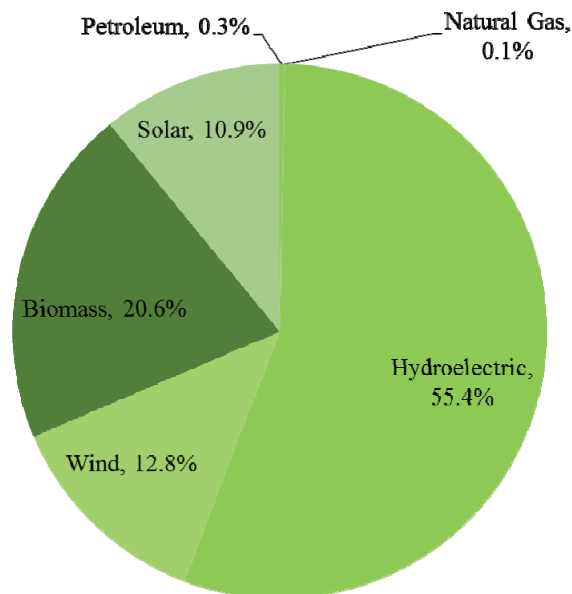
2017 Summary



Economic Data

Supply Chain Members	5+
Indirect Rev (\$M)	3.5
Indirect Jobs	15
Indirect Labor Income (\$M)	1.2
Induced Revenue (\$M)	1.4
Induced Jobs	10
Induced Labor Income (\$M)	0.44
Total Revenue (\$M)	4.9
Total Jobs	26
Total Labor Income (\$M)	1.6

2017 Electric Power Generation by Primary Energy Source



Assessment Summary

*EIA 2017 Electric Generation Data

Potential Stationary Fuel Cell Sites	#
Schools and Institutions	19
Food Sales/Services	153
Healthcare & Lodging	11
Retail	6
Public Order and Safety	8
Energy Intensive Industries	7
GSA Operated Buildings	38
Wireless Telecommunication Towers	9
Wastewater Treatment Plants/Landfills	2
Commercial Airports, Military & Ports	4
Total	257

Potential Hydrogen Refueling Sites	#
Current Gasoline Stations	441
Existing/Planned Stations	0/0

Registered Fleet Vehicle Inventory	#
Vermont Registered Fleet Vehicles	1,966
Directly Operated Transit Buses	86
Total	2,052

Deployment Goals	#
Hydrogen Refueling Stations	1 to 2
FCEV Passenger Vehicles/ Buses	96

Deployment Goals	#
Fuel Cell Electric Generation	58 MW

Potential Emissions Reduction	CO ₂	NO _x
Stationary (metric tons/year)	NA	70
Transportation (metric tons/year)	790	0.30
Total	790	70.3

State Policies/Incentives

State Incentives for Fuel Cells	
• RPS *	• Net Metering *
• Public Benefits Fund	• Property Tax Incentive *
• State Loan Program *	• Sales Tax Incentive *

State Incentives for Hydrogen Fuel
• Zero Emission Vehicle (ZEV) Program
• ZEV Purchase Target for State Government Fleets
• Fuel Efficiency Standard
• Tax Incentives

* Fuel cells using renewable fuels