













**Technical Report** NREL/TP-5600-57588 January 2013

## Early Fuel Cell Market Deployments: ARRA and Combined (IAA, DLA, ARRA)

**Quarter 3 2012 Composite Data Products** 

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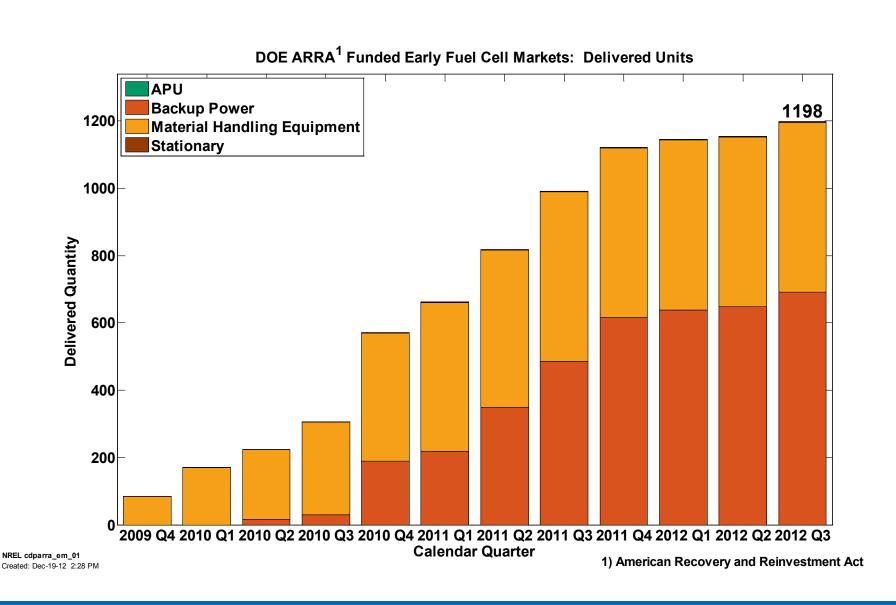
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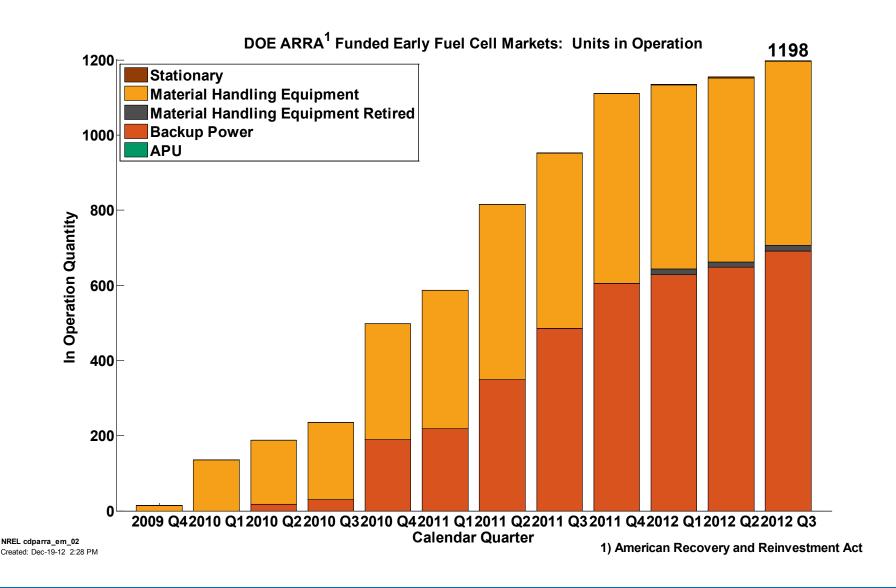


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### CDP ARRA#01: Fuel Cell Units Delivered to Site

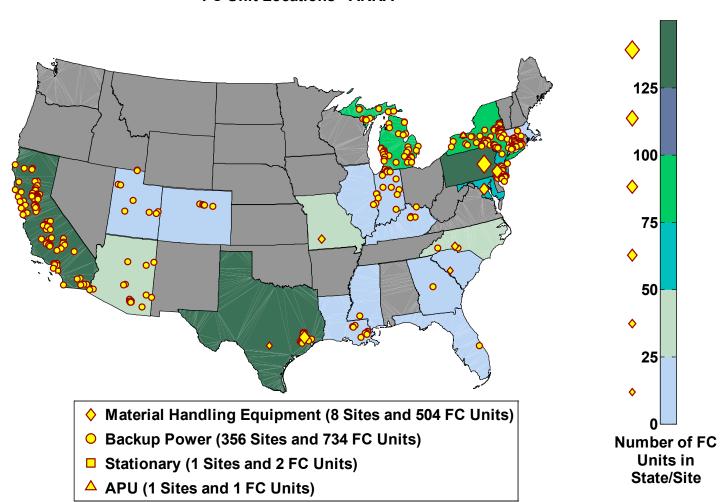


### CDP ARRA#02: Fuel Cell Units in Operation Current and Projected Quantities



## CDP ARRA#03: Early Fuel Cell Market Deployment Sites

#### FC Unit Locations - ARRA

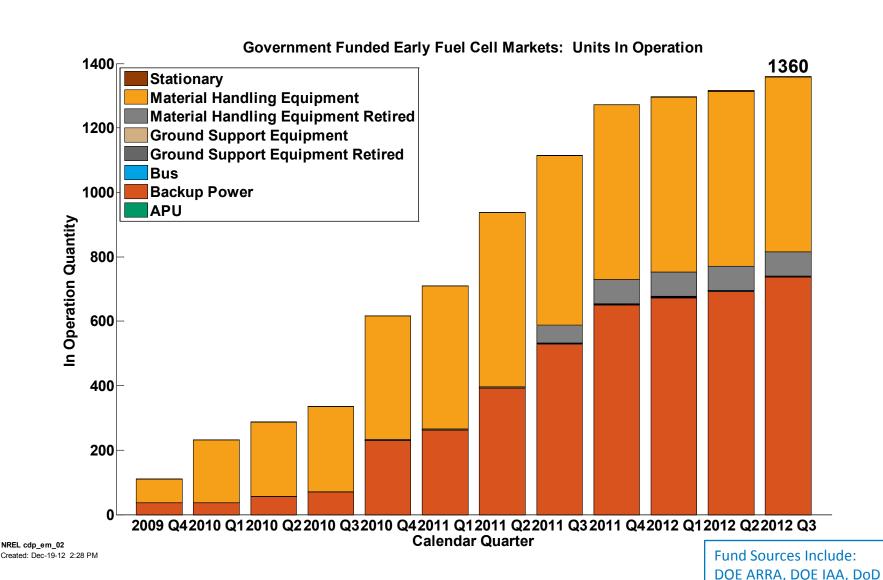


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### DOE ARRA, DOE IAA, & DoD

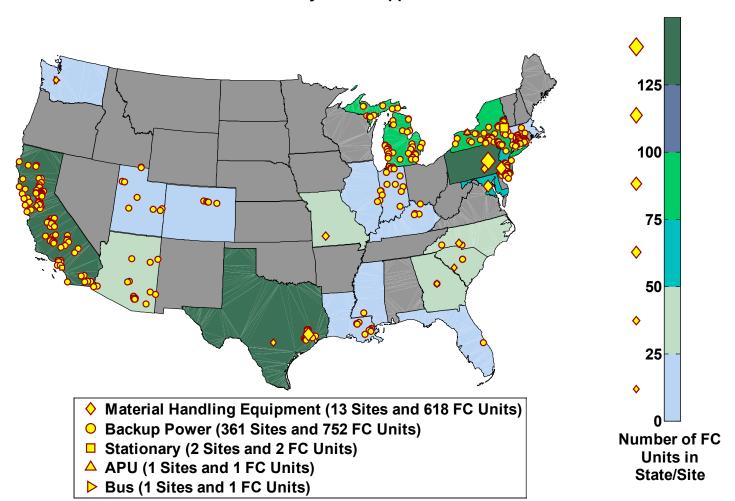
**Early Fuel Cell Market Deployments** 

### Government Funded Fuel Cell Units in Operation: Current and Projected Quantities



## **Government Funded Early Fuel Cell Market Deployment Sites**

#### FC Unit Locations - Early Market Applications

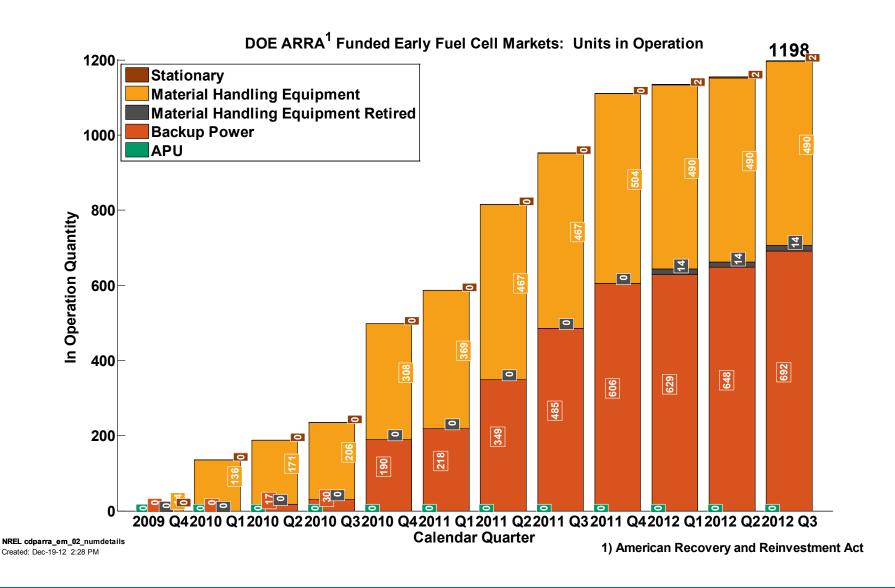


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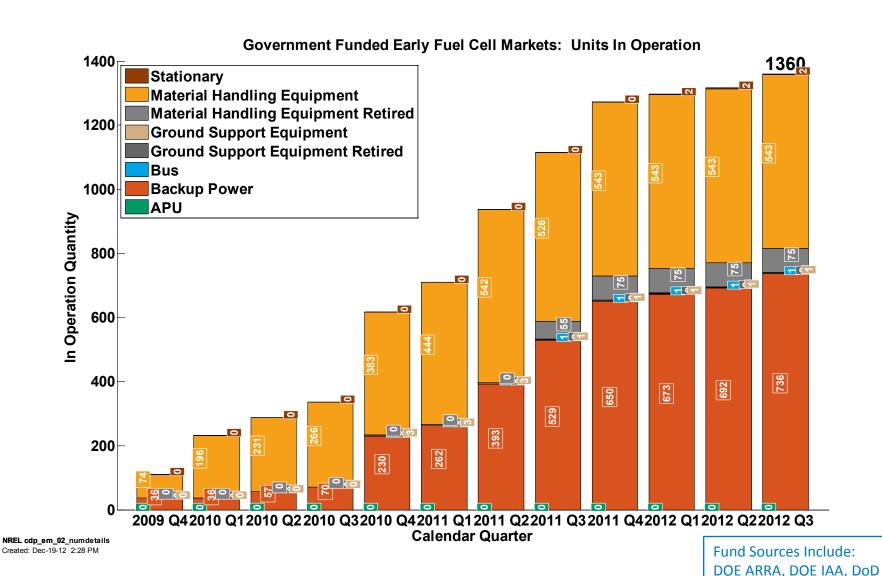
# DOE ARRA & Combined Operation Quantities

**List Quantities - FYI** 

### ARRA Fuel Cell Units in Operation: Current and Projected Quantities

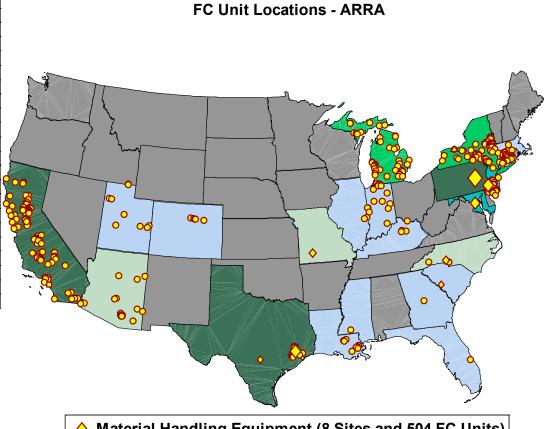


### Government Funded Fuel Cell Units in Operation: Current and Projected Quantities



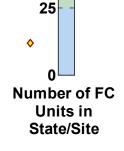
### CDP ARRA#03: Early Fuel Cell Market Deployment **Sites with Numbers**

State	Sites	Units
Arizona	16	42
California	122	268
Colorado	5	12
Connecticut	27	43
Florida	1	3
Georgia	1	10
Illinois	2	2
Indiana	16	25
Kentucky	4	11
Louisiana	8	16
Maryland	1	61
Massachusetts	1	2
Michigan	41	84
Mississippi	1	2
Missouri	1	35
New Jersey	30	62
New York	54	97
North Carolina	3	44
Pennsylvania	2	231
South Carolina	1	25
Texas	20	148
Utah	9	18
Total	366	1241



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- ♦ Material Handling Equipment (8 Sites and 504 FC Units)
- Backup Power (356 Sites and 734 FC Units)
- Stationary (1 Sites and 2 FC Units)
- △ APU (1 Sites and 1 FC Units)



125

100

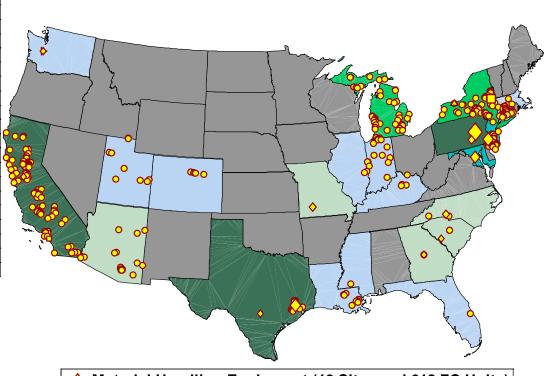
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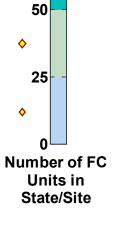
## **Combined Early Fuel Cell Market Deployment Sites**with Numbers

State	Sites	Units
Arizona	16	42
California	125	296
Colorado	5	12
Connecticut	27	43
Florida	1	3
Georgia	3	32
Illinois	2	2
Indiana	16	25
Kentucky	4	11
Louisiana	8	16
Maryland	1	61
Massachusetts	1	2
Michigan	41	84
Mississippi	1	2
Missouri	1	35
New Jersey	30	62
New York	55	97
North Carolina	3	44
Pennsylvania	5	287
South Carolina	4	35
Texas	20	148
Utah	9	18
Washington	2	20
Total	380	1377

#### FC Unit Locations - Early Market Applications



- ♦ Material Handling Equipment (13 Sites and 618 FC Units)
- O Backup Power (361 Sites and 752 FC Units)
- □ Stationary (2 Sites and 2 FC Units)
- △ APU (1 Sites and 1 FC Units)
- **▶** Bus (1 Sites and 1 FC Units)



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