

## The Team

- Free to Fit Commercial Roof Top Solar
- •Free to Fit Performance Estimate Table
  - Social Housing
    - New Builds
  - •Free To Fit ASHP
  - ASHP Costing Sheet
  - Mitsubishi Financial Analysis Sheets
    - Other Avenues





# The Team





## NN&SS Arash Nassouri & James Loftus – Managing Directors

James is an exceptional entrepreneur his sales and marketing skills were obtained in direct sales at senior management level. Prior to establishing Green Eco Grants Limited and its group of companies James had extensive exposure to the financial real estate industry as a broker.

Having the sales experience, determination and financial standing James incorporated Green Eco Grants in July 2012 and the company went from strength to strength achieving a £1.5 M turnover in 2014 and £4.7 M turnover in 2015. At the peak in 2015 James employed around 60 telesales, 20 sales representatives, 20 office staff and over 60 sub-contractors. Green Eco Grants installed Commercial Solar PV, 100+ Domestic Solar PV, 100+ Air Source Heat Pumps, 80+ Biomass Boilers, 50+ paid domestic boilers and 200+ Eco Boilers.

James anticipated the fall in the domestic market and for over a year has been investing heavily and working on and refining calculators to install Free to Fit solar to commercial properties with a PPA Agreement (the model has been tried and tested by BDO).

James has the backing of a highly trained and dedicated team, together with a second to none Customer Service and Sales Department, who are all working together to achieve James' and the teams goals for the future.



## **Karen Argyle – Contracts Manager**

Karen is responsible for the continued health, operational performance and growth of NN&SS LImited and GECS, ensuring successful planning of all operations and management of internal employees. Karen has developed her excellent organisational and management skills through 30 years' experience gained as an in house company accountant. Karen joined Green Eco Grants in its early stage of operation as a Contracts Manager and has overseen and ensured the smooth operation of every installation to date liaising with installers suppliers and customers. Karen also deals with the financial matters of the Company including payroll, CIS and also HR.

## **Colin Armstrong – Technical Manager**

Colin is an engineer with extensive experience across a number of industries, including site management. He oversees project technical feasibility, managing and scheduling client installation and survey teams to ensure HSE and MCS compliance, along with ensuring compliance with technical installation standards. Colin was previously a heating and renewable engineer, working for various blue chip companies throughout the UK, in senior supervisor and management positions.



## **Brian Quinn - Senior Sales Consultant**

Brian is responsible for Commercial Project Development and joined Green Eco Commercial Services in its early stage of development. Brian has 20+ years of experience selling to individuals and up to multi-national corporations in disciplines ranging from financial service to educational products and has run sales forces all over the country. Brian has a network of business contacts developed from sporting, social and business sources which allows him insights into industries he never would have thought possible. Networking is the key for Brian.

## **Stephanie Loftus – Procurement Manger**

Steph commenced her time with Green Eco Grants immediately she left college and since then has achieved a Level III apprenticeship in Business Management. Steph's duties included domestic solar roof loadings, pre-install FIT calcs, sourcing and ordering solar panels upon receipt of surveys, DC ordering together with all handover packs, gas safe registering and boiler warranties.







## Penny Askham – Contracts Supervisor/Customer Service Manager

Penny gained her experience in a Supervisory role whilst working at Lloyds Bank and joined Green Eco Grants in June 2015. Her duties comprised of liaising with the Contracts Manager with Sub-Contractors remuneration and deploying installers. Penny came to us highly trained in Sales and Marketing and has been utilising these skills with NN&SS Limited and GECS plc sourcing and contacting relevant commercial companies informing them of our Free to Fit Solar PV and domestic customers regarding Air Source Heat Pumps/Solar PV/Battery Storage etc.





## **ALL STAFF** are highly trained in the following:

#### Commercial:

- Preparation of PPA Agreements/Rights of Access documentation
- Roof plotting
- •PV Sol
- DNO Applications
- Credit checking prospective clients

## **Domestic:**

- Solar plotting/roof loadings etc
- Procurement
- •Feed In Tariff Claims
- Heat Loss Calculations for ASHP
- •RHI Claims





# FREE TO FIT COMMERCIAL ROOFTOP SOLAR PV

- •PPA Agreement at 8.5 pence per kWh (average), index linked at 2.5% see attached DFS Savings Sheet.
- Battery Storage to include FFR to follow
- Average cost to install 100 kW

£82,000

NN&SS Limited and GECS plc invoice CAPEX @

£105,000

Profit on CAPEX

£23,000 per 100

kW

Plus sale of asset if we, as a group, are the funder





# Green Eco Commercial Services PLC

The Energy Saving Specialists

	Current Costs Per	Savings Bor	Savings Por	New Costs Per	Dorcontago	Co2	Co2
Period	Year	Day	Year	Year	Savings	savings	Savings
		,				Kg	Tons

		,				Kg	Tons
Year 1	£99,762.67	£55.79	£20,362.58	£79,400.10	20.4%	324,990	320
Year 2	£105,876.93	£65.94	£24,067.70	£81,809.22	22.7%	323,365	318
Year 3	£112,365.91	£76.70	£27,997.17	£84,368.75	24.9%	321,748	317
Year 4	£119,252.59	£88.11	£32,161.71	£87,090.89	27.0%	320,139	315
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Year 25	£415,878.21	£570.94	£208,394.48	£207,483.72	50.1%	295,466	291

TOTALS	£5,573,748.18	£2,321,463.39	£3,252,284.79	41.65%	7,677,451	7,556



## NN&SS SOCIAL HOUSING

WITH THE EXCEPTION OF ASHP RHI, FIGURES DO NOT INCLUDE INDEX LINK RISE

BASED ON 3 kW SOLAR PV WITH ESS AND 8.5 kW

ASHP

Rental Guaranteed by District Council £520 x per year x 20 years £10,400

Feed In Tariff from Solar PV

£155 per year x 20 years £3,100

RHI from Air Source Heat Pump for 7 years

£10,420

PPA on Electric from Solar PV @15 p

£330 per year x 20 years £6,600

FFR (unknown at present)

TOTAL INCOMÉ EXCLUDING FFR AND INDEX LINK RISE PER HOUSE: £30,520





## **NEW BUILDS**

## **BASED ON 700 HOUSES and 3KW SOLAR PV**

Council Rental Payments

220 Homes at an average of £100 per week x 25 years £28,600,000

- Feed In Tariff from Solar PV
- •PPA on Electric from Solar PV @15 p
  - Sales of 480 Properties
- FFR (unknown at present)

220 Homes at £155 per year

 $= £3100 \times 20 \text{ years } £682,000$ 

= £330 per year x 25 years £1,815,000

480 Homes at an average price of £125,000 £60,000,000

TOTAL INCOME EXCLUDING FFR AND INDEX LINK RISE ON RENT, PPA AND RENTAL PAYMENTS: £91,097,000

House Build Costs at an average of £100,000 per property

-£70,000,000

TOTAL PROFIT ON BUILD

PPA AND RENTAL PAYMENTS

£21,097,000

20% of remaining stock to Council leaving a remainder of 176 properties in the fund

With a possible saleable value of £200,000 per property

£35,200,000

POTENTIAL TOTAL PROFIT, NOT INCLUDING FFR, INDEX LINK RISE ON RENT,

£56,297,000



## NN&SS FREE TO FIT ASHP

BASED ON 8.5 kW HEAT PUMP, 12,000 kWh, 50 deg FLOW TEMP INCLUDING METERING PAYMENT

Total Install Costs, as per the attached spreadsheet

£8152.00 Less Customer Contribution of £3500.00 Total £4652

•RHI Over 7 Year Period, based on current 7.51 pence
As per the attached calculation sheet

£6446.00

**PROFIT** 

£2418.26







# Green Eco Commercial Services PLC The Energy Saving Specialists

## NN&SS

Air Source Heat Pump Job Costing Sheet			
Customer Name			
Postcode			
Total Sale Price (Inc VAT)		£0	
Less Deposit	£	-	
Balance Payable		£0	
HP Size and Make		8.5 kW	
No. Of Radiators			
HP Kit Cost inc Foot Kit, Drain Kit & Meter Pipe, fittings, electrics, radiators, cylinder and Pumps Installation inc Powerflush and Survey Calculations, GDAR and Legals Telecan, Sales and Office Miscellaneous Fittings MCS, EPC Registration and CPA Insurance 0 & M  Total Cost Exc. VAT	£	1,602.00 1,750.00 2,000.00 300.00 1,600.00 200.00 100.00 600.00	
Job Sign Off Job Authorised By	Print Sign Date		

#### The Renewable Solutions Provider

#### Making a World of Difference

#### Financial Analysis

Renewable Technology - Ecodan

Traditional Technology - Oil Boiler

(The traditional technology being replaced)

Rate of Inflation - 2.9%

#### Captial Cost

	Total Upfront Cost	Investment Above Traditional Technology
Heat Pump System	£7,043	£5,092
Oil Boiler	£1,950	

The reduction in running cost is a major contributer to the overall benefit to the user

#### Running Cost

	Annual Run Cost	10 Year Total	Difference To Traditional Technology
Heat Pump System	£687	£6,869	£5,708
Oil Boiler	£1,258	£12,577	

#### RHI Payment

	First Year Annual RHI	Total RHI Payments
Heat Pump System	£1,392	£10,485

The annual and total RHI income

#### Final Figures

	Total Benefit (RHI + Run Cost Savings)	Payback Period Years (Simple)	Rate of Return (ROR)
	£16,193	2.5	36.0%
Total profit after additional investment	£11,100		

#### Rate of return is a measurement of total benefit received on an investment (useful for customers considering the financial benefit)

#### CO, Savings

	CO <sub>2</sub> (kg)	Savings
Heat Pump System	2850	1838
Oil Boiler	4688	







## **OTHER AVENUES**

OTHER ONGOING PROJECTS WITHIN NN&SS Limited and GECS plc

- •Finance Available for Commercial Solar PV for Clients wishing to Purchase the Array, with interest as low as 2%
- •Lease Purchase Available for LED Lighting
- Finance Available for Anaerobic Digestion
- •C H P on a PPA Agreement
- Stand Alone Battery Storage





## NN&SS Limited

- Site
- Brief
- Considerations
  - Site Plan
- Conceptual Plan
  - Plan Drawing
- Elevation Drawing
- Building Methodology
  - Building Fabric
- Renewable/Energy Efficient Technologies
  - Heating and Hot Water
    - Solar PV
    - Other Technologies
      - Specifications
        - Offer
        - Capex
      - Potential Councils
    - Benefits to Councils



## The Site







# <u>Brief</u>

- EBRL have been holding talks with NWLDC over a period of 20weeks regarding the above site. This site has now been unused for some time and presents the council with ongoing social and cost implications.
- Whilst there is the need for the site to be regenerated either for a change of use or redeveloped, it is generally accepted that there are currently no NWLDC allocated funds to achieve this.
- EBRL researched various funding and development options that may prove viable and acceptable to both parties.





## Considerations

- Due to the demographic of the area, whilst technically feasible it is considered both by NWLDC and EBRL that a change of use of the existing building into a multiple occupancy site would not be the preferred option.
- Our research regarding funding has also shown that this option would be difficult to model, without the council relinquishing all control and interest in the site. Given the possible social impact of a HMO operated by a private landlord this option has been discounted.
- Informal enquiries into housing requirements with local agents, reveals that 2/3 bedroom homes are in demand and deemed suitable for first time buyers.
- National anecdotal evidence appears to support this theory. NWLDC have also indicated that this type of social housing stock is in most demand, and would be the preferred option for the site.





# Site Plan

- Based on the information above, EBRL have formed a conceptual plan for the site. This plan would see the complete demolition and removal of the existing building redevelopment of the site, to incorporate 4No. 3 bed homes and 7No. 2 bed homes. All homes are to include adequate parking and garden provision.
- An illustration of this conceptual plan can be seen on page 6 of this document.
- Informal conversations with architects and planning professionals, have indicated that this plan is likely to be viewed favourably, in terms of a planning application.
- Pages 7 & 8 show plan and elevation drawings, to give an indication of a propsed design and layout.







## Green Eco Commercial Services PLC The Energy Saving Specialists

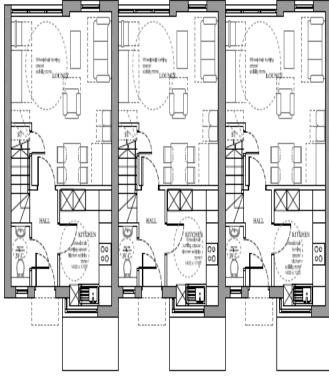
# NN&ss Conceptual Plan





# Plan Drawings





GROUND FLOOR

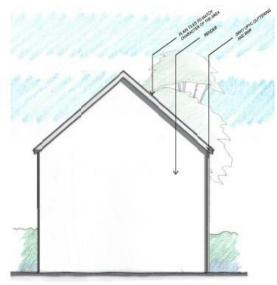




## Green Eco Commercial Services PLC The Energy Saving Specialists

# NN&SS Elevation Drawings

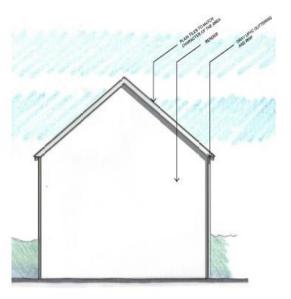




FRONT ELEVATION







REAR ELEVATION

SIDE ELEVATION





# **Building Methodology**

- EBRL believe passionately in building sustainable high quality and energy efficient housing for the future.
- With the ongoing issues surrounding climate change and future energy costs and supply, we feel it only prudent at new build stage to design and build homes that will reduce future energy requirements and therefore ongoing costs for the occupants.





# **Building Fabric**

- For this reason EBRL employ a fabric first approach to building!
- ICF (Insulated Concrete Forms) provide the perfect mix of building quality, energy efficiency, design flexibility and cost, and fit perfectly with other energy efficient/renewable technologies we employ.





# Renewables/Energy Efficient Technologies

- EBRL always looks to provide the energy requirements for a building in a manner that creates the minimum environmental impact and the lowest practical running costs going forward.
- Whilst many developers may incorporate renewables on a site, this is usually a token amount, to meet minimum building codes and energy efficiency standards.
- EBRL will employ the maximum practical amount of renewable energy technology to far exceed minimum codes and therefore reduce future costs and carbon creation.
- Whilst renewable technology can often be perceived as costly, this cost can be minimised when designed and incorporated at new build phase.



# Heating & Hot Water

- Heating and hot water will generally be provided by heat pump technology, which can provide 300 – 400% more energy into a home than the energy input into the system.
- This type of system, when coupled with the energy efficiency and high thermal mass properties of our construction method results in homes with low running costs, improved occupancy comfort and low ongoing carbon emissions.





# Solar PV

- EBRL will, where practicable, look to install a solar PV system. This system will be designed to provide the maximum amount of free electricity to the dwelling and not the minimum amount to reach code approval, which is too often the norm on new builds.
- Again coupled with the other technologies we use, and with sensible building systems control, this will result in drastically reduced grid supplied energy, meaning lower ongoing costs and lower carbon creation.
- These systems will also be designed with a view to accommodating future battery storage options.





# Other Technologies

 Where other energy efficient technologies are proven to be beneficial in terms of long term cost and reliability these will also be implemented where practical.

Standard products at this stage would include:

- Low energy LED lighting or similar
- Energy efficient/heat recovery ventilation
- Triple glazing
- Composite external doors





# **Specifications**

- Due to potential planning issues that may arise and the time frame in which planning may be achieved, final specifications will be confirmed in due course.
- Potential instability in the UK economy, together with the constant evolution of renewable technologies requires that EBRL be prudent in the formulation of a final specification.
- We would seek to prepare final specifications upon the receipt of further interest in our offer.





# <u>Offer</u>

- Legal documents to be agreed and signed to highlight the basis of the offer and protect both parties.
- Legal site ownership to be passed to EBRL.
- EBRL will work with the council for planning approval application to develop the site based on the conceptual layout.
- Once planning approval is granted, demolition of the existing site will commence. All costs borne by EBRL.
- Development of site as per planning approval.
   All costs borne by EBRL
- On completion of development, EBRL will transfer legal ownership of 2No. 2 bed properties to NWLDC
- EBRL will retain ownership of the remaining 9 properties to cover cost of development. At this stage EBRL intend to sell these properties on the open market, at the earliest opportunity, in order to recoup our investment and realise development profit.



# Capex

- Build Cost £1176 p/m² (average property)
- 2 Bedroom 74 p/m²
- 3 Bedroom 96 p/m²
- Prices are to include all infrastructure (lighting, drainage, sewerage etc).
   Adjustment for Capex where elements of infrastructure are not required.
- All systems to include min size 2.8kWp 4kWp solar PV system, air source heat pumps and heat recovery system.
- Electricity will be take over by the fund via metering provided through Evinox





## Potential Councils

- South Derbyshire Council
- North West Leicester Council
- South Staffordshire Council
- Walsall Council
- Wolverhampton Council
- This can be rolled out nationwide





# **Benefits to Council**

- New housing stock
- Reduction in fuel poverty for social tenants
- New housing bonus
- Creation of new homes on otherwise undeveloped sites at zero capex
- A percentage of housing stock returned back to the council after the 25 year agreement
- Reduced waiting list for council homes
- Council provided with first refusal on purchase of housing stock after agreement period
- Bedsits, 1 bed, 2 bed and 3 bed houses
- Higher quality eco-efficient housing stock









## Case Study

5 DFS stores currently fitted with LED lighting.

Comparisons of usage November 2015 to January 2016 and November 2016 to January 2017.

Site	2015/2016 Usage	2016 to 2017 Usage	Savings
Southampton	49077	29293	£7913
Maidstone	33000	18000	£6000
Sunderland	52956	29876	£9232
Croyden	49578	28652	£8730
Enfield	46333	25107	£8490

Total:	230942	130928	£40365
			The second secon

Average Savings Per Site:	46188	26185	£8073
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## NN&SS 5 YEAR COST/SAVINGS CALCULATIONS

Cost per site £42950 x 28 sites £1,202,600.00

Finance cost £377,508.40

Less Tax relief (based on 20% tax rate) -£316,021.68

PAYBACK AFTER TAX RELIEF £1,264,086.80

Energy savings £8,000 per site per annum x 28 sites, based on an average of 10 pence per kWh, increasing at 3% per annum (as per Case Study) X 5 years

£1,189,246.20

Maintenance savings based Government yearly estimated average of £6 per lamp (800 lamp store) £4,800 per site x 28, x 5 years

£672,000.00

5 YEAR SAVINGS £1,861,246.20

TOTAL PROFIT AFTER FINANCE PAID BACK

£597,159.40





## Green Eco Commercial Services PLC

#### **The Energy Saving Specialists**

## **LED Quotation**

Quote Proc	duced By	James Loftus		
Customer	Ref No.	DFS001	Daytime Tel	
Customer	Name	DSF plc	Email	
		Rockingham Way		
C		Adwick le Street		
Customer	Maaress	Woodlands		
		DONCASTER	Postcode	DN6 7NA
Quote Rei	ference	LED DSF001	Quote Date	15th March 2017
	Descriptio	n	Unit Price £	Net Total ₤
	LED replacer	ment at 28 DFS plc stores, including		
	full rewire ins	tall and full on site warranty per store	£42,950.00	£1,202,600.00
			<b>—</b>	
			<u> </u>	
			Total excl.	£1,202,600.00
			VAT @ 20%	£240,520.00
			Total Cost incl. YAT	£1,443,120.00
B				







## **Green Eco Commercial Services PLC**

## **The Energy Saving Specialists**

## NN&SS LED Order Form

Quote Produced B	James Loftus	7	
Customer Ref No		Daytime Tel	
Customer Name	DSF plo	Email	
Customer Hame	Rockingham Way	Lilian	
	Adwick le Street		
Customer Addres			
	DONCASTER	Postcode	DN6 7NA
Order Reference	LED DSF001	Order Date	15th March 2017
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rewire ins	all and full on site warranty per store	£42,950.00	£1,202,600.00
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		-	
Order placed by		Total excl.	£1,202,600.00
Name		VAT @ 20%	£240,520.00
Position		Total Cost incl. YAT	£1,443,120.00
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## PAID SOLAR PV COST/SAVINGS CALCULATIONS VERSUS FREE TO FIT

Price to install 672 kW Solar PV Array £705,600

Plus finance cost £252,319.80

Less Tax relief (based on 20% tax rate)

See below \*\* -£191,583.96

LEASE PAYBACK AFTER TAX
RELIEF

As per the attached savings calculations (in the first column, Current Costs Per Year), payback would be achieved during the beginning of year 7.

SAVINGS OVER 25 YEARS AS PER SAVINGS

**CALCULATIONS** £5,573,748.18

TOTAL SAVINGS ON LEASE PURCHASE

£4,807,412.30

£766,335.84

\*\* Tax relief is claimed on the monthly payments as follows:-

Monthly payment of £15,965.33 x 20% =

£3,193.06 tax relief per month

12 payments of £15,965.33 x 20% =

£38,316.79 tax relief per annum

60 payments of £15,965.33 x 20% =

£191,583.96 overall tax relief as above

FREE TO FIT SAVINGS CALCULATIONS, ZERO CAPEX, BASED ON A PPA



As per the attached savings calculations (in Savings Per Year Column)
TOTAL SAVINGS OVER 25 YEARS
£2,321,463.39





## Green Eco Commercial Services PLC The Energy Saving Specialists

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£2,321,463.39



**TOTALS** 

£5,573,748.18



7,677,451

7,556





# DFS Roof Plot for 672kW Solar PV System















#### **Project Outline**

Lincs Electrical Wholesalers has been working with ASD lighting regarding lighting refits to DFS's warehouses and depots. The following document outlines a recent project relating to this at DFS's Glasgow warehouse.

#### **Project Aim**

The aim of the project at Glasgow was for DFS to refit the existing lighting systems with energy-saving solutions whilst maintaining a high standard of performance.

#### **Project Objectives**

The above aim was achieved by LEW fulfilling the follow objectives:

- To provide DFS with varied lighting options for their internal refits.
- To provide DFS with an additional lighting solution for the outside vicinity of the premises.
- To provide DFS with lighting solutions that will meet adequate energy saving requirements.

#### **Lighting Options**

Lincs Electrical Wholesalers provided two different options to meet the first objective.

Option one included a standard fitting of ASD products. Option two included ASD products that were fitted to include sensors and dimming features. The costs, energy savings, return of investments and net profits that the two options could provide DFS in order to meet the last objective with are summarised below:



## NN&SS Option One – Standard fittings:

Cost of the fittings @ £23,347.25

Cost of install

@£3,250.00

TOTAL

@ £26,597.25

#### Option Two - Sensors & dimming fittings:

- Cost of the fittings @ £33,075.63

Cost of install

@£4,350.00

- TOTAL

@£37,425.63

	A CONTRACTOR OF THE PROPERTY O	
	Option 1 – Standard	Option 2 – Sensors & dimming
COST (£)	26,597.25	37,425.63
PREDICTED SAVINGS (£)	11,693,78	13,365.52
ROI (years)	2.27	2.80
NET PROFIT (9 YEARS)	£80,195.25	£84,633:87

#### Outdoor Flood Lighting Solution

#### Method of Refit

DFS chose to go with LEW/s option two of sensors and dimming ASD lighting. The lighting refit was carried out to install the following:



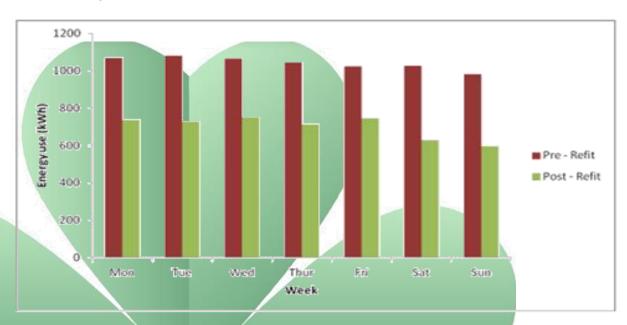
Product	Location	Key Features
LP12LEW/WRDFS560-CFP	WAREHOUSE	5 year warranty     3 hour integral battery backup     Providing upwards and downwards 360° light illumination     Excellent light output     Steel construction with polycarbonate end caps and side panels     Ceiling or suspension mounting kits
R6LEW/DFS2820-GF10	CORRIDORS & STAFF ROOMS	5 year warranty     3 hour integral     battery backup     'Soft-style' light     Low glare     Standard output
APLEW/DFS1800-CFP10	TOILETS & STAIRS	5 year warranty     3 hour integral     battery backup     1P65 rating
M5LEWAWLDFS22M-GFP	TOILETS	5 year warranty     3 hour integral battery backup     Self test emergency option available     Dimming option
LP12LEW/WLLDF\$5650	DISPATCH OFFICE	5 year warranty     Providing upwards and downwards 360° light illumination     Excellent light output     Steel construction with polycarbonate end caps and side panels     Ceiling or suspension



	mounting kits
	 rances and the control of the contro

#### Results of the Refit

The effect of the lighting refit can be seen in the properties energy use. Figure two below depicts one week's energy use prior to the refit of option two and then another week's use post-refit.



Visually, vast differences can be seen in the energy use per hour, however, the exact difference in kW per hour post- and prior to install is 2391.9 kW/h. In terms of savings, based on 10.5p per kW/h, this creates £251.15 savings per week from the refit.

In terms of a year, this would generate savings of £13,059.80 on energy alone. Factor in anticipated maintenance savings of £3,777.75 and this would give DFS total annual savings of £16,837.55 and an actual project ROI of 2.2 years. Based on energy use before the refit, the results indicate an energy saving of 32.8% for the full store, which is 26.6% more than originally predicted.

#### Conclusion

Lincs Electrical Wholesalers has successfully completed the lighting refit of DFS's Glasgow depot, using sensor and dimming ASD lighting, in order to fulfil the aim of providing energy saving light solutions for DFS. As indicated by the results, the aim of this project was met.





## **Green Eco Commercial Services PLC**

**The Energy Saving Specialists** 

## **Social Housing (Eco Houses)**



Free social housing stock with no capex whatsoever. We believe it is important to build sustainable high quality and energy efficient housing for the future, with the ongoing issues surrounding climate change and future energy costs and supply, we feel it only prudent at new build stage to design and build homes that will reduce future

energy requirements and therefore ongoing costs for the occupants. When the properties are being built renewable products will then be fitted, these include: Solar PV, Battery Storage, Air Source Heat Pump and LED Lighting.

Each one of these renewable products is capable of dramatically decreasing the energy costs of each property.

Heating and hot water will generally be provided by heat pump technology, which can provide 300 – 400% more energy into a home than the energy input into the system. This type of system, when coupled with the energy efficiency and high thermal mass properties of the construction method results in homes with low running costs, improved occupancy comfort and low ongoing carbon emissions.



We will also look to install a solar PV system. This system will be designed to provide the maximum amount of free electricity to the dwelling; again coupled with the other technologies we use, and with sensible building systems control, this will result in drastically reduced grid supplied energy, meaning lower ongoing costs and lower carbon creation.

These systems will also be designed with a view to installing battery storage to work alongside the solar PV and maximise the efficiency of the system.

There are many benefits to you which include:

- New housing stock
- Reduction in fuel poverty for social tenants
- New housing bonus
- •Creation of new homes on otherwise undeveloped sites at zero capex
- A percentage of housing stock returned back to the council after the 25 year agreement
- Reduced waiting lists for council homes
- •Council provided with first refusal on purchase of housing stock after the agreement period
- Bedsits, 1 bed, 2 bed and 3 bed houses
- Higher quality eco-efficient housing stock



NN&SS

## Green Eco Commercial Services PLC

**The Energy Saving Specialists** 

## **Retro Fit Social Housing**

#### Free to Fit Solar PV

No cost installation of a tailored solar system that will reduce the energy costs for each house as the Solar PV systems use cells to convert sunlight into electricity. We are able to install systems of 2.5kw or above nationwide and only use Tier 1 panels to ensure the highest quality systems for your peace of mind.



# 9

#### **Battery Storage**

No cost installation of a bespoke energy management unit designed to run alongside Solar and maximise the efficiency of the system. The battery can charge on a night tariff or during the day when the panels are producing. The energy used will effectively be free as this will have been produced throughout the day by the Solar PV System.

#### **LED Lighting**

No cost installation, LED lighting is extremely energy efficient and consumes up to 90% less power than incandescent bulbs. Since LEDs use only a fraction of the energy of an incandescent light bulb there is a dramatic decrease in power costs. Also, money and energy is saved in maintenance and replacement costs due to the long LED lifespan which is around 13.7 years or 50,000 hours.





#### Air Source Heat Pump

No cost installation of a high quality Air Source Heat Pump that will reduce the Gas costs for each house. Heat from the air is absorbed at low temperature into a fluid. This fluid then passes through a compressor where its temperature is increased, and transfers its higher temperature heat to the heating and hot water circuits of the house.



## **Armenia**

 Solar Heating and Cooling in Armenia

Example Roof Plot for Solar PV







## **Green Eco Commercial Services PLC**

The Energy Saving Specialists

## NN&SS Solar Heating and Cooling in Armenia

Armenia possesses enough favourable opportunities for solar energy development by NN&SS Limited and GECS plc. There are 2500 sunny hours per year and the average annual solar radiation on a horizontal surface is 1720 kWh/m2. In Europe, this value is 1000 kWh/m2.

#### **Solar Water Heaters**

A standard SWH produces hot water for bathing and washes; it includes a solar collector with area of 2.75 m2 and a water tank of 140 l. The standard system allows saving up to 65% of the energy demand for hot water for a 5-member family. The pay-back period is about 5 years. 1 m2 of solar collector saves around 0.49 t c.f./year and reduces emissions of GHGs by 0.8 t CO2/year.



#### **Solar Cooling Demo**

t CO2 /year.

In 1999-2002, a solar-driven desiccant cooling demonstration system was installed in the building of the American University of Armenia. The solar water heaters are used to heat up auditorium space and produce the hot water supply during the cold period. They also restore working substance, :which absorbs humidity and make the incoming air dry) during the warm period. In total, 32 flat solar water heaters are used. The surface of each collector is 2m2. The total surface of the solar system is 64 m2. The equal electrical power of the system is 40 kW. The system allows reducing consumption of electric energy by as much as 80%. The system can save 31.2 t c.f./year and can reduce GHG emission by 51.2





## Example Ground Mount in Armenia 5.2mW















NN&SS





# SimpliPhi Your Power Security and Independence

#### AND GAIN CONTROL OF YOUR OWN POWER.

SimpliPhi helps you manage your power as a personal resource. Anytime. Anywhere. SimpliPhi energy storage optimizes integration of renewable power with the grid and protects your home and mission-critical business functions from power outages and intermittency. SimpliPhi storage technology eliminates operating temperature constraints, toxic coolants and the risk of thermal runaway and fire.

SimpliPhi's clean storage technology utilizes the industry's most environmentally benign chemistry combined with proprietary architecture and power electronics (BMS) that eliminate the need for cooling or ventilation to create products that provide energy security and resiliency—all with a 98% efficiency rate.

SimpliPhi Power offers proprietary, commercially available energy storage and management systems that are safe, non-toxic, reliable, durable, efficient, highly scalable, and economical over the lifetime of the battery.



With global distribution and demonstrated performance since 2002, SimpliPhi's Lithium Ferrous Phosphate (LFP) batteries and plug-and-play power packs deliver superior performance in mobile, expeditionary, residential and commercial applications.

#### **GREEN POWER**

- · Non-toxic and non-corrosive; no off-gassing
- · Non-hazardous manufacture and disposal
- Most environmentally benign lithium ion chemsitry

#### SAFETY

- No risk of thermal runaway or fire
- Operate within a range of -4° to 140°F
- SimpliPhi products do not require ventilation or toxic liquid cooling to prevent heat build-up or thermal runaway, a characteristic of other lithium ion cobalt-based batteries

#### **EFFICIENCY & DURABILITY**

- Operates at 98% efficiency with 10,000+ cycles, many times the cycle life of lithium cobalt-based batteries
- Delivers multiple cycles a day
- 100% depth of discharge
- · Warranty: 10 years
- · Product life expectancy of 15 to 20 years
- One fifth the operating cost per kWh over warranty period, vs. other lithium-based batteries

#### INSTALLATION

- No special requirements for delivery and installation; drop-in replacement for traditional batteries within existing electrical infrastructure
- Scalable, modular and light-weight. Ideal for small and large residential or commercial installations





#### NN&SS

#### SIMPLIPHI SMART-TECH SERIES

- Provide clean and efficient energy storage, intelligent management and reliable, uninterrupted power solutions for on-grid and off-grid applications
- Protect against the intermittency of renewable energy sources and support power stability interfacing with the grid, from peak shaving to net-zero and back-up power
- · Ensure access to emergency power during outages



PHI2 2.6kWh



PHI2 LO-PROFILE 2.6kWh



PHI3 3.4kWh

#### SIMPLIPHI LIBERTYPAK SERIES

- Provide light-weight, plug-and-play, portable, rechargeable storage and delivery of AC power anytime, anywhere, for applications in both professional and personal markets
- Can be charged from any generation source (wind, solar, grid, generators)
- Charge cellphones, laptops, research equipment, cameras, lights and mobile field equipment (mining, oil and gas pipelines)



LB 640 LIBERTY BELT 640 Watts



LIBERTYPAK BABY GENNY 160 Watts



1,150-1,700 Watts

Designed and Built in California, USA

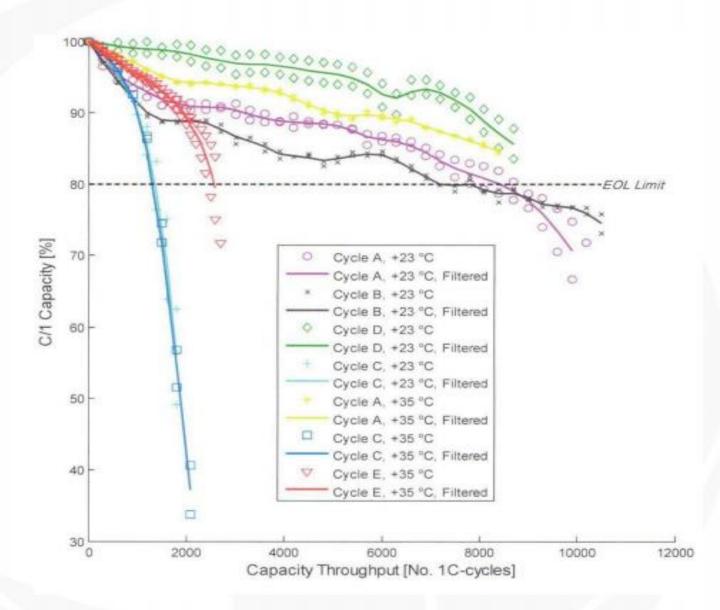




#### NN&SS

GRAPH: Cycle Life and Energy Capacity with 5 Different Cycling Profiles:

The following table depicts the cycle test parameters related to energy capacity and cycle life over time:



As one can see from the graph, the cells cycled using cycle C parameters (temperature, C rate and SOC/DOD) lasted for approximately 2000 cycles, whereas the cells cycled using cycle D parameters (temperature, C rate and SOC/DOD) lasted for almost 9000 cycles, not yet reaching their EOL.



#### Explanation of Cycles:

**Cycle A** is a reference cycle and was derived from a HEV city bus route in Sweden. This cycle had a narrow SOC/DOD range of 25-58% with differing currents within the charge/discharge window up to almost 20C.

Cycle B is a "synthetic" cycle derived from computer models and digitally reproduced.

Cycle C has a wide SOC/DOD range of approximately 100% with a constant current charge/discharge window of almost 4C at a temperature of both +23°C and +35°C.

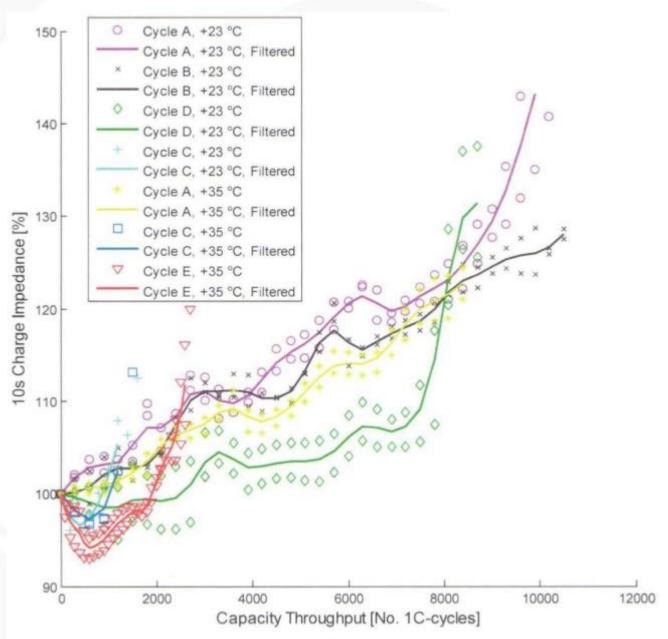
Cycle D has a narrow SOC/DOD range of 25-58% with a constant current charge/discharge window of almost 4C at a temperature of +23°C.

**Cycle E** has a wide SOC/DOD range of approximately 100% with a constant current charge/discharge window of almost 4C at a temperature of +35°C.



## Chart Relating to Change in Impedance in Reference to the 5 Cycling Parameters:

This chart on impedance over time (cycle life) also demonstrates the large difference between cycle life as it relates to SOC/DOD.



As one can see in this graph, the impedance rises quickly with the wide SOC for cycle C, compared to cycle D which has a slow rise until the end of 8000 cycles.



Time HRS	Avg. TEMP C/F	Avg. Volts	
0 hr	26.60/79.88	29	Discharge Commences
.5 hr	29.60/85.28	26	Discharge
1 hr	30.50/86.9	25	Discharge
1.5 hr	32.00/89.6	25	Discharge
2 hr	33.10/91.58	23	Discharge Complete
2.5 hr	33.00/91.4	26	Charge Commences
3 hr	33.40/92.12	26	Charge
3.5 hr	33.50/92.3	27	Charge
4 hr	33.50/92.3	27	Charge
4.5 hr	33.40/92.12	28	Charge
5 hr	33.00/91.4	29	Charge Complete

These tests demonstrate a modest generation of heat (less than 7 degrees) during discharge @ C/2 and no increase in temperature during the charge cycle, which accounts for the high efficiency rate. Proportionately, there is negligible heat generation at discharge rates less than C/2, and no measureable increase at C/5 or less.





# Mr Arash Nassouri & Stewart James Loftus Current Associated Companies





#### **Managing Director**

NN&SS Limited and GECS plc (Green Eco Commercial Services plc)

Company Registration No 0964 6948

Purpose Built SPV
Not Yet Traded

Managing Director
Investeco Limited
Company Registration No 1050 1757
EIS (Enterprise Investment Scheme) Company
Not Yet Traded

Managing Director
Green Eco Grants Limited
Company Registration No 0814 6469
Commenced Trading July 2012





Managing Director
Powercore Energy Limited
Company Registration No 1031
6990
Not Yet Traded

Managing Director
Powercore Systems Limited
Company Registration No 1031
6973
Not Yet Traded

Managing Director
Powercore Distribution Limited
Company Registration No 1031
7588
Not Yet Traded







Green Eco Commercial Services plc Projections For 5 Years. Ended 31<sup>ST</sup> March 2022





## Green Eco Commercial Services PLC Projections For the 5 Years Ended 31st March 2022

The attached projections have been prepared from information and explanations supplied to us by the directors of the company.

The directors of the company are solely responsible for the projections and the assumptions on which they are based. The projections have been prepared for illustrative purposes only and do not constitute a forecast.

Since the projections relate to the future, actual results are likely to be different from the projected results because events and circumstances frequently do not occur as expected and the difference may be material. The projections are by their nature not subject to audit and we are unable to express an opinion as to the possibility that they will be achieved.

Blow Abbott Limited is acting as adviser to Green Eco Commercial Services PLC and accepts no duty of care or liability towards any other person in connection with the projections.

31st March 2017

Blow Abbott Limited Chartered Accountant

FOR THE INTERNAL CONSIDERATION OF THE DIRECTORS ONLY





## Green Eco Commercial Services PLC Projected Profit and Loss Account For the 5 Years Ended 31st March 2022



	YE 31.3.18	YE 31.3.19	YE 31.3.20	<u>∀E 31.3.21</u>	YE 31.3.22
	<u>£</u>	<u>£</u>	<u>£</u>	<u>£</u>	<u>£</u>
INCOME					
Commercial Solar	1,250,000	2,500,000	2,500,000	2,500,000	2,500,000
Armenia	12,120,000	0	0	0	0
Eco Home - Sales	2,250,000	4,500,000	5,625,000	5,625,000	5,625,000
Eco Home - Rent	35,100	122,850	210,600	298,350	386,100
Heat Pumps - Sales Heat Pumps - Customer Contribution	10,054,800	23,461,200	26,812,800	26,812,800	26,812,800
rieat Pumps • Customer Continuution	7,000,000	14,000,000	14,000,000	14,000,000	14,000,000
Total Income	32,709,900	44,584,050	49,148,400	49,236,150	49,323,900
COST OF SALES  Commercial Solar	1,209,600	4 200 600	4 200 600	4 200 600	1 200 600
Armenia	5,250,000	1,209,600 0	1,209,600	1,209,600	1,209,600
Eco Homes	1,800,000	3,600,000	4,500,000	4,500,000	4,500,000
Heat Pumps	16,304,000	32,608,000	32,608,000	32,608,000	32,608,000
	24,563,600	37,417,600	38,317,600	38,317,600	38,317,600
GROSS PROFIT	8,146,300	7,166,450	10,830,800	10,918,550	11,006,300
EXPENSES					
Salaries and Wages	221,742	352,992	427,992	442,992	442,992
Directors Salary	72,000	72,000	72,000	72,000	72,000
Pension	6,652	10,588	12,840	13,288	13,288
Rent, Rates & Insurance	72,000	72,000	72,000	72,000	72,000
Postage, Stationery & Advertising	26,000	26,000	26,000	26,000	26,000
Telephone	18,000	18,000	18,000	18,000	18,000
Travel & Entertaining	30,000	30,000	30,000	30,000	30,000
Subscriptions Training	2,400 12,000	2,400 12,000	2,400 12,000	2,400 12,000	2,400 12,000
Legal & Professional	70,000	40,000	40,000	40,000	40,000
Development of Sales App	15,000	0	0,000	0,000	0
Miscellaneous	12,000	12,000	12,000	12,000	12,000
Depreciation	5,000	5,000	5,000	5,000	5,000
Corporation Tax	1,440,866	1,237,559	1,717,097	1,729,388	1,744,305
Dividend	0	0	0	0	0
	2,003,660	1,890,539	2,447,329	2,475,068	2,489,985
NET PROFIT AFTER TAX	6,142,640	5,275,911	8,383,471	8,443,482	8,516,315



#### Green Eco Commercial Services PLC **Projected Balance Sheet** For the 5 Years Ended 31st March 2022



## Green Eco Commercial Services PLC

**The Energy Saving Specialists** 

ININOSS										
	31st March 2018		31st Ma	rch 2019	31st Mar	ch 2020	31st Mar	ch 2021	31st Mar	ch 2022
	£	£	£	£	£	£	£	£	£	£
FIXED ASSETS  Tangible Assets - Investment Properties Tangible Assets - Other		1,500,000 20,000		3,000,000 15,000		4,500,000 10,000		7,500,000 5,000		9,000,000
CURRENT ASSETS Stock Work in Progress Debtors Prepayments Bank & Cash	1,800,000 1,020,000 0 33,980,406 36,800,406		1,800,000 2,040,000 0 80,889,290 84,729,290		900,000 3,060,000 0 93,137,299 97,097,299		900,000 1,680,000 0 0 59,978,072 62,558,072		2,700,000 0 0 26,894,304 29,594,304	
CURRENT LIABILITIES  Trade Creditors Other Taxes and Social Security VAT Corporation Tax Other Creditor Directors Loan Account NN & SS Loan Accruals	0 (13,100) 1,440,866 0 150,000 30,550,000 0		0 0 38,180 1,237,559 0 150,000 74,850,000 0		0 0 38,180 1,717,097 0 0 80,000,000 0 81,755,277		0 0 38,180 1,729,388 0 0 40,000,000 0 41,767,568		0 0 38,180 1,744,305 0 0 0 1,782,485	
NET CURRENT ASSETS		4,672,640		8,453,551		15,342,022		20,790,504		27,811,819
DEFERRED TAXATION										
NET ASSETS	•	6,192,640		11,468,551	,	19,852,022	,	28,295,504	,	36,811,819
CAPITAL AND RESERVES Share Capital Profit and Loss Account		50,000 6,142,640		50,000 11,418,551		50,000 19,802,022		50,000 28,245,504		50,000 36,761,819
		6,192,640		11,468,551	,	19,852,022	,	28,295,504	,	36,811,819

Prepared by Blow Abbott Limited March 2017 FOR THE INTERNAL CONSIDERATION OF THE DIRECTORS ONLY



## Green Eco Commercial Services PLC

**The Energy Saving Specialists** 

## Green Eco Commercial Services PLU

Cashflow Forecast

For the 5 Years Ended 31st March 2022

X	
NN&SS	
<u>QE</u> 30.6.17	3

Closing Balance

													_								
INCOME	<u>QE</u> 30.6.17	<u>QE</u> 30.9.17	<u>QE</u> 31.12.17	<u>QE</u> 31.3.18	<u>QE</u> 30.6.18	<u>QE</u> 30.9.18	<u>QE</u> 31.12.18	<u>QE</u> 31.3.19	<u>QE</u> 30.6.19	<u>QE</u> 30.9.19	<u>QE</u> 31.12.19	<u>QE</u> 31.3.20	<u>QE</u> 30.6.20	<u>QE</u> 30.9.20	<u>QE</u> 31.12.20	<u>QE</u> 31.3.21	<u>QE</u> 30.6.21	<u>QE</u> 30.9.21	<u>QE</u> 31.12.21	<u>QE</u> 31.3.22	Total
INCOME Commercial Solar Output Vat (5%)	0	0	1,250,000 250,000	0	1,250,000 250,000	0	1,250,000 250,000	0	1,250,000 250,000	0	1,250,000 250,000	0	1,250,000 250,000	0	1,250,000 250,000	0	1,250,000 250,000	0	1,250,000 250,000	0	11,250,000 2,250,000
Armenia	0	0	0	12,120,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12,120,000
Eco Homes - Sales Eco Homes - Rents	0	0	1,125,000 17,550	1,125,000 17,550	1,125,000 17,550	1,125,000 35,100	1,125,000 35,100	1,125,000 35,100	1,125,000 52,650	2,250,000 52,650	1,125,000 52,650	1,125,000 52,650	2,250,000 70,200	1,125,000 70,200	1,125,000 70,200	1,125,000 87,750	1,125,000 87,750	1,125,000 87,750	1,125,000 105,300	2,250,000 105,300	23,625,000 1,053,000
Heat Pumps - Sale Ouput Vat (5%) Heat Pumps - Customer Cont Output Vat (5%)	0 0 1,750,000 87,500	3,351,600 167,580 1,750,000 87,500	3,351,600 167,580 1,750,000 87,500	3,351,600 167,580 1,750,000 87,500	3,351,600 167,580 3,500,000 175,000	6,703,200 335,160 3,500,000 175,000	6,703,200 335,160 3,500,000 175,000	6,703,200 335,160 3,500,000 175,000	6,703,200 335,160 3,500,000 175,000	6,703,200 335,160 3,500,000 175,000	6,703,200 335,160 3,500,000 175,000	6,703,200 335,160 3,500,000 175,000	6,703,200 335,160 3,500,000 175,000	6,703,200 335,160 3,500,000 175,000	6,703,200 335,160 3,500,000 175,000	6,703,200 335,160 3,500,000 175,000	6,703,200 335,160 3,500,000 175,000	6,703,200 335,160 3,500,000 175,000	6,703,200 335,160 3,500,000 175,000	6,703,200 335,160 3,500,000 175,000	113,954,400 5,697,720 63,000,000 3,150,000
Directors Loan NN & SS Investment	200,000 8,100,000	7,900,000	8,000,000	6,550,000	10,600,000	10,700,000	12,100,000	10,900,000	5,150,000	0	0	0	0	0	0	0	0	0	0	0	200,000 80,000,000
	10,137,500	13,256,680	15,999,230	25,169,230	20,436,730	22,573,460	25,473,460	22,773,460	18,541,010	13,016,010	13,391,010	11,891,010	14,533,560	11,908,560	13,408,560	11,926,110	13,426,110	11,926,110	13,443,660	13,068,660	316,300,120
OUTGOINGS Commercial Solar Input Vat (20%)	302,400 60,480	302,400 60,480	302,400 60,480	302,400 60,480	302,400 60,480	302,400 60,480	302,400 60,480	302,400 60,480	302,400 60,480	302,400 60,480	302,400 60,480	302,400 60,480	302,400 60,480	302,400 60,480	302,400 60,480	302,400 60,480	302,400 60,480	302,400 60,480	302,400 60,480	302,400 60,480	6,048,000 1,209,600
Armenia	1,750,000	1,750,000	1,750,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5,250,000
Eco Homes	1,530,000	1,530,000	1,530,000	1,530,000	1,530,000	1,530,000	1,530,000	1,530,000	1,530,000	1,530,000	1,530,000	1,530,000	1,530,000	1,530,000	1,530,000	1,530,000	1,530,000	1,530,000	1,530,000	1,530,000	30,600,000
Heat Pumps Input Vat (5%)	4,076,000 203,800	4,076,000 203,800	4,076,000 203,800	4,076,000 203,800	8,152,000 407,600	8,152,000 407,600	8,152,000 407,600	8,152,000 407,600	8,152,000 407,600	8,152,000 407,600	8,152,000 407,600	8,152,000 407,600	8,152,000 407,600	8,152,000 407,600	8,152,000 407,600	8,152,000 407,600	8,152,000 407,600	8,152,000 407,600	8,152,000 407,600	8,152,000 407,600	146,736,000 7,336,800
OVERHEADS Salaries and Wages Directors Salary Pension Rent, Rates & Insurance Postage, Stationery & Advertising Telephone Travel & Entertaining Subscriptions Training Legal & Professional Development of Sales App Miscelaneous Capital Expenditure Directors Loan Repayment NN & SS Repayment Corporation Tax Input Vat (20%) (Receipt)/Payment to HMRC	31,998 18,000 960 18,000 6,500 4,500 7,500 600 3,000 25,000 0 0 0 8,900 0	50,748 18,000 1,522 18,000 6,500 4,500 7,500 600 3,000 25,000 0 0 7,900 (185,680) 7,888,270	69,498 18,000 2,085 18,000 6,500 4,500 7,500 600 3,000 0 0 3,000 0 0 3,900 (17,100) 8,052,163	69,498 18,000 2,085 18,000 6,500 4,500 7,500 600 3,000 0 0 3,000 0 0 3,900 236,900 6,556,163	88,248 18,000 2,647 18,000 6,500 4,500 7,500 600 3,000 0 0 3,000 0 0 3,900 (13,100) 10,605,275	88,248 18,000 2,647 18,000 6,500 4,500 7,500 600 3,000 0 0 3,000 0 0 3,900 120,600 10,738,975	88,248 18,000 2,647 18,000 6,500 4,500 7,500 600 3,000 0 0 1,440,866 3,900 38,180 12,097,421	88,248 18,000 2,647 18,000 6,500 4,500 7,500 600 3,000 0 0 3,000 0 0 3,900 288,180 10,906,555	106,998 18,000 3,210 18,000 6,500 4,500 7,500 600 3,000 0 75,000 0 3,900 3,900 3,8180	106,998 18,000 3,210 18,000 6,500 4,500 7,500 600 3,000 0 3,000 0 75,000 0 3,900 288,180 11,000,868	106,998 18,000 3,210 18,000 6,500 4,500 7,500 600 3,000 0 0 1,237,559 3,900 38,180 11,913,427	106,998 18,000 3,210 18,000 6,500 4,500 7,500 600 3,000 0 0 3,000 0 0 0 3,900 288,180	110,748 18,000 3,322 18,000 6,500 4,500 7,500 600 3,000 10,000 0 10,000,000 0 3,900 38,180 20,679,730	110,748 18,000 3,322 18,000 6,500 4,500 7,500 600 3,000 10,000 0 10,000,000 0 3,900 288,180 20,929,730	110,748 18,000 3,322 18,000 6,500 4,500 7,500 600 3,000 0 10,000,000 1,717,097 3,900 38,180 22,396,827	110,748 18,000 3,322 18,000 6,500 4,500 7,500 600 3,000 0 10,000 0 3,000 0 10,000,000 0 3,900 288,180 20,929,730	110,748 18,000 3,322 18,000 6,500 4,500 7,500 600 3,000 10,000 0 10,000,000 0 3,900 3,900 38,180 20,679,730	110,748 18,000 3,322 18,000 6,500 4,500 7,500 600 3,000 10,000 0 10,000,000 0 3,900 288,180 20,929,730	110,748 18,000 3,322 18,000 6,500 4,500 7,500 600 3,000 0 10,000,000 1,729,388 3,900 38,180 22,409,118	110,748 18,000 3,322 18,000 6,500 4,500 7,500 600 3,000 0 10,000,000 0 3,900 288,180 20,929,730	0 1,888,710 360,000 56,656 360,000 130,000 90,000 150,000 230,000 15,000 80,000,000 61,24,910 87,000 2,426,140 289,405,816
NET SURPLUS/(DEFICIT)	2,051,862	5,368,410	7,947,067	18,613,067	9,831,455	11,834,485	13,376,039	11,866,905	7,790,142	2,015,142	1,477,583	965,142	(6,146,170)	(9,021,170)	(8,988,267)	(9,003,620)	(7,253,620)	(9,003,620)	(8,965,458)	(7,861,070)	26,894,304
BANK SUMMARY Opening Balance Net Surplus/(Deficit)		2,051,862 5,368,410		15,367,339 18,613,067					80,889,290 7,790,142										43,720,832 (8,965,458)		

2,051,862 7,420,272 15,367,339 33,980,406 43,811,861 55,646,346 69,022,385 80,889,290 88,679,432 90,694,574 92,172,157 93,137,299 86,991,129 77,969,959 68,981,692 59,978,072 52,724,452 43,720,832 34,755,374 26,894,304





## Commercial Solar Cashflow Forecast For the 5 Years Ended 31st Mars

## For the 5 Years Ended 31st March 2022

	30.6.17	30.9.17	31.12.17	31.3.18	30.6.18	30.9.18	31.12.18	31.3.19	30.6.19	30.9.19	31.12.19	31.3.20	30.6.20	30.9.20	31.12.20	31.3.21	30.6.21	30.9.21	31.12.21	31.3.22	Total
INCOME																					
Income - DFS			1,250,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,250,000
Income - Project 2					1,250,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,250,000
Income - Project 3							1,250,000	0	0	0	0	0	0	0	0	0	0	0	0	0	1,250,000
Income - Project 4									1,250,000	0	0	0	0	0	0	0	0	0	0	0	1,250,000
Income - Project 5											1,250,000	0	0	0	0	0	0	0	0	0	1,250,000
Income - Project 6													1,250,000	0	0	0	0	0	0	0	1,250,000
Income - Project 7															1,250,000	0	0	0	0	0	1,250,000
Income - Project 8																	1,250,000	0	0	0	1,250,000
Income - Project 9																			1,250,000	0	1,250,000
Income - Project 10																					0
Output Vat	0	0	250,000	0	250,000	0	250,000	0	250,000	0	250,000	0	250,000	0	250,000	0	250,000	0	250,000	0	2,250,000
	0	Λ	4 500 000	Λ.	4 500 000	۸	4 500 000	۸	4 500 000	ñ	4 500 000	Δ.	4 500 000	۸	4 500 000	Λ.	1 500 000		4 500 000	0	43 500 000
	Ų	Ų	1,500,000	U	1,500,000	Ų	1,500,000	U	1,500,000	Ų	1,500,000	Ų	1,500,000	Ų	1,500,000	Ü	1,500,000	Ü	1,500,000	0	13,500,000
OUTGOINGS  Capital Expenditure - DFS  Capital Expenditure - Project 2  Capital Expenditure - Project 3  Capital Expenditure - Project 4  Capital Expenditure - Project 5  Capital Expenditure - Project 6  Capital Expenditure - Project 7  Capital Expenditure - Project 8  Capital Expenditure - Project 9  Capital Expenditure - Project 9  Capital Expenditure - Project 10	302,400	302,400	302,400	302,400	302,400	302,400	302,400	302,400	302,400	302,400	302,400	302,400	302,400	302,400	302,400	302,400	302,400	302,400	302,400	302,400	604,800 604,800 604,800 604,800 604,800 604,800 604,800 604,800 604,800
Input Vat	60,480	60,480	60,480	60,480	60,480	60,480	60,480	60,480	60,480	60,480	60,480	60,480	60,480	60,480	60,480	60,480	60,480	60,480	60,480	60,480	1,209,600
	362,880	362,880	362,880	362,880	362,880	362,880	362,880	362,880	362,880	362,880	362,880	362,880	362,880	362,880	362,880	362,880	362,880	362,880	362,880	362,880	7,257,600
NET SURPLUS/(DEFICIT)	(362,880)	(362,880)	1,137,120	(362,880)	1,137,120	(362,880)	1,137,120	(362,880)	1,137,120	(362,880)	1,137,120	(362,880)	1,137,120	(362,880)	1,137,120	(362,880)	1,137,120	(362,880)	1,137,120	(362,880)	6,242,400

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FOR THE INTERNAL CONSIDERATION OF THE DIRECTORS ONLY





## Shtgen LLC Ground Source (Armenia) Cashflow Forecast

## For the 5 Years Ended 31st March 2022

INCOME	<u>QE</u> 30.6.17	QE 30.9.17	<u>QE</u> 31.12.17	<u>QE</u> 31.3.18	<u>QE</u> 30.6.18	<u>QE</u> 30.9.18	<u>QE</u> 31.12.18	<u>QE</u> 31.3.19	<u>QE</u> 30.6.19	<u>QE</u> 30.9.19	<u>QE</u> 31.12.19	<u>QE</u> 31.3.20	<u>QE</u> 30.6.20	<u>QE</u> 30.9.20	<u>QE</u> 31.12.20	QE 31.3.21	QE 30.6.21	QE 30.9.21	<u>QE</u> 31.12.21	<u>QE</u> 31.3.22	Total
Income - Shigen LLC	0	0	0	12,120,000	0	0	0	0	0	0	0	0	0	(	) (	0	0	(	) 0	0	12,120,000
		Λ		12 120 000	٨		Λ.	٨	۸	٨	Λ	Λ	٨		\ /				۱ ۸	۸	12 120 000
ALTEANIA A	U	U	U	12,120,000	U		ı Ü	U	U	V	U	U	U	(	) (		U		) (	U U	12,120,000
OUTGOINGS Capital Expenditure - Shtgen LLC	1,750,000	1,750,000	1,750,000																		5,250,000
	1,750,000	1,750,000	1,750,000	0	0	(	0	0	0	0	0	0	0	(	) (	(	0	(	) (	0	5,250,000
NET SURPLUS/(DEFICIT)	(1,750,000)	(1,750,000)	(1,750,000)	12,120,000	0	0	0	0	0	0	0	0	0	(	) (	0	0	(	) (	0	6,870,000

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FOR THE INTERNAL CONSIDERATION OF THE DIRECTOR'S ONLY



## Eco Homes Cashflow Forecast

## For the 5 Years Ended 31st March 2022

MANUE	<u>QE</u> 30.6.17	QE 30.9.17	<u>QE</u> 31.12.17	<u>QE</u> 31.3.18	<u>QE</u> 30.6.18	<u>QE</u> 30.9.18	<u>QE</u> 31.12.18	<u>QE</u> 31.3.19	<u>QE</u> 30.6.19	QE 30.9.19	<u>QE</u> 31.12.19	<u>QE</u> 31.3.20	<u>QE</u> 30.6.20	QE 30.9.20	<u>QE</u> 31.12.20	QE 31.3.21	<u>QE</u> 30.6.21	QE 30.9.21	QE 31.12.21	<u>QE</u> 31.3.22	Total
INCOME  Sale of Eco Houses (Tranche 1)  Sale of Eco Houses (Tranche 2)  Sale of Eco Houses (Tranche 3)  Sale of Eco Houses (Tranche 4)  Sale of Eco Houses (Tranche 5)  Sale of Eco Houses (Tranche 6)			1,125,000	1,125,000	1,125,000	1,125,000	1,125,000	1,125,000	1,125,000	1,125,000 1,125,000	1,125,000	1,125,000		1,125,000	1,125,000	1,125,000	1,125,000	1,125,000	1,125,000	1,125,000 1,125,000	4,500,000 4,500,000 4,500,000 4,500,000 1,125,000
Rent of Eco Houses (Tranche 1) Rent of Eco Houses (Tranche 2) Rent of Eco Houses (Tranche 3) Rent of Eco Houses (Tranche 4) Rent of Eco Houses (Tranche 5) Rent of Eco Houses (Tranche 6)			17,550	17,550	17,550	17,550 17,550	17,550 17,550	17,550 17,550	17,550 17,550 17,550	17,550 17,550 17,550	17,550 17,550 17,550	17,550 17,550 17,550	17,550 17,550 17,550	17,550 17,550 17,550 17,550	17,550 17,550 17,550 17,550	17,550 17,550 17,550 17,550 17,550	17,550 17,550 17,550 17,550	17,550 17,550 17,550 17,550 17,550	17,550 17,550 17,550 17,550 17,550	17,550 17,550 17,550 17,550 17,550	315,900 263,250 210,600 140,400 87,750 35,100
	Ö	0	1,142,550	1,142,550	1,142,550	1,160,100	1,160,100	1,160,100	1,177,650	2,302,650	1,177,650	1,177,650	2,320,200	1,195,200	1,195,200	1,212,750	1,212,750	1,212,750	1,230,300	2,355,300	24,678,000
OUTGOINGS  1st Tranche (51 houses) 2nd Tranche (51 houses) 3rd Tranche (51 houses) 4th Tranche (51 houses) 5th Tranche (51 houses) 6th Tranche (51 houses)	1,530,000	1,530,000	1,530,000	510,000 1,020,000	1,530,000	1,530,000	1,020,000 510,000	1,530,000	1,530,000	1,530,000	1,530,000	1,530,000	1,530,000	510,000 1,020,000	1,530,000	1,530,000	1,020,000 510,000	1,530,000	1,530,000	1,530,000	5,100,000 5,100,000 5,100,000 5,100,000 5,100,000
	1,530,000	1,530,000	1,530,000	1,530,000	1,530,000	1,530,000	1,530,000	1,530,000	1,530,000	1,530,000	1,530,000	1,530,000	1,530,000	1,530,000	1,530,000	1,530,000	1,530,000	1,530,000	1,530,000	1,530,000	30,600,000
NET SURPLUS/(DEFICIT)	(1,530,000) (	1,530,000)	(387,450)	(387,450)	(387,450)	(369,900)	(369,900)	(369,900)	(352,350)	772,650	(352,350)	(352,350)	790,200	(334,800)	(334,800)	(317,250)	(317,250)	(317,250)	(299,700)	825,300	(5,922,000)

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NET SURPLUS/(DEFICIT)



31,729,320

# Heat Pumps Cashflow Forecast For the 5 Years Ended 31st March 2022

INCOME	<u>QE</u> 30.6.17	<u>QE</u> 30.9.17	<u>QE</u> 31.12.17	<u>QE</u> 31.3.18	<u>QE</u> 30.6.18	<u>QE</u> 30.9.18	<u>QE</u> 31.12.18	<u>QE</u> 31.3.19	<u>QE</u> 30.6.19	<u>QE</u> 30.9.19	<u>QE</u> 31.12.19	<u>QE</u> 31.3.20	<u>QE</u> 30.6.20	<u>QE</u> 30.9.20	<u>QE</u> 31.12.20	<u>OE</u> 31.3.21	<u>QE</u> 30.6.21	<u>QE</u> 30.9.21	<u>QE</u> 31.12.21	<u>QE</u> 31.3.22	Total
Sale of Heat Pumps (70% RHI) Output Vat (5%)		3,351,600 167,580	3,351,600 167,580	3,351,600 167,580	3,351,600 167,580	6,703,200 335,160	6,703,200 335,160	6,703,200 335,160	., ,	6,703,200 335,160	.,,		.,,	.,,	6,703,200 335,160		.,,	.,,	., .,		113,954,400 5,697,720
Customer Contribution Output Vat (5%)	1,750,000 87,500	1,750,000 87,500	1,750,000 87,500	1,750,000 87,500	3,500,000 175,000	3,500,000 175,000	3,500,000 175,000	3,500,000 175,000	63,000,000 3,150,000												
	1,837,500	5,356,680	5,356,680	5,356,680	7,194,180	10,713,360	10,713,360	10,713,360	10,713,360	10,713,360	10,713,360	10,713,360	10,713,360	10,713,360	10,713,360	10,713,360	10,713,360	10,713,360	10,713,360	10,713,360	185,802,120
OUTGOINGS no cumulative	500 500	500 1,000	500 1,500	500 2,000	1,000 3,000	1,000 4,000		1,000 6,000		1,000 8,000		1,000 10,000							1,000 17,000		
Construction Costs Input vat	4,076,000 203,800	4,076,000 203,800	4,076,000 203,800	4,076,000 203,800	8,152,000 407,600	8,152,000 407,600	., . ,	8,152,000 407,600	., . ,	8,152,000 407,600	., . ,	., . ,	., . ,	., . ,	., . ,		., . ,	., . ,	., . ,	., . ,	., ,
	4,279,800	4,279,800	4,279,800	4,279,800	8,559,600	8,559,600	8,559,600	8,559,600	8,559,600	8,559,600	8,559,600	8,559,600	8,559,600	8,559,600	8,559,600	8,559,600	8,559,600	8,559,600	8,559,600	8,559,600	0

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FOR THE INTERNAL CONSIDERATION OF THE DIRECTORS ONLY

(2,442,300) 1,075,880 1,075,880 1,075,880 (1,365,420) 2,153,760 2,



## Green Eco Commercial Services PLC For the 5 Years Ended 31st March 2022 Assumptions

#### 1) Commercial Solar

- Based on a single 672 KWP project.
- Projects take 6 months to complete.
- Only 1 project in progress at any time.
- Income calculated as 70% of the 'System Owner Revenue' over the 25 year period of the feed-in tariff.
- Income received in the quarter following project completion.
- Vat of 20% on sale of each project.
- Vat of 20% on project expenditure.

#### 2) Shtgen LLC Ground Source (Armenia)

- Based on a single project.
- Project takes 9 months to complete.
- Armenia project is a 'one-off'.
- Income calculated as 70% of the 'System Owner Revenue' over the 25 year period of the feed-in tariff.
- Income received in the quarter following project completion.
- No vat implications as the work is completed in Armenia.

#### Eco Homes

- 306 homes to be built over the 5 years, in 6 tranches of 51 homes.
- Each tranche consists of 17 each of 1-bed, 2-bed and 3-bed homes.
- Construction costs of £75,000, £100,000 and £125,000 respectively.
- Each tranche will take approx 10 months to build.
- 70% of the homes built will be sold, with the remaining 30% retained and rented out.
- Selling prices £93,750, £125,000 and £156,250 respectively.
- Rental income £4,160pa, £4,680pa and £5,200pa respectively.
- Sales/Rent to commence 6 months after construction commenced.

#### 4) Heat Pumps

- Construction of the pumps costs £8,152 per unit.
- Customer contribution of £3,500 per unit.
- 500 pumps to be constucted in each of the first 4 quarters, rising to 1,000 per quarter thereafter.
- Income calculated as 70% of the feed-in tariff (£94 p month) and meter revenue (£20 p month) over the 7 year period of the feed-in tariff.
- Income received in the quarter following construction.
- All vat calculated at 5% on both costs and outputs.

#### 5) Salaries and Wages

- £10,666 p month for 4 employees for the first 3 months.
- £6,250 p month for additional 5 employees in guarter 2.
- £6,250 p month for additional 5 employees in guarter 3.
- £6,250 p month for additional 5 employees in quarter 5.
- £6,250 p month for additional 5 employees in quarter 9.
- £1,250 p month for additional employee in quarter 13 to take total to 25.
- Pension assumed 3% of Salaries and Wages.
- 7) Rent, Rates & Insurance £6,000 per month (includes gas and electric).

#### 8) Legal and Professional

- £50,000 initial set-up costs.
- £10,000 per quarter after initial set-up, mainly re house sales.
- Capital Expenditure relates to IT and telephony equipment.
  - Depreciation calculated at 20% per annum straight line over the 5 years.
- 10) J Loftus to introduce £200,000 in the first quarter. This is to be repaid (less debtor for share capital) in quarters 9 & 10.
- 11) NN & SS investment of £80M to be drawn down over the first 9 quarters of the projections. This is to be allocated to cover the outgoings in those periods.

Repayment to be made in years 4 & 5 of the projections at a rate of £10M per quarter.

No interest is to be charged on this loan.

- Corporation tax calculated at 19% in 2018 and 2019, reducing to 17% in 2020, 2021 and 2022.
- 13) Stock is calculated as an estimate of the homes that have been completed but not yet sold or rented.
- 14) Work in Progress is estimated at the costs incurred on incomplete homes.