



# *Biomass/Byproduct Innovation Competition*

ScSEED is seeking applications for the 2009 Biomass/Byproduct Innovation Competition. We want to help take your 'green' business to the next level. The winner of the Innovation Competition will receive a venture capital grant (between \$2,500 - \$5,000), professional assistance and marketing package.

In this application packet you will find the eligibility criteria, timeline, application instructions, project summary requirements and inventory of the available Saguache County biomass/byproduct materials.

**Applications are due at 5:00 pm on June 30, 2009**

Incomplete applications will not be considered.

More information is available at [www.scseed.org](http://www.scseed.org).

**P.O. Box 102 • Villa Grove, CO 81155**  
**(719) 655-2775    [www.scseed.org](http://www.scseed.org)    [info@scseed.org](mailto:info@scseed.org)**

## **Eligibility Criteria**

Projects must meet all of the following criteria to be eligible:

- Complete application packet before 5pm on June 30<sup>th</sup>
- Completed business plan
- Grow or expand an existing business or start a new business
- Environmentally friendly
- Plans must be “Shovel-Ready”, no research and development or feasibility studies
- End product must use one or more of the Saguache County biomass/byproduct inventory items (see attached inventory list)
- Final business must benefit Saguache County (job creation, revenue building, etc) and must be registered and located in Saguache County
- End product must be branded or identified as originating in ‘Saguache County’
- Electronic submission (preferred): minimum 12pt font size, 1” page margins **OR** hard copy submission: must be typed with 12pt font size, 1” page margins and provide 6 copies
- Be prepared for a 20 minute presentation/interview
- Provide a report six months after award

## **Timeline**

- **May 1<sup>st</sup>** - Application available online at [www.scseed.org](http://www.scseed.org) and by mail upon request
- **June 30<sup>th</sup> 5:00 pm** - Application deadline
- **August 17<sup>th</sup>** - Interviews throughout the week
- **September 1<sup>st</sup>** - Award announcement

## **Application Instructions**

1. Complete the Project Summary (attached) in a typed 12pt font, 1” margin document
2. Include the project coordinators resume and a copy of the business plan
3. Include a map or detailed description of the businesses location within Saguache County
4. Submit the Project Summary and attachments electronically to [development@scseed.org](mailto:development@scseed.org)  
**OR** by mail to PO BOX 102, Villa Grove, CO 81155 before 5:00 pm on June 30<sup>th</sup>

Electronic submissions are preferred but will not affect the scoring of applications. Hard copy submissions by mail must include **6 copies** of the complete application.

Applicants will be notified by August 1<sup>st</sup> if they are selected to give a presentation and interview with the judge’s panel.



## **Biomass Innovation Competition**

### **Project Summary**

*Maximum 5 pages*

**1. Identification and Significance of the Problem or Opportunity (1 paragraph)**

Define the specific problem or opportunity addressed and its importance. How does the plan fit our criteria?

**2. Project Objectives (1 paragraph)**

Enumerate the specific objectives of the project. What will the money be used for? Provide quantifiable objectives.

**3. Work Plan (2 pages)**

Provide a summary of your business plan. The plan should indicate what is planned, how and where the work will be carried out, a schedule of major events, and the final product to be commercialized. The methods to achieve each objective or task should be discussed explicitly and in detail. This section should be a substantial portion of the total proposal.

**4. Related Work (2-3 paragraphs)**

Describe your significant activities directly related to the proposed project effort. Describe how these activities interface with the proposed project and discuss any planned coordination with outside sources. You need to persuade the reviewers of your understanding and awareness of the technology involved in this project topic. Describe your previous work and how it relates to the proposed effort. Provide a short description of the related work and provide references including names and phone number and the date of completion of the work.

**5. Relationship with Future Development (1-2 paragraphs)**

Discuss the significance of this funding in providing a foundation for future company development.

**6. Marketing Plan (1 paragraph)**

Describe your company's strategy for commercializing this product. Provide specific information on the market need this technology will address and the size of the market. Also include a schedule showing the quantitative commercialization results from this project that your company expects to achieve and when (i.e., amount of additional investment, sales revenue, etc.)

**7. Key Personnel (1 paragraph)**

Identify key personnel who will be involved in your project. Include a concise resume of the principals involved.

**8. Facilities/Equipment (1 paragraph)**

Describe your current facility and any available instrumentation, equipment, necessary to carry out the effort proposed.

**9. Do you have any Prior, Current, or Pending Support for this Project? (1 paragraph)**

List any funders and the level of support that the project has or will receive.

**10. Environmental Impact Statement (1 paragraph)**

Describe any expected impact on the environment including how impact is measured and what steps are being taken to ensure best practice.

# **Biomass & By-Product Inventory List**

Biomass is organic matter that is available on a renewable or recurring basis, including wood, plants, agricultural residues, animal waste, and the organic components of municipal and industrial wastes. Landfills are full of woody biomass resources from construction, lumber mill activities, disposal of wooden palettes, etc. Wastes from food processing, paper industries and household garbage also contain organic matter that could be converted.

By-product is a secondary or incidental product deriving from a manufacturing process, a chemical reaction or a biochemical pathway, and is not the primary product or service being produced. A by-product can be useful and marketable, or it can have negative ecological impact.

## **Animal sources**

- dried blood and blood meal - from slaughterhouse operations
- chicken by-product meal - clean parts of the carcass of slaughtered chicken, such as necks, feet, undeveloped eggs, and intestines.
- chrome shavings - from a stage of leather manufacture
- collagen and gelatin - from the boiled skin and other parts of slaughtered livestock
- feathers - from poultry processing
- feather meal - from poultry processing
- lanolin - from the cleaning of wool
- manure - from animal husbandry
- meat and bone meal - from the rendering of animal bones and offal
- poultry byproduct and poultry meal - made from unmarketable poultry bones and offal
- poultry litter - swept from the floors of chicken coops
- whey - from cheese manufacturing
- fetal pigs

## **Vegetation**

- acidulated soap stock - from the refining of vegetable oil
- bran and germ - from the milling of whole grains into refined grains
- brewer's yeast - from ethanol fermentation
- cereal food fines - from breakfast cereal processing
- corn stover - residual plant matter after harvesting of cereals
- potato starch or matter
- distillers grains - from ethanol fermentation
- glycerol - from the production of biodiesel
- grape seed oil - recovered from leftovers of the winemaking process
- molasses - from sugar refining
- orange oil and other citrus oils - recovered from the peels of processed fruit
- pectin - recovered from the remains of processed fruit
- sawdust and bark- from the processing of logs into lumber
- soybean meal - from soybean processing
- straw- from grain harvesting

### **Minerals and petro chemicals**

- asphalt - from the refining of crude oil
- fly ash - from the combustion of coal
- slag - from ore refining
- gypsum - from Flue gas desulfurization
- ash and smoke - from the combustion of fuel
- mineral oil - from refining crude oil to produce gasoline
- salt - from desalination

### **Other**

- sludge - from wastewater treatment

### **Recycling By-Product Materials List**

Acid-free paper	File folder	Paper
Aggregate (composite)	Fluorescent lamp	Paperboard
Alkaline battery	Foam take-out container	Plastic
Aluminium	Fordite	Plastic bottle
Artificial turf	Glass	Plastic mulch
Asphalt	Glass bottles	Plastic shopping bag
Battery (electricity)	Graph paper	Polyester
Beer bottle	Graphite	Polyethylene
Beverage can	Green waste	Polyethylene terephthalate
Bioasphalt	Halogen lamp	Polystyrene
Biodegradable plastic	High-density polyethylene	Polyvinyl chloride
Biodegradable waste	Iggesund Paperboard	Radioactive scrap metal
Book	Incandescent light bulb	Rechargeable alkaline battery
Bottle	Incinerator bottom ash	Rechargeable battery
Business card	Inkjet paper	Ruled paper
Button cell	Iron	Scrap
Car battery	Kraft paper	Sewage
Card stock	Lead	Sketchbook
Cardboard	Lead-acid battery	Stainless steel
Compact fluorescent lamp	Lithium battery	Steel
Composition book	Lithium-ion battery	Stretch wrap
Computer recycling	Loose leaf	Textile
Construction aggregate	Low-density polyethylene	Tin can
Copper	Magazine	Tire
Corrugated fiberboard	Manila paper	Two-liter bottle
Corrugated plastic	Mason jar	Wine bottle
Deinked pulp	Mayonnaise jar	Wood ash
Digger gold	Mercury (element)	Writing paper
Dimension stone	Mercury battery	
Electric vehicle battery	Nickel-cadmium battery	
Electronic waste	Nickel-metal hydride battery	
Enameled wire	Packaging and labeling	
Energy recycling	Pallet crafts	