

V(A). Planned Program (Summary)

Program # 7

1. Name of the Planned Program

Sustainable Energy

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
104	Protect Soil from Harmful Effects of Natural Elements	0%		1%	
111	Conservation and Efficient Use of Water	0%		2%	
123	Management and Sustainability of Forest Resources	0%		1%	
131	Alternative Uses of Land	0%		1%	
133	Pollution Prevention and Mitigation	0%		4%	
201	Plant Genome, Genetics, and Genetic Mechanisms	0%		38%	
203	Plant Biological Efficiency and Abiotic Stresses Affecting Plants	0%		3%	
204	Plant Product Quality and Utility (Preharvest)	0%		2%	
205	Plant Management Systems	0%		3%	
206	Basic Plant Biology	0%		6%	
211	Insects, Mites, and Other Arthropods Affecting Plants	0%		2%	
212	Pathogens and Nematodes Affecting Plants	0%		3%	
302	Nutrient Utilization in Animals	0%		1%	
305	Animal Physiological Processes	0%		3%	
402	Engineering Systems and Equipment	0%		3%	
403	Waste Disposal, Recycling, and Reuse	0%		1%	
404	Instrumentation and Control Systems	0%		1%	
503	Quality Maintenance in Storing and Marketing Food Products	0%		1%	
511	New and Improved Non-Food Products and Processes	0%		20%	
605	Natural Resource and Environmental Economics	0%		4%	
	Total	0%		100%	

V(C). Planned Program (Inputs)

1. Actual amount of professional FTE/SYs expended this Program

Year: 2010	Extension		Research	
	1862	1890	1862	1890

Actual	0.0	0.0	8.0	0.0
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2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
0	0	85455	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	0	85455	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
0	0	4674622	0

V(D). Planned Program (Activity)

1. Brief description of the Activity

UC ANR's integrated research and extension programs conducted research projects and workshops, as well as one-on-one interventions. In addition, the programs used collaborations with other agencies and organizations to create and deliver programs.

2. Brief description of the target audience

- Relevant agency and private-sector partners
- Lawmakers working on issues related to energy
- Members of the public in general
- Agricultural producers of crops for use as biofuels

V(E). Planned Program (Outputs)

1. Standard output measures

2010	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Plan	{NO DATA}	{NO DATA}	{NO DATA}	{NO DATA}
Actual	0	0	0	0

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

Year: 2010
 Plan:
 Actual: 3

Patents listed

1. Application of the Tla1 Gene in Optimizing Absorption and Utilization of Sunlight and Improving Photosynthetic Productivity in Plants
2. SIMPLIFIED DAYLIGHTING CONTROLS
3. DUAL PHOTO-SENSOR DIMMING DAYLIGHT CONTROLS

3. Publications (Standard General Output Measure)

Number of Peer Reviewed Publications

2010	Extension	Research	Total
Actual	0	24	24

V(F). State Defined Outputs

Output Target

Output #1

Output Measure

- Classes/Short Courses Conducted

Year	Target	Actual
2010	{No Data Entered}	0

Output #2

Output Measure

- Workshops Conducted

Year	Target	Actual
2010	{No Data Entered}	8

Output #3

Output Measure

- Demonstrations and Field Days Conducted

Year	Target	Actual
2010	{No Data Entered}	0

Output #4

Output Measure

- Newsletters Produced

Year	Target	Actual
2010	{No Data Entered}	0

Output #5

Output Measure

- Web Sites Created or Updated

Year	Target	Actual
2010	{No Data Entered}	0

Output #6

Output Measure

- Research Projects Conducted

Year	Target	Actual
2010	{No Data Entered}	10

Output #7

Output Measure

- Videos, Slide Sets, and other AV or Digital Media Educational Products Created

Year	Target	Actual
2010	{No Data Entered}	0

Output #8

Output Measure

- Manuals and Other Printed Instructional Materials Produced

Year	Target	Actual
2010	{No Data Entered}	0

V(G). State Defined Outcomes

V. State Defined Outcomes Table of Content

Outcome #1

1. Outcome Measures

{No Data Entered}

V(H). Planned Program (External Factors)

External factors which affected outcomes

- Public Policy changes
- Government Regulations

Brief Explanation

Public policy and regulations relating to biomass use for power and fuels are constantly changing. Other policies affect the amount of power from renewable sources used in the state and nation and its price, its distribution, etc. California's Low Carbon Fuel Standard affects the use of Biofuels in the state and the federal standard (very different regulations) also applies. Important policies affecting Biofuels will continue to evolve. For example, there are groups in the state working to try to forbid irrigating crops in California that might be used as a biofuel feedstock.

V(I). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

Evaluation Results

Key Items of Evaluation