NOTICE & DISCLAIMER

In order to provide greater transparency to the public regarding the expenditure of funds authorized by the American Recovery and Reinvestment Act of 2009, the DOE State Energy Program has posted on its public website the ARRA Formula Grant applications submitted by each grantee state and territory.

These applications provide information about the state offices responsible for administering the funds, as well as an overview of how the funds are to be spent.

PLEASE NOTE: The information contained in this ARRA SEP Formula Grant application document may not reflect the final document as approved by DOE. The posted document is subject to change and may have modifications pending.

OMB Number: 4040-004 Expiration Date: 01/31/2009

APPLICATION FOR FEDERAL ASSISTANCE SF-424 Version 02					
1. Type of Submission: Preapplication Application Changed/Corre	cted Application	2. Type of Application X New Continuation Revision		Revision, select appropriate letter(s) ther (specify):	
3. Date Received 03/23/2009			4. Applicant Ider	ntifier:	
5a. Fed Entity Identifier:			5b. Federal Awa EE00165	ard Identifier:	
State Use Only:			-		
6. Date Received by State	e: 03/12/2009		7. State Applicatio	on Identifier:	
8. APPLICANT INFORMA	ATION:				
a. Legal Name:	State of Ohio				
b. Employer/Taxpayer	r Identification Number (EIN/TIN):		c. Organization	al DUNS:	
d. Address:					
Street 1:	77 S. High Street				
Street 2:	26th Floor				
City:	Columbus				
County:	Franklin				
State:	ОН				
Province:					
Country:	U.S.A.				
Zip / Postal Code:	43216-				
e. Organizational Unit:					
Department Name:			Division Name:		
Department of Develop	oment		Strategic Busines	ss Investment	
f. Name and contact inf	ormation of person to be contacted	on matters involving this	application:		
Prefix:	First Na	me: Sherry			
Middle Name:					
Last Name: Hu	ibbard				
Suffix:					
Title:					
Organizational Affiliati	ion:				
Telephone Number:	(614)466-6797		Fax Number:	(614)466-1864	
Email: sherry.hub	bard@development.ohio.gov				

	Expiration Date: 01/31/2009		
APPLICATION FOR FEDERAL ASSISTANCE SF-424	Version 02		
9. Type of Applicant:			
A State Government (State)			
0. Name of Federal Agency:			
U. S. Department of Energy			
11. Catalog of Federal Domestic Assistance Number:			
81.041			
CFDA Title:			
State Energy Program			
12. Funding Opportunity Number:			
DE-FOA-0000052			
Title:			
13. Competition Identification Number:			
Title:			
14. Areas Affected by Project (Cities, Counties, States, etc.):			
Statewide			
15. Descriptive Title of Applicant's Project:			
State Energy Program - ARRA			

OMB Number: 4040-004
Expiration Date: 01/31/2009

APPLICATION	FOR FEDERAL ASSISTANCE SF-424			Version 02
16.Congressional D	istrict Of:			
a. Applicant:	15	b. Program/Project:	Statewide	
Attach an additiona	list of Program/Project Congressional Districts if needed:			
17. Proposed Projec a. Start Date:	t: 04/01/2009	b. End Date:	03/31/2012	
18. Estimated Fundi	ng (\$):			
a. Federal	96,083,000.00			
b. Applicant	0.00			
c. State	0.00			
d. Local	0.00			
e. Other	0.00			
f. Program Income	0.00			
g. TOTAL	96,083,000.00			
a. This applic b. Program is c. Program is	bject to Review By State Under Executive Order 12372 Proce- ation was made available to the State under the Executive Order subject to E.O. 12372 but has not been selected by the State fo not covered by E.O. 12372	r 12372 Process for review or review.	n:	
20. Is the applicant I	Delinquent On Any Federal Debt? (If "Yes", provide explanation	on)		
herein are true, com comply with any res	pplication, I certify (1) to the statements contained in the list plete and accurate to the best of my knowledge. I also provid ulting terms if I accept an award. I am aware that any false, fic riminal, civil, or administrative penalties. (U.S. Code Title 218	e the required assurances** ctitious, or fraudulent stater	and agree to	
X I AGREE				
** The list of certifica specific instructions.	tions and assurances, or an internet site where you may obtain	this list, is contained in the a	nnouncement or agency	
Authorized Represe	entative:			
Prefix:	Ms. First Name: Candace			
Middle Name:	M. Jones for			
Last Name:	/Mark Barbash,			
Suffix:				
Title:	Interim Director, Department of Development			
Telephone Number:	(614)466-6797	Fax Number:		
Email:				
Signature of Authori	zed Representative: Signed Electronically		Date Signed: 05/07/2009	

Version 02

APPLICATION FOR FEDERAL ASSISTANCE SF-424

Applicant Federal Debt Delinquency Explanation:

The following field should contain an explanation if the Applicant is delinquent on any Federal Debt. Maximum number of characters that can be entered is 4,000. Try and avoid extra spaces and carriage returns to maximize the availability of space.

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Standard Form 424 (Revised 10/2005) Prescribed by OMB Circular A-102



BUDGET EXPLANATION FOR FORMULA GRANTS

Applicant: State of Ohio

Award number: EE00165

Budget period: 04/01/2009 - 03/31/2012

Amendment number: A000

1. <u>PERSONNEL</u> - Prime Applicant only (all other participant costs are listed in 6 below and form DOE F 4600.4, Section B. Line 6.f. Contracts and Sub-Grants).

Positions to be supported under the proposed award and brief description of the duties of professionals:

Position	Description of Duties of Professionals		
Energy Office Chief	Provides policy, guidance, program direction, and administrative oversight		
Asst. Energy Office Chief	Provides financial direction to support staff and assists Office Chief		
Operations Manager	Provides administrative/program operation support		
Energy Public Policy Liaison	Provides analytical assistance and policy guidance to Office Chief		
Energy Outreach Analyst	Provides support to the Energy outreach staff		
Solar Specialist_Vacant	Lead Solar Energy Specialist		
AE Deployment Manager_Vacant	Provides direction to renewable energy deployment staff		
Energy Specialist	Industrial Efficiency Lead		
Energy Specialist	Solar Industrial Lead		
Energy Specialist_Vacant	Renewable Program Developer		
Fiscal Specialist 2	Processes all sub-recipient financial request & Energy Office operating expenses		
Fiscal Specialist 2	Administrative Compliance and desk monitoring of quarterly reports		
Fiscal Specialist 1	Processes all grant documents and inclusions		
Intern	Provides support to deployment & supply chain staff		
Data Base Analyst	Provides financial and grant tracking support		
Administrative Assistance	Provides support to the Energy Office staff		
Energy Outreach Researcher	Provides Energy Research		
Program Specialist	Provides support to workforce and supply chain		
AE Development Manager	Provides direction to outreach & wind and solar development staff		
Fiscal Manager_Vacant	Lead fiscal staff to all support and program staff		
Loan Officer	Provides support to Office Chief with various revolving loan fund models		
Wind Industry Lead	Provides Wind development to Energy Office		

Direct Personnel Compensation:

Position	Salary/Rate	Time	Direct Pay	
Energy Office Chief	\$81,265.60	180 % FT	\$146,278.08	
Asst. Energy Office Chief	\$74,526.40	195 % FT	\$145,326.48	
Operations Manager	\$58,136.00	195 % FT	\$113,365.20	
Energy Public Policy Liaison	\$42,640.00	150 % FT	\$63,960.00	
Energy Outreach Analyst	\$40,539.20	120 % FT	\$48,647.04	
Solar Specialist_Vacant	\$61,817.60	60 % FT	\$37,090.56	
AE Deployment Manager_Vacant	\$71,988.80	105 % FT	\$75,588.24	

Energy Specialist	\$89,960.00	195 % FT	\$175,422.00
Energy Specialist	\$81,827.20	195 % FT	\$159,563.04
Energy Specialist_Vacant	\$60,091.20	195 % FT	\$117,177.84
Fiscal Specialist 2	\$70,803.20	195 % FT	\$138,066.24
Fiscal Specialist 2	\$63,252.80	195 % FT	\$123,342.96
Fiscal Specialist 1	\$49,712.00	195 % FT	\$96,938.40
Intern	\$12.00	1200 hours	\$14,400.00
Data Base Analyst	\$49,154.56	195 % FT	\$95,851.39
Administrative Assistance	\$36,857.60	120 % FT	\$44,229.12
Energy Outreach Researcher	\$62,358.40	60 % FT	\$37,415.04
Program Specialist	\$70,803.20	60 % FT	\$42,481.92
AE Development Manager	\$62,004.80	60 % FT	\$37,202.88
Fiscal Manager_Vacant	\$61,609.60	195 % FT	\$120,138.72
Loan Officer	\$55,182.40	15 % FT	\$8,277.36
Wind Industry Lead	\$92,372.80	60 % FT	\$55,423.68
		Direct Pay Total	\$1,896,186.19

5

2. FRINGE BENEFITS

a. Are the fringe cost rates approved by a Federal Agency? If so, identify the agency and date of latest rate agreement or audit below, and include a copy of the rate agreement.

Fringe benefits for the State of Ohio employees includes medical, dental, and vision; contributions to the Public Employees Retirement Systems (PERS); Workmen's Compensation coverage; and disability coverage. Individual rates vary depending upon the type of insurance coverage chosen by the employee. The calculation for fringe benefits averages about 36% of the total salary. This is the percentage used in preparing this budget.

b. If a above does not apply, indicate the basis for computation of rates, including the types of benefits to be provided, the rate(s) used, and the cost base for each rate. You may provide the information below or provide the calculations as an attachment.

Fringe Benefits Calculations

Position	Direct Pay	Rate	Benefits	
Energy Office Chief	\$146,278.08	36.00 %	\$52,660.11	
Asst. Energy Office Chief	\$145,326.48	36.00 %	\$52,317.53	
Operations Manager	\$113,365.20	36.00 %	\$40,811.47	
Energy Public Policy Liaison	\$63,960.00	36.00 %	\$23,025.60	
Energy Outreach Analyst	\$48,647.04	36.00 %	\$17,512.93	
Solar Specialist_Vacant	\$37,090.56	36.00 %	\$13,352.60	
AE Deployment Manager_Vacant	\$75,588.24	36.00 %	\$27,211.77	
Energy Specialist	\$175,422.00	36.00 %	\$63,151.92	
Energy Specialist	\$159,563.04	36.00 %	\$57,442.69	
Energy Specialist_Vacant	\$117,177.84	36.00 %	\$42,184.02	
Fiscal Specialist 2	\$138,066.24	36.00 %	\$49,703.85	
Fiscal Specialist 2	\$123,342.96	36.00 %	\$44,403.47	
Fiscal Specialist 1	\$96,938.40	36.00 %	\$34,897.82	
Intern	\$14,400.00	0.00 %	\$0.00	
Data Base Analyst	\$95,851.39	36.00 %	\$34,506.50	
Administrative Assistance	\$44,229.12	36.00 %	\$15,922.48	
Energy Outreach Researcher	\$37,415.04	36.00 %	\$13,469.41	

04/12/2010

Program Specialist	\$42,481.92	36.00 %	\$15,293.49
AE Development Manager	\$37,202.88	36.00 %	\$13,393.04
Fiscal Manager_Vacant	\$120,138.72	36.00 %	\$43,249.94
Loan Officer	\$8,277.36	36.00 %	\$2,979.85
Wind Industry Lead	\$55,423.68	36.00 %	\$19,952.52
		Fringe Benefits Total	\$677,443.01

3. <u>TRAVEL</u> - Identify total foreign and domestic travel as separate items.

a. Proposed travel:	Number	Cost Per	Total
Purpose of Trip	of Trips	Trip	
Training and Professional Conferences sponsored by the U. S. Department of Energy, Regional & or National events.	10	\$1,348.00	\$13,480.00
In state monitoring & compliance site visits	120	\$75.00	\$9,000.00
In state stakeholder meetings (Regional Economic Development Directors and other Industry stakeholders)	50	\$75.00	\$3,750.00
International travel to promote Ohio and Midwest as sites for advanced energy development	3	\$3,000.00	\$9,000.00
		Travel Total	\$35,230.00

b. Basis for computation of travel expenses (e.g., current airline quotes, past trips, federal or organization travel policy, etc.):

The basis of computation for travel expense is based on past trips of a similar nature that were sponsored by the DOE. The estimated number of trip would be allocated over a 3 year period

- 4. EQUIPMENT As defined in 10 CFR 660.202. Definitions are at <u>http://www.access.gpo.gov/nara/cfr/waisidx_00/10cf</u>
 - a. Basis of cost estimates (e.g., vendor quotes, prior purchases of similar or like items, etc.):

The basis for the equipment cost estimates will be from vendor quotes and or State Term Contracts.

b. Equipment to be purchased and justification of need:

Equipment	Unit Cost	Number	Total Cost	Justification of Need
Office Copier	\$7,200.00	1	\$7,200.00	The Energy Office has one copier to handle its daily operations. Over the past year, the existing equipment has experienced an increase in down time. The expectation is that the Energy Office will need another copier to prepare for increased grant activity and support documentation. The unit cost is a projected number, actual vendor quotes will be obtained through the IT department.
	Equi	ipment Total	\$7,200.00	

5. MATERIALS AND SUPPLIES - As defined in 10 CFR 660.202.

a. Basis cost estimates (e.g., vendor quotes, prior purchases of like items, etc.):

The general office supply & material cost estimates have been determined from previous operational invoices and historical data. Computer hardware and digital Cameras determined from published price list (State Term Contract various & various office equipment vendors.

b. Supplies to be purchased and justification of need:

General Category	Cost	Justification of Need

04/12/2010

General Office Supplies & Materials	\$1,800.00	published price list for State Term Contract
3 Digital Camera @ 250	\$750.00	vendor quotes to be obtained by IT Department
Up grade - Portable Laptops 7 @ \$ 2,100	\$14,700.00	vendor quotes to be obtained by IT Department
4 Desktop Scanners (\$150)	\$600.00	vendor quotes to be obtained by IT Department
Upgrade Desktop Computers i.e. monitors, keyboards, operating systems	\$7,000.00	vendor quotes to be obtained by IT Department
— Materials and Supplies Total	\$24,850.00	

6. <u>CONTRACTS AND SUBGRANTS</u> - All other participant costs including subcontractor sub-grants, and consultants For ongoing subcontractors and sub recipients described elsewhere in the application, document and item numbe is

Name of Proposed Sub	Total Cost	Basis of Cost*
Other Contractual	\$372,827.00	Competitive Bid
Receptionist	\$174,642.00	Direct calls to appropriate staff and provide program incentives information to exterma; customers
1Contractor Biomass, Biofuel Technologies (\$ 36 per hr., fb,& idc)	\$483,622.00	Energy storage and second generation biomass/biofuel
1 Financial Contract Specialist (\$35 per hr., fb, & idc)	\$470,187.00	New Energy Financing -Revolving Loan
2 Support Staff (\$18 per hr., fb, & idc)	\$483,622.00	assist with desk audit reviews and report requirements
1 Contractor-Measurement & Verification (\$40 per hr., fb, & idc)	\$537,359.00	Competitive Bid
1 Contracting Manager (\$35 per hr., fb, & idc)	\$470,187.00	Performance of overall grant management accountablitiy
Cost identified by market activities in each of the program tab	\$88,500,000.00	
Contract Services for additional staff over a 3 year period :		
1 Outreach Manager (\$30 per hr., fb & idc)	\$403,019.00	Contduct Stakeholder Meetings and mangement of communication
Contracts and Subgrants Total	\$91,895,465.00	

*For example, Competitive, Historical, Quote, Catalog

7. OTHER DIRECT COSTS - All direct costs not included in above categories

a. Basis for cost estimates (e.g., vendor quotes, prior purchase of similar items, etc.):

The basis for the cost estimates have been determined from previous operational invoices, historical data, and published price list.

b. Other direct costs and justification of need:

General Description	Cost	Justification of Need
Information Technology Network Fees	\$2,500.00	historical data
License Renewal	\$1,500.00	historical data
In House & State Printing_Printed Materials	\$9,000.00	historical data
Monthly Telecommunication Charges	\$7,200.00	historical data
Teleconferences & Webinar Cost	\$1,500.00	historical data
Seminar & Registration Fees, i.e. IEDC & Solar Energy, & International Conferences	\$8,500.00	historical data
Record Storage Fees (Interdepartmental)	\$7,000.00	historical data
Pool Car Rental Fee	\$9,000.00	previous invoices

Other Direct Costs Total \$46,200.00

8. INDIRECT COSTS

- Are the indirect cost rates approved by a Federal agency? If so, identify the agency and date of latest rate agreement or audit and provide a copy of the rate agreement.
 National EnergyTechnology Laboratory _ Indirect Cost Neglioation Agreement Fiscal Years 2008 & 2009 Dated March 24, 2008
- b. If the above does not apply, indicate the basis for computation of rates, including the types of benefits to be provided, the rate(s) used, and the cost base for each rate. You may provide the information below or provide the calculations separately.

The name and phone number of the individual responsible for negotiating the State's indirect cost rates. Name: Lynda P. Sudderberg Phone Number: (614)644-6058

Indirect costs calculations:

Indirect Cost Account	Direct Total	Indirect Rate	Total Indirect
Salaries & Fringe	\$2,573,629.00	58.30 %	\$1,500,425.71
		Indirect Costs Total	\$1,500,425.71

DOE F 4600.4 (04-94) Replaces EIA-459C All Other Editions Are Obsolete

U.S. Department of Energy

Federal Assistance Budget Information

OMB Burden Disclosure Statement

Public reporting burden for this collection of information is estimated to average 1.87 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Office of Information Resources Management Policy, Plans and Oversight, Records Management Division, HR-422 - GTN, Paperwork Reduction Project (1910-0400), U.S. Department of Energy, 1000 Independence Avenue, S.W., Washington, DC 20585; and to the Office of Management and Budget (OMB), Paperwork Reduction Project (1910-0400), Washington, DC 20503.

1. Program/Project Ident Amendment number:		EE00165 A000	5	2. Program/Project Title State Energy Program - ARRA		
3. Name and Address	State of Ohio 77 S. High Street				4. Program/Project Start Date	04/01/2009
	Columbus	ОН	43	216-	5. Completion Date	03/31/2012

			SEC	CTIO	N A - BUDGET	SU	MMARY		
Grant Program	Federal		Estimated Unobligated Funds			New or Revised Budget			
Function or Activity (a)	Catalo	leral og No. b)	Federal (c)		Non-Federal (d)		Federal (e)	Non-Federal (f)	Total (g)
1. DOE	81.	041	\$ ().00			\$ 96,083,000.00		\$ 96,083,000.00
2. GRANTEE					\$ 0.0	00		\$ 0.00	\$ 0.00
3.									
4.									
5. TOTALS			\$ (0.00	\$ 0.0	00	\$ 96,083,000.00	\$ 0.00	\$ 96,083,000.00
			SECT	FION	B - BUDGET C	CAT	TEGORIES	· · · · · · · · · · · · · · · · · · ·	
6. Object Class Categori	es			(Grant Program, Fu	nctio	on or Activity		Total
		(1)	DOE	(2)		(3)		(4)	(5)
a. Personnel		9	5 1,896,186.00						\$ 1,896,186.00
b. Fringe Benefits			\$ 677,443.00						\$ 677,443.00
c. Travel			\$ 35,230.00						\$ 35,230.00
d. Equipment			\$ 7,200.00						\$ 7,200.00
e. Supplies			\$ 24,850.00						\$ 24,850.00
f. Contractual		\$	91,895,465.00						\$ 91,895,465.00
g. Construction			\$ 0.00						\$ 0.00
h. Other			\$ 46,200.00						\$ 46,200.00
i. Total Direct Charges		\$ 94,582,574.00							\$ 94,582,574.00
j. Indirect Charges		\$ 1,500,426.00							\$ 1,500,426.00
k. Totals		\$	96,083,000.00						\$ 96,083,000.00
7. Program Income			\$ 0.00						\$ 0.00

DOE F 4600.4 (04-94) Replaces EIA-459C All Other Editions Are Obsolete

U.S. Department of Energy

Federal Assistance Budget Information

OMB Burden Disclosure Statement

Public reporting burden for this collection of information is estimated to average 1.87 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Office of Information Resources Management Policy, Plans and Oversight, Records Management Division, HR-422 - GTN, Paperwork Reduction Project (1910-0400), U.S. Department of Energy, 1000 Independence Avenue, S.W., Washington, DC 20585; and to the Office of Management and Budget (OMB), Paperwork Reduction Project (1910-0400), Washington, DC 20503.

1. Program/Project Identification No. Amendment number:		EE00165 A000	5	2. Program/Project Title State Energy Program - ARRA		
3. Name and Address	State of Ohio				4. Program/Project Start Date	04/01/2009
	77 S. High Street Columbus	ОН	432	216-	5. Completion Date	03/31/2012

Comments:

Administrative Cost are calculated by percentage of time dedicated to program. For budget purposes, each job title identified in the personnel section has been multiplied by 3 to cover 3 year period.

OMB Approval No. 0348-0044

BUDGET INFORMATION - Non-Construction Programs

1. Program/Project Identification No. Amendment number:		EE00165 A000	2. Program/Project Title State Energy Program - ARRA		
3. Name and Address State of Ohio				4. Program/Project Start Date	04/01/2009
	77 S. High Street Columbus	OH	43216-	5. Completion Date	03/31/2012

			SEC	CTIO	N A - BUDGET	SU	MMARY		
Grant Program				Estimated Unobligated Funds			New or Revised Budget		
Function or Activity (a)		eral og No. o)	Federal (c)		Non-Federal (d)		Federal (e)	Non-Federal (f)	Total (g)
1. DOE	81.	041	\$ (0.00			\$ 96,083,000.00		\$ 96,083,000.00
2. GRANTEE					\$ 0.0	00		\$ 0.00	\$ 0.00
3.									
4.									
5. TOTALS			\$ ().00	\$ 0.0	00	\$ 96,083,000.00	\$ 0.00	\$ 96,083,000.00
			SECT	FION	B - BUDGET C	CAT	FEGORIES		
6. Object Class Categorie	s			(Grant Program, Fu	nctio	on or Activity		Total
		(1)	DOE	(2)		(3)		(4)	(5)
a. Personnel		5	\$ 1,896,186.00						\$ 1,896,186.00
b. Fringe Benefits			\$ 677,443.00						\$ 677,443.00
c. Travel			\$ 35,230.00						\$ 35,230.00
d. Equipment			\$ 7,200.00						\$ 7,200.00
e. Supplies			\$ 24,850.00						\$ 24,850.00
f. Contractual		\$	91,895,465.00						\$ 91,895,465.00
g. Construction			\$ 0.00						\$ 0.00
h. Other			\$ 46,200.00						\$ 46,200.00
i. Total Direct Charges			94,582,574.00						\$ 94,582,574.00
j. Indirect Charges								\$ 1,500,426.00	
k. Totals			96,083,000.00						\$ 96,083,000.00
7. Program Income			\$ 0.00						\$ 0.00

BUDGET INFORMATION - Non-Construction Programs

1. Program/Project Identification No. Amendment number:		EE00165 A000	5	2. Program/Project Title State Energy Program - ARRA		
3. Name and Address	State of Ohio				4. Program/Project Start Date	04/01/2009
	77 S. High Street Columbus	ОН	432	216-	5. Completion Date	03/31/2012

Comments:

Administrative Cost are calculated by percentage of time dedicated to program. For budget purposes, each job title identified in the personnel section has been multiplied by 3 to cover 3 year period.

U.S. Department of Energy STATE ENERGY PROGRAM (SEP) NARRATIVE INFORMATION WORKSHEET

OMB: Control No. 1910-5126 Expiration Date: 06/30/08

(Grant Number: EE00165)

Market 7	Title: Banking on New Energy Finance	cing - The Energy Alliance	
1. Marke	t (choose one):		
	Buildings Electric Power and Renewable Ener Energy Education	gy	Industry Policy, Planning and Energy Security Transportation
2. State:	ОН		
3. Progra	m Year: 2009	Date Start: 04/01/2009	Date End: 03/31/2012
4. Topics	s Involved in the Overall Program Mark	et (choose all that apply):	
	AgricultureAlternative FuelsAppliance efficiency and standardsBioenergy and biobased productsBiomass PowerBuilding AmericaCarpools, vanpools, and ridesharing **Clean CitiesClimate change planningCombined heat and powerCommercial buildingsCurriculum developmentDemand reductionDistributed energy generationEnergy and environmentEnergy consumption and pricestatisticsEnergy emergency planning	 Federal Energy Management Program Federal, state and local facilities Financing energy programs Fuel cells General energy efficiency for industry Geothermal Green power programs Heavy vehicles and trucks X Home energy ratings X Hydrogen X Hydrogower X Industrial processing X Industries of the future X Lighting ** Low-income Weatherization X Motors and other industrial systems X Performance contracting Policy and energy legislation 	 Procurement of efficient products ** Public information Rating and labeling Rebuild America Residential buildings Right turn on red ** Schools Schools Solar power State energy strategic plans Telecommuting Thermal ** Traffic signals Transmission and infrastructure reliability Xaste management and recycling Water systems Wind energy
x	ENERGY STAR		

5. Estimated Annual Energy Savings : 0.00 MBtus

6. Description (executive summary of goals and objectives)* :

U.S. Department of Energy STATE ENERGY PROGRAM (SEP) NARRATIVE INFORMATION WORKSHEET

OMB: Control No. 1910-5126 Expiration Date: 06/30/08

(Grant Number: EE00165)

Market Title: Banking on New Energy Financing - The Energy Alliance

Today's tight credit markets impede the many benefits that could be realized through advanced and renewable energy projects. Financing for energy projects would advance several goals: facilitating improvements that yield energy efficiency, re-tooling existing manufacturing operations to supply the renewable energy market, building domestic sources of renewable energy technologies, expanding production in emerging energy companies and retaining and creating jobs associated with each of those opportunities.

Ohio will develop a revolving loan program to improve access to capital for energy efficiency and renewable energy projects through a public-private partnership using SEP dollars in tandem with debt or equity investment participation.. Through an "Energy Alliance" initiative, federal stimulus dollars would serve as match-funding for other sources including banks, non-profits and investors willing to offer debt, equity or low-interest financing for energy projects in the commercial, industrial, institutional and aggregated residential sectors.

The Energy Alliance will be implemented in a cost-effective arrangement through underwriting projects and loan servicing including appropriate mechanisms to proserve SEP funds from unreasonable and ensure adequate reporting and accounting for SEP funds. Accounting and reporting procedures will be rigorous to maintain accountability and transparency for funds as they flow through to projects and return as repayments. Planning and implementation will accommodate lending the 50% revolving loan fund balance within the first eighteen (18) months. Program income will be reported and used consistent with SEP-ARRA requirements.

The Energy Alliance covers the following activities as submitted in Ohio's Initial Application: Financing energy programs (i.e., revolving loan programs for energy efficiency and renewable energy); Funding third party entities to purchase and deploy energy efficiency and/or renewable energy technologies; Market transformation including engaging banks and other public and private partners in energy financing; Performance contracting, and Manufacturing capacity expansion and attraction for energy efficiency and renewable energy products.

Goals: The goals of the "Energy Alliance" are to transform the energy finance landscape in Ohio and to bring greater dollars to energy efficiency and renewable energy projects. Financing would be available for eligible projects submitted to <u>www.recovery.ohio.gov ">http://www.recovery.ohio.gov and otherwise eligible under any SEP activities to (1) increase energy efficiency to reduce energy costs and consumption for consumers, businesses and government; (2) reduce reliance on imported energy; (3) improve the reliability of electricity and fuel supply and the delivery of energy services; or (4) reduce the impacts of energy production and use on the environment."</u>

Objectives: Objectives include to make low interest financing available to leverage non-public funds to build clusters of companies around Ohio's investments in fuel cells, energy storage, solar, wind and other renewable energy technologies, and to expand the availability of financing based on energy savings, for example to smaller commercial entities.

Examples: Examples are loans to companies with innovative, commercially-available fuel cell, energy storage, solar, wind and other renewable products to expand in Ohio and strengthen the industry clusters developing in the Midwest. Financing would be available for eligible projects submitted to <u>www.recovery.ohio.gov www.recovery.ohio.gov for any of the other three SEP activities: Deploying Renewable Energy, Making Efficiency Work, and Targeting Industry Efficiency.</u>

Experience: The Ohio Energy Office administered a linked deposit, revolving loan program from 2001 through March, 2008 and funded sixty-one (61) projects in energy efficiency and renewable energy. Since 2008, when the Ohio Energy Office joined the Strategic Business Investment Division, its administration of the Advanced Energy Fund is participating in the creation of 1001 new jobs and the retention of 1,224 jobs by providing \$ 2,100,000 in Renewable Energy Deployment Incentives. The Advanced Energy Fund is budgeted to continue funding these development projects at \$ 5.0 million through June, 2011.

U.S. Department of Energy STATE ENERGY PROGRAM (SEP) NARRATIVE INFORMATION WORKSHEET

OMB: Control No. 1910-5126 Expiration Date: 06/30/08

(Grant Number: EE00165)

Market Title: Banking on New Energy Financing - The Energy Alliance

7. Program Year Milestones* :

	Milestone	Planned (Number)
1	Identify additional contractual resources needed to support this activity by June 2009	1
2	Post Request for Qualifications for contractual resources in support of the initiative June 2009	1
3	Select and retain contractual resources by August 2009	1
4	Develop profiles of financing opportunities for eligible projects including metrics and methods of performance data collection by July 2009	4
5	Complete applications to collect necessary project information to review projects submitted to www.recovery.ohio.gov and fund those meeting requirements for jobs and leverage by July 2009	1
6	Research potential investment partners and fund characteristics by August 2009	1
7	Develop an RFP for potential partner(s) by Sejptember 2009	1
9	Evaluate partner proposals and select partner by October 2009	1
10	Establish alliance agreement, including method of transfer of funds, repayment schedule to OEO, OEO required documentation, threshold credit criteria for borrowers, etc. by October 2009	1
11	Finalize program guidelines and application materials by November 2009	1
12	Establish criteria and process for continual development project review November 2009	2
13	Notify www.recovery.ohio.gov project submittals of potential financing resources; promote awareness of financing resources by December 2010	1
14	Lend 50 percent of funds within eighteen months of award date.	1

8.Standard metrics (required)**

JOB METRICS	Planned
Job Creation	
Jobs created through Recovery Act funds	
Jobs created	326

9. Specific metric activity (required)**

SPECIFIC METRICS	Planned
Loans and Grants	
Loans given	
Number of loans	40
Total monetary value of loans	30,000,000

10. User specified metrics (optional)*

	METRICS	Planned	
11	. Program Year Funds by Source*		
	a SEP Grant (all funds in the approved hudget)		

 a. SEP Grant (all funds in the approved budget)

 DOE
 \$30,000,000.00

 Market Budget Total
 \$30,000,000.00

U.S. Department of Energy STATE ENERGY PROGRAM (SEP) NARRATIVE INFORMATION WORKSHEET

OMB: Control No. 1910-5126 Expiration Date: 06/30/08

(Grant Number: EE00165)

Market Title: Banking on New Energy Financing - The Energy Alliance

b. Leveraged funds anticipated (outside approved budget) Other

\$30,000,000.00

Market Title:

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(Grant Number: EE00165)

1. Market (choose one):				
 Buildings Electric Power and Renewable Energ Energy Education 		Industry Policy, Planning and Energy Security Transportation		
2. State: OH				
3. Program Year: 2009 Date Start: 04/01/2009 Date End: 03/31/2012				
4. Topics Involved in the Overall Program Marke	et (choose all that apply):			
Image: Section of the section of th	 Federal Energy Management Program Federal, state and local facilities Financing energy programs Fuel cells General energy efficiency for industry Geothermal Green power programs Heavy vehicles and trucks Home energy ratings Hydropower Industrial processing Industries of the future Lighting ** Low-income Weatherization Manufacturing Motors and other industrial systems Performance contracting Policy and energy legislation 	 Procurement of efficient products ** Public information Rating and labeling Rebuild America Residential buildings Right turn on red ** Schools Solar power State energy strategic plans Telecommuting Thermal ** Traffic signals Transmission and infrastructure reliability X aste management and recycling Water systems Wind energy 		

5. Estimated Annual Energy Savings : <u>401,250.00</u> MBtus

6. Description (executive summary of goals and objectives)* :

Deploying Renewable Energy in Ohio

U.S. Department of Energy STATE ENERGY PROGRAM (SEP) NARRATIVE INFORMATION WORKSHEET

OMB: Control No. 1910-5126 Expiration Date: 06/30/08

(Grant Number: EE00165)

Market Title: Deploying Renewable Energy in Ohio

This three-pronged program utilizes renewable energy sources including solar, wind, biomass waste, and deploys related technologies plus fuel cells and energy storage for electricity, heat, biofuel and bioproducts.

1-Renewing Manufacturing Through Deployment

Ohio's manufacturing prowess has brought prosperity to generations of Americans. Today, a number of its manufacturing, steel, glass and other industries that supplied the automotive and durable goods markets, are retooling to supply the growing markets for wind, solar and other renewable energy technologies important for the conversion to lower carbon power technologies. This program creates a market for their products and covers these activities as submitted in Ohio's Initial Application: Procurement of renewables, Solar power and Wind energy, Energy storage, Fuel cells,. Brownfields to solar fields, Demand reduction, Distributed energy generation.

Goals: The goals are to fund deployment projects that propel Ohio forward in the solar and wind power industries and strengthen its renewable energy industry.

Objectives: Objectives are to leverage existing public (government and educational including public and private colleges) investments and facilities to deploy significant solar, wind, energy storage, fuel cell and other renewable energy projects and to demonstrate a market in Ohio to support existing and emerging Ohio wind, solar, fuel cell and energy storage manufacturers and attract investment from across the nation and globe to expand and produce in Ohio.

Examples: Examples are grants to companies for purchasing and installing wind turbines, solar panels, for replacing fossil-fuel powered equipment with fuel cell powered equipment, for installing large scale wind turbines for communities or commercial campuses, and for installing solar thermal systems for domestic hot water for retirement communities, hospitals or other institutions.

Experience: The Ohio Energy Office has been providing grants for renewable energy deployment projects since 2004 and renewable energy development projects since 2008 through the Advanced Energy Fund. In program year 2008, the Advanced Energy Fund awarded grants for 960.8kW of commercial and residential solar and wind projects and awarded grants for 14.95 MW of utility scale wind capacity currently under development. The Advanced Energy Fund is budgeted to continue funding renewable deployment projects at \$ 8.5 million through June, 2011.

2-Transforming Waste to Value

Ohio is transforming its economy to recapture the value from what have traditionally been waste Research conducted by the Biomass Task Force in 2004 suggested that sufficient biomass resources were available for Ohio to capture significant energy from waste. However, limited resources have been available to explore this energy source. This initiative will support the development of a variety of technologies to determine the greatest market opportunities in food waste, farm waste or municipal solid waste and sludge. This initiative will add these activities as submitted in Ohio's Initial Application: Biomass Power, and Waste management and recycling.

Goals: The goals are to convert municipal solid wastes, and food and farm wastes to electricity, heat, fuel and/or bio-products and to create jobs by building market demand for Ohio manufacturers and distributors of biodigester components.

Objectives: The objectives are to create a portfolio of Ohio anaerobic digester projects around the state to build technical expertise and to encourage the creation of a waste to energy industry in the State of Ohio, to reduce regulatory and market barriers to anaerobic digester technology adoption, and to raise public awareness about the benefits of waste to energy technologies.

U.S. Department of Energy STATE ENERGY PROGRAM (SEP) NARRATIVE INFORMATION WORKSHEET

OMB: Control No. 1910-5126 Expiration Date: 06/30/08

(Grant Number: EE00165)

Market Title: Deploying Renewable Energy in Ohio

Examples: Examples are grants to projects for installing anaerobic digesters to convert food waste, animal manure and/or municipal solid waste to methane to generate power and to create conditioned methane gas, and for installing gasification equipment to create bio-based products such as char for soil amendments.

Experience: This initiative expands upon the State's pilot Biomass Waste to Energy competitive grant program currently accepting applications to the Advanced Energy Fund. Of interest to the Waste to Value activity are also two pilot project biodigester activities deployed through Ohio Third Frontier funding, The first activity is based upon a \$1.5 million grant to The Ohio State University's Ohio Agricultural Research & Development Center (OARDC) to develop a scalable modular anaerobic digester system optimized to use renewable mixed biomass to produce methane-biogas for powering fuel cells to generate electricity. Partners on this project include Rockwell Automation as well as younger tech-based companies. The second activity is leveraged from the \$1.5mm grant, in partnership with Ohio Third Frontier, OARDC, Ohio BioProducts Innovation Center, and Schmack BioEnergy. This project is a pilot-scale digester which is generating real-time data on biogas generation. Schmack's technology recycles organic wastes to product biogas that can be converted to pipeline quality natural gas, motor vehicle fuel, electricity, soil amendments, and fertilizer. Since these technologies are proven at the pilot project level, it is Ohio's plan to further fund market sustainable deployment of these digesters. Ohio has been internationally recognized as a leader in technology-based economic development activities which drives development of projects between cutting-edge research facilities in Ohio with key industry partners who can take the prototypes to market.

3-Advancing Biofuels Beyond the Basics

The biofuels industry in the U.S. and elsewhere has encountered opposition to the energy intensity and the water intensity of its first generation production processes. This initiative seeks to assist facilities that are making progress towards second-generation refining - breaking down cellulosic materials found in crop waste and energy crops grown and harvested using an ecological systems approach. Advancement will occur through an incremental process requiring investments to improve existing processes to retain jobs and build a knowledgeable and skilled workforce. This initiative will add these activities as submitted in Ohio's Initial Application: Alternative Fuels, Bioenergy and bio-based products, and Innovation for commercialization.

Goals: The goals are to expand and improve upon the viability of Ohio's ethanol refining capacity by assisting in progress towards second generation refining, and to increase the availability ethanol and biodiesel refined from algae.

Objectives: The objectives are to improve the sustainability of ethanol bio-refining processes and to accelerate the production of biodiesel from algae.

Examples: Examples are grants for implementing corn feedstock fractionation improvements in existing biorefineries, for piloting a cellulosic ethanol biorefinery, and for increasing algal biodiesel production for use in commercial applications.

Experience: The Ohio Energy Office provides incentives to increase the retail availability of biofuels. The Alternative Fuels Transportation Grant Program has awarded \$ 882,500 in thirty-two (32) grants for E85 and B20 distribution facilities and twenty-four (24) grants totaling \$193,000 to public school fleets for the incremental costs of purchasing biodiesel B20.

U.S. Department of Energy STATE ENERGY PROGRAM (SEP) NARRATIVE INFORMATION WORKSHEET

OMB: Control No. 1910-5126 Expiration Date: 06/30/08

(Grant Number: EE00165)

Market Title: Deploying Renewable Energy in Ohio

7. Program Year Milestones* :

Milestone		Planned (Number)
1 Finalize applications and scoring criteria reflective of SEP-ARRA goals	s by June 2009	1
2 Complete applications to collect necessary information to review project www.recovery.ohio.gov and fund those meeting requirements for jobs, gas reductions, time to completion and leverage by June 2009.		1
3 Notify project submittals of applications, guidelines and deadlines. NOT freeze date on website submittals for internal purposes, but new submitt potential second July 2009		2
4 Identify and retain additional Contract Management resources needed t	to support this activity by August 2009	1
5 Log and score first round of applications with interagency team by Aug	ust 2009	1
6 Award eligible projects from first round September 2009		1
7 Install X megawatts of solar and wind in geographically diverse areas o	f the state by December 2010	160
9 Work with OEPA and ODA to monitor Waste to Value projects as they permitting process to identify barriers and best practices by april 2010	move through the regulatory and	7
10 Identify technical resources within Ohio Department of Agriculture to a projects for the Advancing Beyond Basic Biofuels project by Septembe	r 2009	7
11 Increase the number of municipal solid waste digesters to X by Decemb	per 2010	3
12 Increase the number of farm waste anaerobic digesters by X by Decemb	per 2010	4
 13 If needed complete RFP for Waste to Value project to use existing data from OSU studies to map potentially economically viable food/farm waste project locations and identify locations with maximum opportunity by December 2009 		1
14 Pilot a food and farm waste anaerobic digester by 3/15/10 by May 2010)	1
15 Calculate generation of useful heat/fuel/electricity from Waste to Value	projects funded by December 2010	1
16 Calculate waste management benefits from Waste to Value projects by	December 2010	1
17 Conduct outreach events through Regional Economic Development Net funds available for eligible projects by January 2010	twork to raise awareness of remaining	11
18 Log and score and award second round of applications for deployment p	projects, if necessary by March 2010	1
20 Monitor via site visits and data collection results of each project by Oct	tober 2010	80
22 State outreach to promote awareness of projects deployed by December	2010	5
23 International outreach to promote awareness of Ohio as an expansion si through Deployment December 2010		3
24 Regional outreach for technical transfer and peer review September 201	0	1

8.Standard metrics (required)**

JOB METRICS	Planned
Job Creation	
Jobs created through Recovery Act funds	
Jobs created	381

9. Specific metric activity (required)**

U.S. Department of Energy STATE ENERGY PROGRAM (SEP) NARRATIVE INFORMATION WORKSHEET

OMB: Control No. 1910-5126 Expiration Date: 06/30/08

(Grant Number: EE00165)

Market Title: Deploying Renewable Energy in Ohio

SPECIFIC METRICS	Planned
Renewable Energy Market Development	
Solar thermal systems installed	
Number of systems installed	0
Total capacity of systems installed	0
Renewable Energy Market Development	
Solar energy systems installed	
Number of systems installed	38
Total capacity of systems installed	1,880
Renewable Energy Market Development	
Wind energy systems installed	
Number of systems installed	14
Total capacity of systems installed	2,000
Renewable Energy Market Development	
Other systems installed (kilowatts)	
Number of systems installed	8
Total capacity of systems installed	1,000

10. User specified metrics (optional)*

METRICS	Planned

11. Program Year Funds by Source*

a. SEP Grant (all funds in the approved budget)		
DOE	\$42,583,000.00	
Market Budget Total	\$42,583,000.00	
b. Leveraged funds anticipated (outside approved budget)		
Other	\$35,000,000.00	

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OMB: Control No. 1910-5126 Expiration Date: 06/30/08

(Grant Number: EE00165)

IndustryPolicy, Planning and Energy Security
Transportation
Date Start: 04/01/2009 Date End: 03/31/2012
all that apply):
I Energy Management Program X Procurement of efficient products ** I, state and local facilities Public information ing energy programs Rating and labeling ells Rebuild America al energy efficiency for industry Residential buildings grmal Right turn on red ** power programs Schools vehicles and trucks Solar power gen Telecommuting power X tial processing Traffic signals ries of the future Transmission and infrastructure reliability Vaste management and recycling acturing Water systems and other industrial systems Wind energy and energy legislation Wind energy

5. Estimated Annual Energy Savings : 131,250.00 MBtus

6. Description (executive summary of goals and objectives)* :

U.S. Department of Energy STATE ENERGY PROGRAM (SEP) NARRATIVE INFORMATION WORKSHEET

OMB: Control No. 1910-5126 Expiration Date: 06/30/08

(Grant Number: EE00165)

Market Title: Making Efficiency Work

Ohio's existing buildings and new construction present significant opportunities for reduction in energy waste through energy audits, lighting retrofits, heating ventilation and air conditioning retrofits, geothermal installations, deployment of green building techniques and technologies and improvements to building envelopes through air sealing and insulation. This initiative covers these activities as submitted in Ohio's Initial Application: Demand reduction, Energy building codes, Geothermal, Lighting, and Thermal efficiency for commercial and residential sectors.

Goals: Goals for "Making Efficiency Work" will be to engage Ohio manufacturers, retailers, builders, contractors, institutions and energy savings companies in the work of measurably improving the efficiency of Ohio's new and existing building stock.

Objectives: Objectives include to build partnerships with the building and contractor industries, to conduct pilots of above-code new commercial and residential construction, and to incentivize the participation of entrepreneurial and minority-based enterprises in the jobs created through this initiative.

Examples: Examples are grants for commercial and residential building retrofits. for installing geothermal for multi-family new construction, schools and colleges to undertake innovative pilot projects with long-term sustainability or substantial alternative energy generation components, for working with manufacturers to develop rebate programs, and for residential efficiency retrofit programs that engage builders and contractors in improving existing housing stock, training programs for builders on new construction, and collaborations between code officials, builders and policymakers to further Ohio's energy efficient building codes adoption.

Experience: This initiative builds upon builder training programs co-sponsored with rural electric cooperatives, the multi-year home performance builder training program through a grant with Cuyahoga Community College, and a pilot Energy Star/Solar Model home program funded by the Advanced Energy Fund in 2007.

OMB: Control No. 1910-5126 Expiration Date: 06/30/08

(Grant Number: EE00165)

Market Title: Making Efficiency Work

	Milestone		
1	Convene exploratory meeting with representatives from building industry and commercial stakeholders by July 2009		
2	Identify manufacturers and distributors to increase the market penetration of efficiency products by August 2009		
3	Complete applications to collect necessary information to review projects submitted to www.recovery.ohio.gov and fund those meeting requirements for jobs, energy savings/generated, greenhouse gas reductions, time to completion and leverage by August 2009		
4	Develop and implement methods for selecting, recommending or referring projects to builders, contractors, consultants and distributors by August 2009		
6	Notify www.recovery.ohio.gov project submittals of applications, guidelines and deadlines; log and score first round by August 2009		
7	Award eligible projects from first round by September 2009		
8	Issue grant agreements by October 2009		
9	Complete first round of projects by June 2010	1	
10	Conduct inspections of projects by July 2010	1	
11	Convene stakeholder meetings including industry representatives to assess impact of first round of projects and to determine next steps by July 2010		
12	If warranted, conduct outreach events through appropriate channels and partners to promote awareness of remaining funding by October 2009		
13	If applicable, log and score and award second round of applications for efficiency projects by January 2010		
17	Regional outreach for technical transfer and peer review by September 2010		

8.Standard metrics (required)**

	JOB METRICS	Planned
Job Creation		
Jobs created through Recovery Act funds		
Jobs created		109

9. Specific metric activity (required)**

SPECIFIC METRICS	Planned
Building Retrofits	
Buildings retrofitted, by sector	
Buildings retrofitted (Other)	75
Square footage retrofitted (Other)	10,560,000

10. User specified metrics (optional)*

METRICS

Planned

11. Program Year Funds by Source*

U.S. Department of Energy STATE ENERGY PROGRAM (SEP) NARRATIVE INFORMATION WORKSHEET

OMB: Control No. 1910-5126 Expiration Date: 06/30/08

(Grant Number: EE00165)

Market Title: Making Efficiency Work

a. SEP Grant (all funds in the approved budget)	
DOE	\$8,000,000.00
Market Budget Total	\$8,000,000.00
b. Leveraged funds anticipated (outside approved budget)	
Other	\$8,000,000.00

U.S. Department of Energy STATE ENERGY PROGRAM (SEP) NARRATIVE INFORMATION WORKSHEET

OMB: Control No. 1910-5126 Expiration Date: 06/30/08

(Grant Number: EE00165)

larket Title: Setting the Stage for Ohio's Carbon Management Strategy				
1. Market (choose one):	Market (choose one):			
 Buildings Electric Power and Renewable Ener Energy Education 	gy Industry gy Image: Security main transportation Transportation			
2. State: OH				
3. Program Year: 2009	Date Start: 04/01/2009 Date End: 03/31/2012			
4. Topics Involved in the Overall Program Mark	et (choose all that apply):			
Agriculture Alternative Fuels Appliance efficiency and standards Bioenergy and biobased products Biomass Power Building America Carpools, vanpools, and ridesharing ** Clean Cities X Combined heat and power Commercial buildings Curriculum development Demand reduction Distributed energy generation X Energy and environment X Energy consumption and price statistics Energy emergency planning ENERGY STAR	Federal Energy Management ProgramProcurement of efficient products **Federal, state and local facilitiesPublic informationFinancing energy programsRating and labelingFuel cellsRebuild AmericaGeothermalRight turn on red **Green power programsSchoolsHeavy vehicles and trucksState energy strategic plansHydrogenTelecommutingHydropowerTraffic signalsIndustrial processingTraffic signalsLighting **Transportation alternativesManufacturingWaste management and recyclingMotors and other industrial systemsWater systemsPerformance contractingWind energyYolicy and energy legislationWind energy			

5. Estimated Annual Energy Savings : 0.00 MBtus

6. Description (executive summary of goals and objectives)* :

U.S. Department of Energy STATE ENERGY PROGRAM (SEP) NARRATIVE INFORMATION WORKSHEET

OMB: Control No. 1910-5126 Expiration Date: 06/30/08

(Grant Number: EE00165)

Market Title: Setting the Stage for Ohio's Carbon Management Strategy

Ohio's energy policy made giant strides forward from the start of the current administration with the issuance in February 2007 of Executive Order 2007-02s which called for the creation of the position of Energy Advisor to the Governor, the convening of cabinet level representatives to an energy policy formulation effort, and the requirements for reducing energy usage 15% in all state facilities by 2011 and increasing biofuels use in the state fleet (an endeavor that just received national recognition). Further progress was made with the 2008 bipartisan passage of the Jobs, Energy and Progress Act (Senate Bill 221) which, among other policy changes instituted both an Energy Efficiency Standard of 22% by 2025 and an Advanced Energy Portfolio Standard of 25% by 2025, half of that to be renewable energy and half to be generation delivered within the state. Ohio is the fifth largest user of energy in the nation, and more than 80% of the electricity generated comes from coal.

This initiative will utilize an integrated collaborative planning process to address energy policy related to energy diversity, sustainability and innovative policies to help secure a reliable energy future, led by the Governor's Energy Advisor. Other components of the strategy will build on climate change planning, Energy use and modeling, Policy and energy legislation. The Ohio Energy Office, OAQDA and PUCO will actively support this effort. The strategy development will be based upon a thorough review of best practices, appropriate modeling and outreach to stakeholders across Ohio, the Great Lakes region and the nation. This initiative will develop an energy strategy for the next five to ten years that will assess the opportunities and risks for Ohio's economy around key energy issues including carbon policy and market options. It will cover the following activities as submitted in Ohio's Initial Application: Climate change planning, Energy use and modeling, Policy and energy legislation.

Goals: The goal of this initiative are to develop an integrated energy and carbon strategy for the state that integrates with the region and the nation's planning over a five to ten year planning horizon.

Objectives: Objectives are to identify industries and businesses that are at risk under varying carbon regimens, to assess the economic impacts, and to develop scenarios from best to worst case that provide policy guidance for economic development over the planning horizon.

Examples: Examples are grants or contracts to for-profit or non-profit entities to develop strategy.

Experience: This initiative will build upon previous investments in energy policy including modeling through MARKAL to assess the impacts of carbon management and the Market Transformation work being done by ODOD, PUCO and ODOD. Further, the OAQDA participates in the Midwest Governor's Climate Change Initiative and the National Governor's Association.

U.S. Department of Energy STATE ENERGY PROGRAM (SEP) NARRATIVE INFORMATION WORKSHEET

OMB: Control No. 1910-5126 Expiration Date: 06/30/08

(Grant Number: EE00165)

Market Title: Setting the Stage for Ohio's Carbon Management Strategy

7. Program Year Milestones* :

	Milestone	Planned (Number)
1	Develop RFP or consider OAQDA as sole source to be funded through SEP-ARRA to develop this initiative and strategy by September 2009	1
2	Complete applications to collect necessary information to review projects submitted to www.recovery.ohio.gov by September 2009	1
3	Execute agreement by December 2009	1
4	Conduct industry stakeholder meetings by February 2010	6
5	Review modeling tools and resources by February 2010	3
9	Report on outcomes to ODOD, legislature, administration by December 2010	3
10	Develop carbon management recommendations by December 2010	1
14	Select a contractor by November 2009	1
15	Conduct interagency stakeholder meetings by January 2010	12

8.Standard metrics (required)**

Planned
5

9. Specific metric activity (required)**

SPECIFIC METRICS	Planned
Clean Energy Policy	
Other policies developed or improved	
Policies developed	1
Policies improved	1

10. User specified metrics (optional)*

METRICS	Planned

11. Program Year Funds by Source*

a. SEP Grant (all funds in the approved budget)	
DOE	\$500,000.00
Market Budget Total	\$500,000.00
b. Leveraged funds anticipated (outside approved budget)	

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(Grant Number: EE00165)

Market Title: Targeting Industry Efficiency				
1. Market (choose one):	. Market (choose one):			
 Buildings Electric Power and Renewable Ener Energy Education 	x Industry gy Policy, Planning and Energy Security Transportation			
2. State: OH				
 Program Year: 2009 Topics Involved in the Overall Program Marl 	Date Start: 04/01/2009 Date End: 03/31/2012 set (choose all that apply):			
Agriculture Alternative Fuels Appliance efficiency and standards Bioenergy and biobased products Biomass Power Building America Carpools, vanpools, and ridesharing ** Clean Cities X Climate change planning X Combined heat and power X Commercial buildings Curriculum development X Demand reduction X Distributed energy generation X Energy and environment Energy building codes Energy consumption and price statistics Energy emergency planning ENERGY STAR	Federal Energy Management Program Procurement of efficient products ** Federal, state and local facilities Public information Financing energy programs Rating and labeling Fuel cells Rebuild America & General energy efficiency for industry Residential buildings Gethermal Right turn on red ** Green power programs Schools Heavy vehicles and trucks Solar power Home energy ratings State energy strategic plans Hydrogen Telecommuting Hydropower Thermal ** Industrial processing Traffic signals Industries of the future Transmission and infrastructure reliability Low-income Weatherization Transportation alternatives Manufacturing Water systems Performance contracting Wind energy Policy and energy legislation Wind energy			

5. Estimated Annual Energy Savings : 252,500.00 MBtus

6. Description (executive summary of goals and objectives)* :

U.S. Department of Energy STATE ENERGY PROGRAM (SEP) NARRATIVE INFORMATION WORKSHEET

OMB: Control No. 1910-5126 Expiration Date: 06/30/08

(Grant Number: EE00165)

Market Title: Targeting Industry Efficiency

According to DOE statistics, industrial energy usage, at 33%, accounts for the largest share of Ohio's energy use. Industrial energy efficiency improvement activities are shovel ready in that many projects have been engineered and employees will not need to be retrained. Source energy savings and green house gas emission reductions are typically among the most cost effective of efficiency measures.

The equipment and installation requirements of the industrial market for energy efficiency improvements will have an immediate stimulating effect on the economy as the fabrication and installation will require immediate spending by engineering companies, parts manufacturing, equipment fabricating companies, equipment vendors and installation companies.

The passage of Ohio's electric restructuring bill in 2008 (S.B. 221) provides Ohio's investor owned utilities the ability to recover the cost of investing in energy efficiency projects in order to meet the mandated efficiency standards. These utility investments will create two opportunities for this initiative. First, improving the efficiency of industries that create high greenhouse gas or criteria pollutant emissions in non-attainment areas while developing carbon management plans will improve both the environmental quality of the surrounding communities and provide much needed information about the actual costs of various carbon reduction tactics.

Second, improving the efficiency of those industries targeted in the State's economic development strategic plan will improve Ohio's core economic sustainability. This initiative will incentivize efficiency investments for companies not otherwise served by utility efficiency programs in these targeted industries: Advanced Energy and Environmental Technologies; Aerospace and Aviation; Agriculture and Food Processing; Bioscience and Bio-products; Refrigerated Warehousing and Distribution; Instruments, Controls, and Electronics; Motor Vehicle and Parts Manufacturing; and Polymers and Advanced Materials. This initiative covers the following activities as submitted in Ohio's Initial Application: Combined heat and power, Demand reduction, Distributed energy generation, Industrial assessments for carbon mitigation opportunities, Industrial processing, Industries of the future, and Motors and other industrial systems.

Goals: The goals of the "Targeting Industry Efficiency" are to reduce energy use, reduce greenhouse gases and criteria pollutant emissions, and to assess the economics of carbon reduction activities in the industrial sector.

Objectives: Objectives are to improve the sustainability of Ohio's industry, reduce greenhouse gas and other criteria pollutant emissions in non-attainment areas, and to build expertise and awareness in industrial carbon management projects.

Examples: Examples are grants to companies for replacement of inefficient process equipment with higher efficiency equipment, and installation of cogeneration equipment to capture waste heat and generate electricity in grid-connected applications, efficiency planning and technical assessments, carbon assessment of industrial efficiency measures,

Experience: This initiative would expand upon the Advanced Energy Fund Manufacturing Efficiency program to benefit more manufacturers. To date \$ 1.3 million has been awarded to thirty-five (35) industrial efficiency projects to save more than 218,354 MMBtu. In program year 2008, \$722,767 was awarded for forty-seven assessments and 14 implementation projects. The Advanced Energy Fund is budgeted to continue funding industrial efficiency projects at \$ 2.5 million through June, 2011.

U.S. Department of Energy STATE ENERGY PROGRAM (SEP) NARRATIVE INFORMATION WORKSHEET

OMB: Control No. 1910-5126 Expiration Date: 06/30/08

(Grant Number: EE00165)

Market Title: Targeting Industry Efficiency

	Milestone	Planned (Number)
1	Finalize applications and scoring criteria reflective of SEP-ARRA goals by June 2009	1
2	Complete applications to collect necessary information to review projects submitted to www.recovery.ohio.gov and fund those meeting requirements for jobs, energy savings/generated, greenhouse gas reductions, time to completion and leverage June 2009	1
3	Notify project submittals of applications, guidelines and deadlines. NOTE: Initial funding request will trigger freeze date on website submittals for internal purposes, but new submittals will again be collected for potential second by July 2009	2
4	Log and score first round of applications with interagency team by august 2009	1
5	Award eligible projects from first round -awards will include funding for deployment, equipment installation, diagnostic, planning and technical assessments by September 2009	1
6	Complete diagnostics, planning and technical assessments and implement over a six to nine month period by June 2010	45
7	Calculate source energy savings based on measures and E-grid data estimates by July 2010	45
8	Calculate carbon emission and other criteria pollutants reduction estimates from energy use reduction by July 2010	45
9	If needed convene stakeholder meetings including industry representatives and technical assistance to determine need for additional funding, and if so, identify strategy and tactics for continued funding by September 2009	1
10	If warranted, conduct outreach events through Regional Economic Development Network to solicit additional applications of eligible projects by October 2009	5
11	If applicable, log and score and award second round of applications for industrial efficiency projects by January 2010	1
13	Monitor via site visits and data collection of actual energy saved and emissions reduced from each project by December 2010	25
_		

8.Standard metrics (required)**

15

Planned
217

9. Specific metric activity (required)**

SPECIFIC METRICS	Planned
Industrial Process Efficiency	
Reduction in natural gas consumption	
Reduction in natural gas consumption	1,263
Industrial Process Efficiency	
Reduction in electricity consumption	
Reduction in electricity consumption	10,654

1

Regional outreach for technical transfer and peer review by December 2010

OMB: Control No. 1910-5126

Expiration Date: 06/30/08

U.S. Department of Energy STATE ENERGY PROGRAM (SEP) NARRATIVE INFORMATION WORKSHEET

(Grant Number: EE00165)

Market Title: Targeting Industry Efficiency

10. User specified metrics (optional)*

METRICS

Planned

11. Program Year Funds by Source*

a. SEP Grant (all funds in the approved budget)	
DOE	\$15,000,000.00
Market Budget Total	\$15,000,000.00
b. Leveraged funds anticipated (outside approved budget)	
Other	\$15,000,000.00

*Please use additional pages if more space is needed. **Mandatory requirement

State Plan - Master File Worksheet

State: Program Year:

This worksheet should be completed as specified in Section III of the State Energy Program Application Package.

1. Description of State Energy Goals to be achieved (10CFR 420.13.b.2)

2. Selection of State Goals (10CFR 420.13.b.2.ii)

- 3. Measuring Achievements (10CFR 420.13.b.2.iii)
- 4. State Strategy (10CFR 420.13.b.2.iv)
- 5. 10% energy efficiency improvement by 2000 (10 CFR 420.13.b.3)
- 5. 25% or more improvement in the efficiency of use of energy by 2012 (1990 baseline)
- 6. Mandatory Activities (10CFR 420.13.b.4.v and 15)
- 7. Environmental Impact (10CFR 420.13.b.5)
- 8. Supplementing Weatherization (10CFR 420.13.b.6)
- 9. Supplementing State/Local Funds (10CFR 420.13.b.7)
- 10. Compliance with Laws and Regulations (10CFR 420.13.b.8)
- 11. Energy Emergency Plan (10CFR 420.13.b.9)
- 12. Monitoring Approach (Annual SEP Guidance)