# THRIVERENEWABLES PLC HALF-YEAR REPORT

TO 30 JUNE 2018







Our mission and core values continue to drive us forward in 2018:

#### Sustainable at heart

The principles of sustainability have guided us for over two decades, from the projects we invest in to how we run our business. To generate clean energy that can meet the needs of today's world and future generations, we only ever invest in sustainable projects, in a sustainable way.

#### **Rewarding Connection**

We make decisions based on the interests of our investors. That means we invest in real projects, that are supported by real people. and that create real rewards - financial, environmental and social. We always communicate these impacts clearly and transparently.

#### **Movement for Change**

We play an active and committed role in the clean energy movement: a growing community of people and businesses who are committed to making change happen. We share our knowledge and insight to catalyse change, and we're passionate and excited about what is possible.



**DIVIDEND AGREED** 

(PAID JULY 2018)

**INVESTMENT INTO NEW TECHNOLOGIES SUCH AS** 

**ELECTRICITY STORAGE** 

AND GROUND **SOURCED HEAT** 

**OPERATING PROFIT** £2.9M

5.7% UP ON 2017

**EQUIVALENT OF** ELECTRICITY GENERATED PER SHAREHOLDER



66,534

HOMES

HAVE BEEN POWERED BY
OUR INVESTED PORTFOLIO IN THE LAST SIX MONTHS

**SECURED** 

**POWER PRICES** 

HIGHER NO

THRIVE **RENEWABLES** 

SO FAR IN 2018...

**TONNES** 



OF  $CO_2$ e

**EMISSIONS SAVED PER SHAREHOLDER** 

> IN THE FIRST 6 MONTHS OF 2018

**GENERATED BY INVESTED** 

> **PORTFOLIO** (25% INCREASE ON FIRST **HALF OF 2017)**

**COST OF DEBT** 

**AVERAGE** 

**LOWER THAN** 2017

COMMUNITY BENEFIT PROGRAMME GENERATING

**EMISSION REDUCTIONS** ANNUALLY FROM 17 PROJECTS





#### FINANCIAL PERFORMANCE

The Group achieved a half year operating profit including the contribution from investments of £2.92m on turnover of £7.85m compared to an operating profit of £2.76m on turnover of £7.87m in the first half of 2017.

The increase in operating profit relates largely to the contributions from new investments in the form of mezzanine loan arrangements extended to project developers under the community energy funding bridges.

Whilst generation is lower than targeted for the period due to the lower wind resource and the operational issues mentioned below, we have benefited from improved wholesale electricity prices and increased embedded benefit income. We have also been able to secure compensation for some of the lost availability with claims from our turbine manufacturers. Revenue, including other operating income, is overall slightly below expectations, yet above the same period in 2017.



#### CONSOLIDATED OPERATING STATEMENT

#### **HALF YEAR ENDED 30 JUNE 2018**

	HALF YEAR TO 30 JUNE 2018 £	HALF YEAR TO 30 JUNE 2017 £	FULL YEAR TO 31 DEC 2017 £	HALF YEAR TO 30 JUNE 2016 £	FULL YEAR TO 31 DEC 2016 £
TURNOVER	7,848,401	7,869,272	15,609,821	7,085,618	13,541,316
Cost of sales	(4,247,964)	(4,071,234)	(8,775,494)	(3,613,020)	(7,960,883)
GROSS PROFIT	3,600,437	3,798,038	6,834,327	3,472,598	5,580,433
Other operating income	72,023	-	372,187	=	=
Administrative expenses	(1,509,016)	(1,489,798)	(2,810,962)	(1,379,436)	(2,839,604)
OPERATING PROFIT	2,163,444	2,308,240	4,395,552	2,093,162	2,740,829
Share of associates and mezzanine arrangements	754,728	451,792	1,489,866	226,452	433,296
OPERATING PROFIT INCLUDING INVESTMENT	2,918,172	2,760,032	5,885,418	2,319,614	3,174,125

#### DIVIDEND

Following shareholder approval at the AGM, a dividend of 4p per share was paid to shareholders on 25 July.

#### **OPERATIONS**

Thrive Renewables' portfolio of renewable energy projects into which the Group is invested generated 125,784MWh in the first six months of 2018, more than in any previous first half year and 25% more than the first half of 2017. Thrive's portfolio consists of 21 sites, 12 of which are 100% owned by Thrive. Thrive co-owns four of the sites with developers, landlords and communities and is supporting five others by means of a mezzanine loan.

Generation relating to our proportion of Thrive Renewables ownership was 83,050MWh by the end of June, 5% more than 2017. This is equivalent to the electricity demand of 43,930<sup>2</sup> UK homes.

<sup>&</sup>lt;sup>2</sup> Calculated using the most recent statistics from the Department of Business, Energy and Industrial Strategy (BEIS) showing that annual UK average domestic household consumption is 3,781kWh



The availability of the portfolio has improved in the first half of 2018 following the resolution of operational issues experienced in 2017. This, combined with good wind resource in March and April, has contributed to the increase in generation. Thrive's portfolio was able to harness the wind power of the 'beast from the East' cold spell in March, with wind energy renewables delivering over 29% of the UK's electricity demand, at a time when natural gas was in short supply<sup>3</sup>. Renewables supplied 30% of the UK's electricity in the first half of 2018<sup>4</sup>, a further milestone in cleaning up the UK's energy system.

Whilst generation levels are higher than achieved in 2017, a combination of lower wind resource in February, May and June and some operational issues have resulted in generation being below Thrive's expectations for the period. Operational issues have included a gearbox bearing replacement at Kessingland, which required one of the turbines to operate in a curtailed mode for a period ahead of the repair. Also, at our site in March, Cambridgeshire, we have ice detection equipment to mitigate the risk of ice falling from the turbine blades. Due to the prolonged cold spell, numerous ice stops were experienced, reducing generation.

Additionally, at 7.30 am on 30 May a fire broke out in one of the 5 turbines at Ransonmoor wind farm in Cambridgeshire. The turbine responded appropriately, it shut down and was disconnected from the electricity grid within minutes. The fire brigade responded quickly, established that there was no immediate risk and allowed the fire to burn out. Turbine fires are very rare. Importantly, no one was injured, the turbine's inspection and maintenance regimes were up to date, and we have commercial protection against such events from both the turbine manufacturer and our operational all risk insurance. Thrive owns 25% of the project and is now working with its joint venture partners, asset managers and industry experts to safely decommission the turbine, establish root cause, replace the turbine and share learnings within the industry with a view to preventing similar incidents. After a pause in operations for safety checks the remaining 4 turbines on the site continue to deliver electricity to the grid.

The turbine fire has been reported as required to the Health and Safety Executive (HSE) as a 'Dangerous Incident'. There have been no other reportable health, safety and environment incidents in 2018, with appropriate learning being taken from the identification and reporting of near miss events.

 $<sup>^4</sup>$  www.gov.uk/government/statistics/energy-trends-section-6-renewables



<sup>&</sup>lt;sup>3</sup> www.renewableuk.com/news/391498/New-wind-energy-record-set---during-another-British-cold-snap-.htm



#### THRIVE'S MEDIUM TERM TARGETS

- Continuing to provide a rewarding and accessible direct investment opportunity into sustainable energy.
- Investment into a portfolio of sustainable energy projects which deliver over 100,000 tCO₂e of greenhouse gas emission reductions per annum by 2020.
- Deliver renewable energy projects in a subsidy free context.
- Grow the investor base to 10,000 by 2020, combining the direct investment into Thrive Renewables and the investment facilitated by the Community Energy Funding Bridge.





## DELIVERING VALUE FROM THE EXISTING PORTFOLIO

We continue to seek ways to enhance the performance and extend the life of our existing portfolio of operational renewable energy projects. Progress over the last 6 months includes;

#### **Power prices**

Over the last two years energy prices have begun to return to pre 2015 oil price crash levels. The chart below illustrates the movement in baseload power prices from January 2013 to August 2018.

#### **UK WHOLESALE ELECTRICITY PRICES**



Thrive's revenues comprise government backed support and wholesale electricity prices. Approximately 50% of Thrive's income is derived from the wholesale electricity prices. To mitigate Thrive's exposure to negative movements in energy prices, we maintain a blend of both fixed and variable pricing. The positive movement in wholesale electricity prices has allowed us to lock in electricity prices 6% higher than the same period in 2017. We continue to benefit from higher wholesale prices in the second half of 2018.

#### Cost of debt

When acquiring and building new projects, we routinely combine debt with Thrive's own funds to allow our shareholders' capital to build more new renewable generation capacity and deliver greater impact and higher long-term returns.

In the first half of 2018 we have refinanced £11.3m of our £60m debt. This has reduced the cost of the borrowing on the £11.3m by 29%. As a consequence the average cost of debt for the Thrive Renewables group has reduced from 5.9% to 5.5%. This will



2018

deliver an estimated annual cost saving of £235,000 although this will only be partially realised in 2018 due to timing of agreements and transaction costs. All of our debt is now at fixed rates.

#### Lease extension

Our site at Haverigg II will have been operating for 20 years in October 2018. The original land lease expires at this time. We have now agreed an extension to the lease to allow us to continue generating beyond the initial 20 years and make the most of the operational life of the turbines there.

We continue to evaluate the feasibility of repowering (replacing the existing technology with new equipment) at Haverigg II and at Thrive's other 'mature' sites in the future in a subsidy free regime. However, commercially it makes sense to keep generating using the existing



generation equipment for as long as possible towards the end of the renewal obligation certificates period and the lease extension allows us to do this.

#### Thrive Renewables Plc Bond

The Thrive Bond is currently fully invested. In the half year to June 2018 the contribution to operating profit from the investments made using the money raised through the bond issue was £445,126.

This means that those who invested in the bond, some of whom are shareholders, have received 5% interest on the bond, and shareholders have seen a positive net contribution from the investments made with the capital raised through the bond issue. Wider benefits of the bond include further growth in the portfolio, securing additional projects, increasing positive impact and diversifying revenue streams.

#### Thrive Buy-Back 2018

The Board decided to offer a round of buy-backs for eligible shareholders who had their shares listed for sale on the matched bargain market for 12 months or more, subject to a maximum aggregate buy-back value of £400,000 for 2018. The resolution was passed at the AGM and 101,986 shares were purchased by the company in June and more will be purchased in November.





#### **INVESTING IN STORAGE**

In May, Thrive Renewables entered into a joint venture with battery storage developer Aura Power. Our joint investment model will offer UK businesses the chance to use battery energy storage systems to cut electricity bills and contribute to a cleaner electricity grid. The joint venture will install and operate batteries for medium and large energy users free of charge in return for a share of revenues and cost savings generated. Once the battery is installed, customers will see immediate cost savings from avoiding premium-cost peak energy charges and income from providing flexibility services to the grid.

Locating the batteries behind the meter at the host business allows the Joint Venture to generate value from both energy savings and also by delivering flexibility services that respond to short term peaks in demand, to the National Grid - important in a part of the sector which is continuing to evolve. Thrive is keen to invest in power storage as this contributes to the reduction in use of the most polluting generation projects which are used





to meet peak demand. It paves the way for a more flexible electricity grid, providing the conditions to use a growing proportion of renewable energy by reducing variability. Increased flexibility is an essential stepping stone in reaching the point where the majority of the UK's power is generated by renewable sources.

#### INVESTING IN SUSTAINABLE HEAT

Space heating and hot water accounts for 80% of UK residential energy consumption<sup>5</sup>. Almost 40% of the UK's energy requirement is for heat, with 70% of our heating requirements met by burning natural gas, which results in 20% of the UK's CO<sub>2</sub>e emissions<sup>6</sup>. Therefore, transitioning heat generation from fossil fuels to renewable sources is key to cleaning up the UK's energy system.

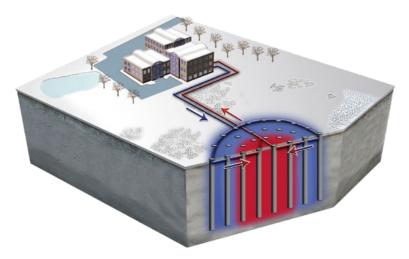


In July, Thrive invested £350,000 into Rendesco Holdings Ltd. Rendesco designs, installs and operates heating and hot water systems with ground source heat pumps at their heart.

<sup>6</sup> www.icax.co.uk



www.thriverenewables.co.uk/media/1428/2017-02-heat-investment-in-the-uk.pdf



Rendesco specialises in implementing ground source heat pump systems which provide hot water and space heating to new build retirement homes. Rendesco has already successfully delivered 21 ground sourced heating systems into new build developments and Thrive's £350,000 investment, combined with a further crowdfunded target of £4m, will be used to fund a further 100 systems to be installed by the end of 2020. Once implemented, the new schemes will generate 4,000 tCO<sub>2</sub>e emission reductions annually, and supply competitively priced heat and hot water to retirement apartments. The scheme benefits from Renewable Heat Incentive (RHI) income, a government backed source of revenues to incentivise the deployment of sustainable heat.



Given the potential that decarbonising heat in the UK has to reduce the nation's greenhouse gas emissions, Thrive intends to seek additional opportunities in this sector.





In addition to continuing to focus on securing additional value from the existing portfolio of renewable energy projects, Thrive is evaluating investment opportunities in the following areas:

#### COMMUNITY ENERGY FUNDING BRIDGE

Having lent £11.4m to 2 wind projects and 1 solar project in 2017, Thrive continues to work with community groups and project owners with a view to funding and providing expertise to migrate the ownership of renewable energy projects from commercial to community.

#### SUBSIDY FREE GENERATION AND **ENERGY STORAGE**

The evolving energy regulatory regime in the UK currently offers little support for new onshore renewable electricity generation projects (wind, hydro and solar). Building new projects on a subsidy



free basis with limited revenue certainty is the key challenge facing the sector. Thrive is developing investment opportunities to demonstrate that subsidy free renewables can work. This includes further private wire projects, where power is delivered directly to end users. Thrive continues to look for opportunities for private wire connections and has participated in direct supply tender processes with both public and private sector consumers.

Additionally, energy storage has a key role to play in the transition to a cleaner energy system and Thrive is seeking further opportunities to invest into storage assets.

### LIFE EXTENSION AND REPOWERING

We continue to make progress with both the extension of the operational life of Thrive's existing projects and preparation for repowering. In the medium term the continued operation of our older sites is beneficial. We are also undertaking preparatory works in anticipation of repowering mature projects, replacing the existing technology with more modern



equipment with the capacity to generate more renewable energy from very similar environmental footprints.

#### RENEWABLE HEAT OPPORTUNITIES

Progress in the transition from fossil fuelled heat generation to renewable heat has been slower than that which has been achieved in the electricity sector. With almost 40% of the UK's energy requirement being in the form of heat, Thrive is seeking additional means to contribute to the transition to more sustainable heat supply. The ground source heat pump investment described above is one example of how we aim to achieve this.





Now in a third successful round, Thrive's voluntary Community Benefit Programme offers grants up to £4,000 for improvements to the sustainability and energy



performance of community buildings close to our operational sites. The programme is administered by the nationwide charity, Centre for Sustainable Energy (CSE) and the application process includes a self-guided energy audit, experienced advice and support to identify the most cost effective and beneficial measures.

Importantly, these buildings provide essential social meeting spaces for what are often remote communities and vulnerable groups or individuals. The improvements facilitated by our programme fill a gap between commercial and domestic funding, improve energy performance, reduce running costs and make the spaces more comfortable and usable.

The funding has proved popular with £30,600 fully allocated by the end of March to allow energy improvements to be made in



9 buildings by local contractors during the summer, delivering benefits over the winter ahead. The measures funded include LED lighting, heating upgrades and air source heat pumps and are forecast to save 22.81tCO<sub>2</sub>e every year.

"It will really improve the lighting and reduce our consumption on electricity by 50%, helping reduce emissions and really put the community hall in a very good financial position." Doddington Village Hall, Cambridgeshire (near to Ransonmoor (Fenpower), March (Greenvale) and Boardinghouse)

"I am delighted to let you know that the air to air heating has now been installed ... and we are very pleased with the outcome. It will be a great benefit to us and will make a big difference for next winter." Rendall Church of Scotland, Orkney (near to Sigurd)

#### COMMUNITY ENERGY FUND BRIDGE - MEAN MOOR

the transition from corporate to

community ownership.

As reported in 2017, Thrive provided a £7.4m mezzanine finance facility to Mean Moor Community Wind Farm Limited to purchase Mean Moor, a 6.9MW wind farm in Cumbria commissioned in late 2016. Mean Moor Community Wind Farm Limited was set up by three Energy Co-operatives – Energy Prospects, High Winds and Baywind. This innovative transaction allowed three communities to come together and secure the required finance from Thrive to purchase a large commercial wind farm. During late 2017 and in the first half of 2018, the combined community groups have raised the first £4m to partially repay the Community Energy Funding Bridge to Thrive, attracting over 700 investors. The outstanding amount of the bridge is planned to be repaid towards the end of 2019. We are pleased to be facilitating





#### THRIVE'S AGM

We hosted our Annual General Meeting (AGM) at the Bridge 5 Mill, Manchester, on Friday 22 June. Bridge 5 Mill is a hub for sustainable living and resource for groups, organisations and individuals working towards a sustainable future. The venue was chosen because of its community feel and sustainable ethos. Shareholders asked challenging and relevant questions of the Board. It is always helpful for the Board and team to meet the investors and receive valuable feedback, including how much they enjoyed seeing the result of their combined investment.

All Company resolutions were approved. It was great to see our shareholders and their guests contributing to discussions. It was also good to receive an update on progress in the community energy sector from Emma Bridge, CEO of Community Energy England who commented on Thrive's significant contribution to the community energy sector.



#### PICTURES FROM THE 2018 AGM EVENT







#### VISITING SCHOOLS WITH EXPLORERDOME

Thrive has maintained a proactive approach to improving awareness of climate change and the importance of renewables in our evolving energy mix. In June, on Global Wind Day we took the interactive ExplorerDome to Avonmouth Church of England Primary School close to our Avonmouth wind farm and delivered the curriculum linked science show to primary age pupils which received enthusiastic and positive feedback. We find educational events incredibly fulfilling and an excellent opportunity to prompt dialogue with a diverse audience.











#### THRIVE RENEWABLES OPEN DAY

At the time of writing, we (with our Joint Venture partner, GreenPower International Ltd) are preparing to host one of our popular open days at the Drumduff wind farm near Blackridge in West Lothian, Scotland on Saturday 15 September. The day promises a host of fun and educational activities for the whole family to learn more about renewable energy and a chance to get up close to a commercial turbine. Details of the event are on our web site at www.thriverenewables.co.uk/openday

#### DATES FOR YOUR DIARY

We get in touch at certain points of the year via your Registrar. Key dates include:

> TR plc Bond interest payment

- late March

Shareholder **Dividend payment** - July

**Annual Report and AGM** invitation

- mailing sent early June, AGM held late June

Half year report

- September





There are further ways to get involved:

- Thrive shares are available via our monthly auctions www.thriverenewables.co.uk/investors
- Attend one of our open days or sponsored events
- Sign up to hear about Thrive's news, events, latest energy projects and investment opportunities at www.thriverenewables.co.uk/newsletter
- Follow us on Twitter, LinkedIn and Facebook
- **●** Thrive\_R
- in linkedin.com/company/thrive-renewables
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Visit www.thriverenewables.co.uk for more information or contact info@thriverenewables.co.uk



We encourage investors to register for email communications (eComms) to go paperless, as it has a positive impact both environmentally and financially. If you're not already receiving emails from us instead of paper communications, you can instruct your Registrar to change your settings. Shareholders should contact Computershare on 0370 707 1350 or sign yourself up at www-uk.computershare.com/investor (look for the eComms Signup button on the right-hand side of the page). If you already have eComms, please remember to keep the Registrar updated if you change your email.

Please remember to notify your Registrar if you change your email or move address. Computershare are the Registrar for Thrive shares. Abundance are the Registrar for the TR Plc bond. Contact details for your Registrar can be found on the 'Contact Us' and 'FAQs' sections on our website.



#### Contact your Registrar if you need to update your contact details:

TR shares: Computershare: 0370 707 1350

Buchan Bond: Computershare: 0370 707 1350

Abundance: 020 3475 8666 / TR plc Bond:

support@abundanceinvestment.com

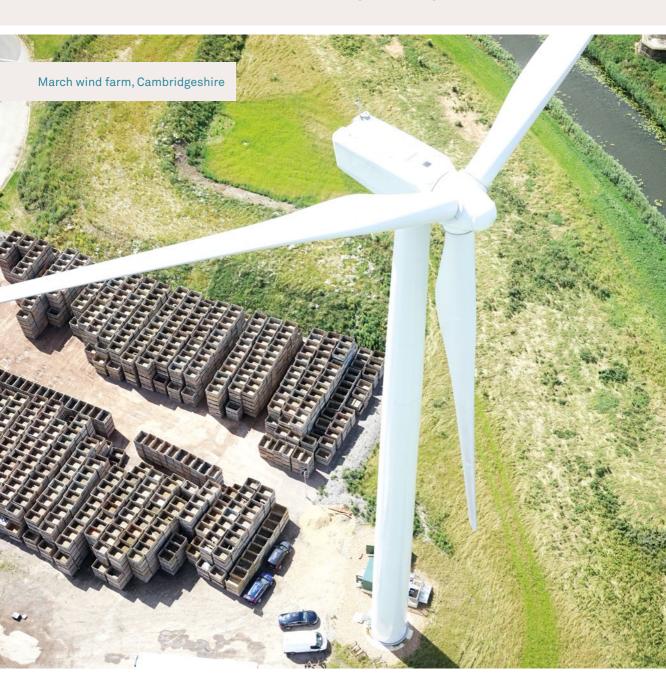
We could not do all of this without the continued support of our shareholders and we thank you for your involvement.



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