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PROJECT TECHNICAL REPORT

Purpose

The Project Technical Report is to provide data on the project status and its successful implementation using Science and Technology Entrepreneurship funds provided by CRDF Global.

Submission Instructions

Reports must be sent via e-mail to amirzoyan@crdfglobal.org and the CRDF Grant Officer identified in your Grant Agreement. **Please limit your report to no more than (4) typed pages.**

Project General Information

Agreement Number:	FSAX-14-60085-0
Project Title:	Highly effective dryer machine develop for bio-briquette manufacturing.
Grantee Name:	Zviad Gviniashvili
Reporting Period/Milestone:	1.09.2014 -28.02.2015

PART I. Project Information

Please provide a brief summary of the Project's overall status:

The objective of this project is development of an effective technology for drying of wastes (sawdust) from timber industry existed in Georgia, as well as development of a drying device.
Such type drying devices are distinguished by simple construction, low hydraulic resistance and compactness that is very important for their mobility. They can work in the non-stationary cyclic regime, as well as in the stationary regime.
Devices of the stationary regime with simultaneous movement of loading and unloading are especially interesting. In this case, the plane "boiling" on all detained grids of drying material is reached and intensification of the drying process is rather effective.

Please provide a brief summary of progress made toward each of the following items:
(If the progress was already made on a previous Milestone, please state the Milestone)

Patent Acquisition	N/A
Startup Registration	N/A
Successful Commercial Prototype	Our team has made assembly commercial prototype of dryer machine.
Product Test Launch	We have done experiments of drying process and choose optimal technology regimes.
Sales Launch and/or Expansion	N/A
Product Test Launch	N/A
Marketing Campaign Launch	N/A

Links of articles where project has been featured.	During the project we have done 2 articles.
New Strategic Partnerships	Negotiations are being held with municipal districts (of Bagdadi, Samtredia and Ambrolauri) for making and supply whole the technological line of bio briquette.
New Customer Acquisition	N/A
Number of clients signed	N/A
Number of new clients versus old clients	N/A
Revenue per client	N/A
Team recruitment (description recruitment efforts and qualifications of team members secured)	***Zviad Gviniashvili, PhD*** **–** Assistant Professor of Transportation and Mechanical Engineering Faculty, Georgian Technical University, He has experience with mechanical engineer began in the 2004 in scientific-research laboratory as a senior engineer he was working with small team to solve mechanical problems for wood cutting machines and tools. He worked in international projects. ***Givi Goletiani PhD:*** **-** Full Professor and Manager of Transportation and Mechanical Engineering Faculty. He started his work from 1972 in All-Union Institute of fodder branch of Georgia as senior scientist; from here he worked in many scientific projects different universities as in Georgia as abroad. ***Nodar Kevkhishvili PhD:*** **-** Full professor of the Department of hydro and thermal power Georgian Technical University. He worked also in Moscow Power Engineering Institute as graduate student of nuclear power stations. He works about Participation assessment of energy efficiency of buildings. ***Baadur Chkhaidze PhD:*** **-** Professor at Heat Power Engineering Department at Georgian Technical University. He has over 45 years of experience in the heat and electric power sector. His background includes experience in: power plant design, rehabilitation and mode optimization, engineering and project management, combustion and co-generation engineering, power project financing, cascaded energy utilization and system integration, energy audits, energy saving project management, renewable energy system design. ***Vazha Qiria:*** **-** Associate Professor of Transportation and Mechanical Engineering Faculty on Department of Industrial Technological Machines and Mechatronic, at the same time - leader specialist of Georgian Technical University, Managers Office of Transportation and Mechanical Engineering Faculty. He also have work experience several local and international projects.
Board of advisors recruitment (description of recruitment efforts and qualifications of advisory members secured)	N/A
Participation in Networking Events	1. Wednesday, September 17, 2014 from 8:00 AM to 9:15 AM (EDT) "GIST TechConnect From Lab to Market" Order #333215829 2. Friday, November 14, 2014 from 11:00 AM to 12:00 PM (EST) GIST TechConnect: Disrupting Markets Through Transparency and Empowerment Order #369136241 3. Thursday, February 19, 2015 from 7:00 AM to 8:15 AM (EST) REC@NNECT TechConnect Building The Dream Startup Team Order #395031576

Additional Funding / Investment Acquired (include other competitions won)	N/A
Entry in a New Market (description of any entry to a new market such as a new geography or other industry where clients were acquired)	N/A

Please include any additional comments here:

For the present we have done all the work according of the project:

1. Calculated of the dryer machine.
2. Designed of the dryer machine.
3. Made 3D Drawing of the dryer machine.
4. Details and working drawing and created separate nodes.
5. Created dryer machine individual parts according to the working drawings.
6. Assembled of the parts.
7. Assembled of the dryer machine.
8. Prepared and start of dryer machine.
9. Selected of the optimal grille positions of drying unit at the time of different value of moisture biomass.

The project was implemented at Georgian Technical University., I Building, Kostava str. 69.

PART II. Online Mentoring Sessions

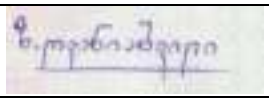
Communication tracking form:

Date:	Topics/Questions:	Comments/Suggestions:
Date:	Topics/Questions:	Comments/Suggestions:
Date:	Topics/Questions:	Comments/Suggestions:

PART III. Future Work Plan

Please give a brief overview of your projected future plans for the Project:

Our team has done a lot of work according the project and finally we develop highly effective dryer machine for bio-briquette manufacturing.
After the project, we are going to install the dryer machine in the technological line and determine optimal regimes of the whole line.

Grantee Signature:		Printed Name:	Z. Gviniashvili
Date:	16.02.2015		