

V(A). Planned Program (Summary)

Program # 3

1. Name of the Planned Program

Sustainable Energy

Reporting on this Program

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
206	Basic Plant Biology	0%		25%	
402	Engineering Systems and Equipment	55%		35%	
403	Waste Disposal, Recycling, and Reuse	45%		40%	
	Total	100%		100%	

V(C). Planned Program (Inputs)

1. Actual amount of FTE/SYs expended this Program

Year: 2012	Extension		Research	
	1862	1890	1862	1890
Plan	1.0	0.0	0.7	0.0
Actual Paid Professional	0.2	0.0	1.8	0.0
Actual Volunteer	0.0	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
3293	0	157416	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
3293	0	157948	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	206747	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

1. Conduct research into alternative biofuels and methods of production that are well-suited for the Intermountain West.
2. Publish in peer-reviewed journals and other professional outlets.
3. Take the research that is done and adapt that research so useful practical strategies might be followed in producer biofuels to the extent that it can be shown to be beneficial in terms of benefits and costs.

2. Brief description of the target audience

For experiment station faculty their target audiences are geared primarily towards extension specialists, county agents, and other scientists; the specialists' audiences include peers, county agents, federal and state organizations, producer groups, state and local government, and the general public. County agents work cooperatively with federal, state, and local governments, citizen groups, and the public to address sustainable energy issues in their areas.

3. How was eXtension used?

There is a link to eXtension's "Ask an Expert" feature from the USU Extension webpage

V(E). Planned Program (Outputs)

1. Standard output measures

2012	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Actual	144	494	14	48

2. Number of Patent Applications Submitted (Standard Research Output)

Patent Applications Submitted

Year: 2012
 Actual: 0

Patents listed

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2012	Extension	Research	Total
Actual	0	6	0

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Number of Graduate Students/Post Docs Trained

Year	Actual
2012	5

Output #2

Output Measure

- Contract/Grant Dollars Generated

Year	Actual
2012	191054

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

O. No.	OUTCOME NAME
1	Number of clientele gaining sustainable energy knowledge
2	Number of clientele who implement sustainable energy practices

Outcome #1

1. Outcome Measures

Number of clientele gaining sustainable energy knowledge

2. Associated Institution Types

- 1862 Extension
- 1862 Research

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	220

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
206	Basic Plant Biology
402	Engineering Systems and Equipment
403	Waste Disposal, Recycling, and Reuse

Outcome #2

1. Outcome Measures

Number of clientele who implement sustainable energy practices

2. Associated Institution Types

- 1862 Extension
- 1862 Research

3a. Outcome Type:

Change in Knowledge Outcome Measure

3b. Quantitative Outcome

Year	Actual
2012	130

3c. Qualitative Outcome or Impact Statement

Issue (Who cares and Why)

What has been done

Results

4. Associated Knowledge Areas

KA Code	Knowledge Area
206	Basic Plant Biology
402	Engineering Systems and Equipment
403	Waste Disposal, Recycling, and Reuse

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Appropriations changes
- Public Policy changes
- Government Regulations
- Competing Public priorities
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)

Brief Explanation

Everyone of the above checked factors have had a negative impact on this program area!

V(I). Planned Program (Evaluation Studies)

Evaluation Results

Many of the programs offered through Extension have participant self evaluations where results are used to document impacts. Evaluations of some extension programs falling under Sustainable Energy include the Induced Bed Reactor and alternative crop production.

Key Items of Evaluation