

NEW HAMPSHIRE BUSINESS FINANCE AUTHORITY

BUSINESS ENERGY CONSERVATION RLF

Quarterly Report for the Period Ending 9/30/11

1. The NHBFA closed one new loan this quarter - \$600,000 with Ragged Mountain Resort Management. Ragged is one of the least energy efficient ski areas in the Northeast. The project involves compressor and pump upgrades, as well as the installation of low-energy snowmaking guns. A Summary Sheet for the project is attached, as are copies of the energy savings analysis by SNOWCONSULT and the CSNE Data Release Forms.
2. A Revolving Loan Fund status report is attached. To date, we have committed \$3,910,000 in total and have loaned \$2,585,401 to five companies. We have an additional \$1,070,249 in outstanding loan commitments to two companies, Warwick Mills and Ragged Mountain, both of which are scheduled to complete their projects this year. Since we had cash on hand as of September 30, we are not requisitioning any funds this quarter.
3. Miscellaneous
 - The total match for the Shelburne Plastics project has increased to \$707,810. An updated Summary Sheet for the loan is attached.
 - Foss Manufacturing has a loan covenant violation with its primary lender that has prohibited the company from paying our loan since June. We expect to resolve this situation this quarter and have the company resume payment before the start of 2012.

Borrower

Ragged Mt Resort Mgmt	NAICS	713900
620 Ragged Mt. Road	Contact	Bob Ashton
Danbury, NH 03230		603-768-3600

Project Description: installation of ultra-low-energy snowmaking guns and related improvements to expand snowmaking capacity while reducing energy use

Square footage	
Total	0
Project	0

	Initial
Total Project Cost	\$ 873,900

Amount of Loan Requested	\$ 600,000
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Other Funding Sources & Amounts	
PSNH	\$ 90,000
Owner	\$ 183,900

Project savings		Savings	
Heat	oil	46100 \$	4.00 \$ 184,400
	propane	0 \$	1.50 \$ -
Electric	kwhs	649439 \$	0.17 \$ 110,405
			\$ 294,805
			2.96

Source: SNOWCONSULT

Loan Status

- Application July, 2011
- Approved 7/18/2011
- Closed 8/23/2011
- Completed
- Repayment begins 1/1/2012

Employment	
Initial	85
Latest	
Projected	85

Copy of of Audit sent to MM x

CSNE Data Release Form x

Estimated # of Hours of Labor

Borrower

Shelburne Plastics	NAICS	326160
27 Industrial Drive	Contact	Rob Fougere
Londonderry, NH		603-867-0488

Project Description: improve layout and operation of blow molding co. -
new equipment, consolidate grinding operations,
install efficient process chilling and AC systems

Square footage
Total
Project 0

Total Project Cost **Initial**
\$ 1,457,810

Amount of Loan Requested \$ 750,000

Other Funding Sources & Amounts
PSNH \$ 147,224.00
Owner \$ 560,586.00

Project savings		Savings	
Heat	oil	\$ -	\$ 2.00
	propane	0	\$ 1.50
			\$ -
Electric	kwhs	1582979	\$ 0.12
			\$ 186,158

7.83

Source: PSNH analysis 12/16/10

Loan Status
Application December, 2010
Approved 1/10/2011
Closed 2/18/2011
Completed June 2011
Repayment begins 7/1/11

Employment
Initial 22
Latest 22
Projected 0

Copy of of Audit sent to MM x

CSNE Data Release Form x

Estimated # of Hours of Labor 1366

NH Business Finance Authority
GGERF Revolving Loan Fund
as of September 30, 2011

Funding Received to Date:

2008 Grant \$ 2,000,000.00
2010 Grant \$ 746,000.00
\$ 2,746,000.00

Loans:	Approved	Total Loaned	September 30 Outstanding	June 30 Outstanding	Repaid Quarter	Loaned Quarter	Leverage
1 Foss Manufacturing	\$ 750,000	\$ 750,000	\$ 584,900	\$ 584,900	\$ -	\$ -	\$ 61,000
2 Vitex	\$ 510,000	\$ 255,650	\$ 68,203	\$ 71,338	\$ 3,135	\$ -	\$ 29,700
3 Canam Steel	\$ 750,000	\$ 750,000	\$ 704,114	\$ 724,688	\$ 20,574	\$ -	\$ 943,671
4 Shelburne Plastics	\$ 750,000	\$ 750,000	\$ 735,153	\$ 750,000	\$ 14,847	\$ -	\$ 807,810
5 Ragged Mountain	\$ 600,000	\$ 79,751	\$ 79,751	\$ -	\$ -	\$ 79,751	\$ 415,000
6 Warwick Mills	\$ 550,000	\$ -	\$ -	\$ -	\$ 38,556	\$ 79,751	\$ 273,900
	\$ 3,910,000	\$ 2,585,401	\$ 2,172,121	\$ 2,130,926	\$ 38,556	\$ 79,751	\$ 2,531,081

Grant Received to \$ 2,746,000.00

Total Loan Commitments/Quarter \$ 600,000

Outstanding Loan \$ 2,172,121

Total Repaid/Quarter \$ 38,556

Cash on Hand \$ 573,879.00

Total Loaned/Quarter \$ 79,751

Outstanding Commitments \$ 1,070,249

Ragged Mountain - Energy Saving Projects Financing Summary - 2011

PROJECT	Project Cost	Financing Request	Energy Savings	PSNH Rebate	Comments
PSNH Upgrade	\$22,500	\$22,500			Allows conversion to electric compressors; Eliminate diesel
Bog Water Withdrawal	\$450,000	\$124,600 \$78,900	\$24,000	TBD	Pumps, VFD's; electrical equipment Electrical Distribution Upgrades; Royal Electric Increase water recharge from 325 gpm to 1,150 gpm; ability to double terrain open by Christmas holidays Eliminate 7,100 gal of diesel less incremental electric cost
Electric Compressor Upgrades	\$116,000	\$116,000	\$61,800		Electrical energy savings vs diesel; Royal Electric Electric rentals in 2011/12; purchase in 2012
HKD Guns	\$131,100	\$101,100	\$57,400	\$30,000	Savings from reduced energy vs current gun mix (Ragged "Virtual Gun")
JCS Demo Trail	\$70,000	\$70,000	\$87,800		42 Gun Demo Trail with purchase option; non-recoverable RMR Equipment (enclosures, conduit, wiring) Savings from reduced energy vs Ragged "Virtual Gun" Rebates in 2012 for guns & automation purchase
Electric Upgrades for Fan guns	\$59,300	\$59,300	\$14,600		Electric line upgrade (\$39,300) & trenching (\$20,000) Savings from reduced energy vs Ragged "Virtual Gun"
Pipe work to allow broader use of Low Energy guns	\$25,000	\$25,000	\$57,400		Easy Winder pipe, tower mounts to move low e guns; utilize 40 low energy guns Savings from reduced energy vs Ragged "Virtual Gun"
	\$873,900	\$597,400	\$303,000		

Ragged Mountain - Electric Compressor versus Diesel Compressor Cost Analysis

1800 cfm
400 hp
4 units
500 hrs
\$0.15 /kw
\$4.00 /gal

Electric Compressor

25	brake horsepower per 100cfm x	0.746	divided by	16	=	314.1053 kw	0.95 motor efficiency =	19.63158	
	19.63158 kw per 100 cfm x								
314.10526 kw	x	500 hrs	=	157052.6316 kwh					
157052.63 kwh	x	\$0.15 /kw	=	\$23,557.89 /unit	x	4 units			
								Yearly Operating Cost =	\$94,231.58

Diesel Compressor (1650 cfm per unit)					
4 units	x	19.5 gph	=	78 gph	
500 hrs	x	78 gph	=	39000 gallons	
39000 gallons	x	\$4.00 per gallon	=	\$156,000.00	
				Yearly Operating Cost =	\$156,000.00

0.1700 Blended Power Rate		200000 Gallons per acre foot		Cost and ROI per acre foot of snow @ 21 ^{ftw}		2.5 Acre Ft. per gun		guns		42		380			
Gun Type	CFM	GPM	Ratio	KW	Air Cost per Hr.	Pumping Cost per Hr.	Total Energy Cost per hr.	Hrs. per acre ft.	Blend kW rate	Air Cost per Acre ft.	Pumping Cost per Acre ft.	Total Energy Cost Per Acre ft.	Annual goal per gun X 42 guns	Current annual Acre ft Goal	Cost to operate 41 for 10 years @ .21
Rat G II (Original)	550	31	17.7	110	\$ 18.70	\$ 2.26	\$ 20.96	108	0.17	\$ 2,011	\$ 243	\$ 2,254	\$ 236,642	\$ 856,418	\$ 2,310,074
Rat G-5 / Jaws	800	47	17.0	160	\$ 27.20	\$ 2.54	\$ 29.74	71	0.17	\$ 1,929	\$ 180	\$ 2,109	\$ 221,484	\$ 801,562	\$ 2,162,107
"New" Rat G II	385	27	14.3	77	\$ 13.09	\$ 2.26	\$ 15.35	123	0.17	\$ 1,616	\$ 279	\$ 1,895	\$ 198,978	\$ 720,109	\$ 1,942,400
Ragged "Virtual Gun"	210	28	8.5	42	\$ 7.14	\$ 1.69	\$ 8.83	119	0.17	\$ 850	\$ 202	\$ 1,052	\$ 110,435	\$ 398,668	\$ 1,078,053
Borax	103	32	3.2	20.6	\$ 3.50	\$ 2.26	\$ 5.76	104	0.17	\$ 365	\$ 235	\$ 600	\$ 63,019	\$ 228,067	\$ 615,181
HKD Spectrum	100	32	3.1	20	\$ 3.40	\$ 2.26	\$ 5.66	104	0.17	\$ 364	\$ 236	\$ 590	\$ 61,903	\$ 224,030	\$ 604,291
HKD SV 10110 or Impluse	120	40	3.0	24	\$ 4.08	\$ 1.98	\$ 6.06	83	0.17	\$ 340	\$ 165	\$ 505	\$ 53,001	\$ 191,812	\$ 517,389
T-A "A30"	42	34	1.2	8.4	\$ 1.43	\$ 1.98	\$ 3.41	98	0.17	\$ 140	\$ 194	\$ 334	\$ 35,054	\$ 126,862	\$ 342,193
Safyr	22	52	0.4	4.4	\$ 0.75	\$ 2.82	\$ 3.57	64	0.17	\$ 48	\$ 181	\$ 229	\$ 24,046	\$ 87,025	\$ 234,740
Rubis EVO	18	40	0.5	3.6	\$ 0.61	\$ 1.98	\$ 2.59	83	0.17	\$ 51	\$ 165	\$ 216	\$ 22,556	\$ 81,992	\$ 221,164
Ragged Mt.										Annual savings		\$ 87,779			
Ragged Mt.										Est. Cost 42 guns		\$ 612,500.00			
Ragged Mt.										ROI in Years		5.84			

