

COMPANY REGISTRATION NUMBER: 02218531  
CHARITY REGISTRATION NUMBER: 298951

**THE NATIONAL ENERGY FOUNDATION**

**Company Limited by Guarantee**

**FINANCIAL STATEMENTS**

**31 MARCH 2017**

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**THE NATIONAL ENERGY FOUNDATION**

**COMPANY LIMITED BY GUARANTEE**

**FINANCIAL STATEMENTS**

**YEAR ENDED 31 MARCH 2017**

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**THE NATIONAL ENERGY FOUNDATION**  
**COMPANY LIMITED BY GUARANTEE**  
**TRUSTEES' ANNUAL REPORT (INCORPORATING THE DIRECTORS' REPORT)**  
**YEAR ENDED 31 MARCH 2017**

The trustees, who are also the directors for the purposes of company law, present their report and the financial statements of the charity for the year ended 31 March 2017.

**Reference and administrative details**

<b>Registered charity name</b>	The National Energy Foundation
<b>Charity registration number</b>	298951
<b>Company registration number</b>	02218531
<b>Principal office and registered office</b>	The National Energy Centre Davy Avenue Knowlhill Milton Keynes MK5 8NG

**The trustee directors**

John Daggart	
Steven Fawkes	
Stewart Fergusson	
Christopher Gossop	Resigned 29 June 2017
Chris Hall	
Eryl Hardman	Served from 20 April 2016 to 24 March 2017
Liz Male	
Andrew Pakes	Appointed 17 June 2017
Liz Reason	
Matthew Rhodes	
Peter Rickaby	
John Walker	Resigned 27 June 2017
Andrew Wordsworth	

John Walker served as Chair until 27 June 2017; Andrew Pakes acted as Chair from that date until 14 November 2017; the Trustees are in the process of appointing a new permanent Chair.

<b>Company secretary</b>	Ian Byrne
<b>Auditor</b>	Keens Shay Keens MK LLP Chartered accountant & statutory auditor Sovereign Court 230 Upper Fifth Street Central Milton Keynes MK9 2HR
<b>Bankers</b>	National Westminster Bank Plc

# **THE NATIONAL ENERGY FOUNDATION**

## **COMPANY LIMITED BY GUARANTEE**

### **TRUSTEES' ANNUAL REPORT (INCORPORATING THE DIRECTORS' REPORT) *(continued)***

**YEAR ENDED 31 MARCH 2017**

#### **STUCTURE, GOVERNANCE AND MANAGEMENT**

##### **Company Information**

The National Energy Foundation is a registered charity (no. 298951), incorporated as a company limited by guarantee, (company registration number 2218531) and has no share capital, and was established to increase public awareness of the efficient and safe use of energy. The Foundation's current programme is described in detail in the Trustees' Report. The Foundation is governed by its Memorandum and Articles of Association.

The Trustees (but not the President, John Walker, or Patron, Lady Mary Archer) form the Board of Directors of the Company for the purposes of the Companies Act 2006 and hold office for an indefinite period of time. Members may elect up to 18 Trustees, who are formally appointed by an Annual General Meeting. No Trustee has a beneficial interest in any of the capital of the Foundation or its subsidiaries.

##### **Organisation**

The Board of Trustees, which can have up to 18 members, administers the charity. The Board normally meets quarterly and there is a Management Committee covering finance, risk, administration and audit which also normally meets quarterly. A Chief Executive is appointed by the Trustees to manage the day-to-day operations of the charity. To facilitate effective operations, the Chief Executive has delegated authority, within terms of delegation approved by the Trustees, for all operational matters including finance. The principal executive officers of the Foundation are:

Dr Kerry Mashford	Chief Executive
Ian Byrne	Deputy Chief Executive & Company Secretary

##### **Appointment of Trustees**

In order to obtain a wide spread of experience and appropriate skills the recruitment of Trustees is undertaken through two main methods: a permanent advertisement on the Foundation's website seeking contact from interested parties, and through personal contacts and introductions. Trustees are elected by the members in general meeting and normally serve for a period of three years following which they may serve for further periods of three years.

##### **Trustee induction and training**

New Trustees are provided with an induction which features a meeting with the Chair of the Board and/or another member, then with the Chief Executive to familiarise themselves with their responsibilities and legal obligations to the company and their role as a Trustee. Background information on the Company, including a briefing on the role of Trustees and responsibilities of Charitable Trustees and other relevant documents, is provided by way of a written induction pack.

##### **Pay policy for senior staff**

The Trustees consider the Board and the senior management team collectively comprise the key management personnel of the charity. All Trustees give of their time freely and no Trustee received any remuneration in the year. Details of Trustees' expenses and related party transactions are disclosed in notes 13 and 22 to the accounts. The pay of the senior staff is reviewed annually taking into account the staff member's performance and market rates for equivalent roles in similar organisations. No staff participate in any bonus scheme.

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## **COMPANY LIMITED BY GUARANTEE**

### **TRUSTEES' ANNUAL REPORT (INCORPORATING THE DIRECTORS' REPORT) *(continued)***

**YEAR ENDED 31 MARCH 2017**

#### **Risk management**

The Trustees review risks and mitigation activities on a regular basis, with the Management Committee responsible for maintaining an up to date risk register. Risks identified include ones around competition with other charities or technical consultancies; difficulties maintaining acceptable contract pricing or terms; reliance on a relatively small number of clients; inadequate cash flow; changing government priorities; and the general economic environment.

#### **Quality Management**

In August 2016, BSI awarded the Foundation ISO 9001:2008 certification for our Quality Management System. This was a great achievement and provides external verification and assurance to our customers and project partners that we are placing their satisfaction at the forefront of our operations. Our quest for quality continues and we are already well on the way to implementing steps for the transition to ISO 9001:2015 by September 2018.

#### **Related parties and cooperation with other organisations**

None of our Trustees receive remuneration or other benefit from their work with the charity. Any connection between a Trustee or senior manager of the charity with a relevant third party must be disclosed to the full Board of Trustees. As a charity we actively seek to cooperate with other organisations working to improve the use of energy in buildings including other charities, community interest companies, public authorities, building stock owners and energy suppliers.

#### **Volunteers**

In common with most charities, the Foundation makes use of volunteers, including providing occasional opportunities for people wishing to gain work experience in the environmental sector. As far as possible volunteers are offered the chance to work on discrete activities that would not be achieved by core staff, to provide defined outcomes that benefit both the charity and the volunteer. The Trustees are very grateful to all those willing to support the charity on a voluntary basis, including through the EU's Leonardo da Vinci programme.

#### **Public Benefit**

The Trustees consider that the activities of the Charity are carried out for the public benefit and in particular adhere to the following charitable purposes as set out by the Charity Commission in its general guidance on public benefit:

- The advancement of environmental protection or improvement

Further details of the Charity's activities during the period are set out in this Report.

#### **STRATEGIC REPORT**

The following sections describing impact and achievements and the financial review form the strategic report of the charity.

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## COMPANY LIMITED BY GUARANTEE

### TRUSTEES' ANNUAL REPORT (INCORPORATING THE DIRECTORS' REPORT) *(continued)*

YEAR ENDED 31 MARCH 2017

#### OBJECTIVES AND ACTIVITIES

The National Energy Foundation works to improve the use of energy in buildings. By doing this it meets its principal objective to promote, through education, demonstration and research the innovative, efficient and safe use of energy to increase the public awareness of energy in all its aspects.

#### IMPACT & ACHIEVEMENTS

This section of Trustees' Report is an edited version of the full impact report produced for 2016-17, a copy of which is available from the National Energy Foundation website [www.nef.org.uk](http://www.nef.org.uk)

##### Highlights from our achievements in 2016-17:

- Helped nearly 2,600 people at 74 Affordable Warmth outreach events
- Worked with 58 installers to deliver 577 Green Deal Communities energy efficiency measures
- First homes successfully completed our Assured Performance Process
- Worked in partnership with six universities on research and innovation projects
- Identified non-domestic totalling client savings of 32 GWh and £3.1m per year
- Recruited 142 young people as Envoys Energy
- Supported trading standards in investigating 18 PV installations
- Demonstrated a financial two-year ROI for NHS through Better Homes Better Health
- Worked with over 50 local authorities on built environment energy projects
- Secured over £375,000 in funding for collaborative and R&D projects

The National Energy Foundation is an independent, national charity based in Milton Keynes and has been at the forefront of improving the use of energy in buildings since 1988. We aim to give people, organisations and government the knowledge, support and inspiration they need to understand and improve the use of energy in buildings. In delivering our 2016-17 impacts, we invested over £150,000 (alongside partner funding) in outreach and development activities: supporting the development of policy, strategy and standards in the UK and internationally; inspiring and informing individuals and companies ranging from householders to energy managers of major corporates; supporting individual projects in and with communities; carrying out research and development into the many factors that contribute to improving the use of energy in buildings.

#### PROJECTS, PROGRAMMES & RESEARCH ACTIVITIES

##### Green Deal Communities

We managed one of the 24 Green Deal Communities projects delivered across England that were initially established by the former Department for Energy and Climate Change (DECC) to promote the Green Deal with a focus on insulating hard to treat properties. We were appointed by South Bucks District Council on behalf of a partnership of 14 local authorities across Buckinghamshire, Oxfordshire and Hertfordshire, and we:

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### TRUSTEES' ANNUAL REPORT (INCORPORATING THE DIRECTORS' REPORT) *(continued)*

#### YEAR ENDED 31 MARCH 2017

- Managed the grants from the DECC (BEIS) Green Deal Communities Fund and all the councils.
- Produced grant application forms, show home applications, template invoices and guidance for installers.
- Developed a marketing plan and related collateral, ran ten show home competitions and liaised with local community groups to promote the scheme.
- Procured suppliers.
- Negotiated with DECC on grant levels, target numbers and the widening of the funding criteria. Liaised and negotiated with DECC, and reported on progress.
- Liaised between clients, the local authorities and all the contractors.
- Managed the Project Board and risk register.
- Carried out post-installation customer satisfaction surveys.
- Wrote the interim and final evaluation documents for DECC.

By its end, the project involved:

- 577 installs, of which 423 were solid wall installations and 154 were other energy efficiency measures.
- 813 Green Deal Assessments/EPCs.
- £2.17 million of DECC-funded grants.
- A total spend of £4.3 million on installs.
- Working with 58 installers.

We subsequently held an independent 'learnings event' to record and disseminate the lessons learnt from the scheme, and published a report of recommendations and suggestions around:

- The biggest challenges, including programme design, interactions with BEIS, changes to national policy and managing procurement rules.
- The problems encountered and the solutions developed by different local authorities, with a focus on programme setup, planning and procurement, customer engagement and measures delivery.
- How future solid wall insulation projects could be designed in a world with little or no subsidy.

After the project concluded, we were delighted to win the Local Authority/Community category in the 2016 Public Sector Energy & Sustainability Awards for the Green Deal Communities project.

#### **Local Carbon Offsets**

Carbon offsets were first introduced under the Kyoto Protocol, but soon became unpopular as many seemed to focus on low-cost actions, such as targeting industrial gases in Asia. However, interest is growing again, as it is often sensible (cheaper, easier and yet still additional) to use locally generated offsets rather than trying to squeeze out the very last tonne of emissions from a new building. With the ending of the national zero-carbon homes policy, local authorities that had previously agreed a net zero-carbon target for new homes in their local plans are looking at alternatives.

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### TRUSTEES' ANNUAL REPORT (INCORPORATING THE DIRECTORS' REPORT) *(continued)*

#### YEAR ENDED 31 MARCH 2017

We first worked with Milton Keynes to pioneer a local Carbon Offset Fund a decade ago, setting a £200 cost per tonne of carbon, equivalent to £20 a tonne over 10 years. Although slightly more expensive than internationally traded offsets, it has produced additional benefits, such as improving residents' comfort and supporting renewable energy locally, while facilitating hundreds of measures saving over 6,000 tCO<sub>2</sub>e annually. Ten years on, we continue to manage the Carbon Offset Fund on behalf of Milton Keynes Council.

More recently, in Whitehill & Bordon we have worked with East Hampshire District Council, sitting on its carbon offset board and proposing, evaluating and helping select projects that help deliver the zero-carbon expansion of the area. The second reason is a growing recognition by cities that they need to be part of the solution to climate change, and can't wait for national governments to act.

We also worked with the Greater London Authority (GLA) and individual local authorities during 2016-17 to identify ways in which carbon offsetting could help. The GLA had a policy requiring London Boroughs to set up carbon offset funds as part of its zero-carbon home strategy. We identified best practice for funds, and mapped the actions taken so far within the 33 boroughs.

Finally, we helped Three Rivers District Council review options for achieving carbon neutrality from its own operations through actions such as maintaining its excellent record in energy efficiency, buying green electricity, sequestering carbon locally, buying traded offsets and establishing a carbon offset fund.

#### **Research into Solar Shading**

Solar shading using blinds, shutters and awnings has a pivotal role to play in the future of the UK's building stock but an investigation we undertook for the British Blind and Shutter Association (BBSA) found that this is poorly understood, both by construction professionals and building occupants. Our Solar Shading Impact report was an evidence-based investigation into the current and potential impact of solar shading in the UK built environment. It found that rising energy costs and climate change, combined with efficient, modern 'eco' designs, make solar shading a key issue both now and in the years ahead for architects, builders and occupants of buildings. The report called on the construction industry to consider solar shading as part of a building's overall design strategy rather than as an optional, remedial 'afterthought', concluding: "It is generally recognised that considering solar shading at an early stage in design makes it easier to integrate with other parts of the building – ultimately making it more successful. The effects of solar shading go far beyond reduced glare and overheating." The report also:

- Confirmed the benefits of solar shading in terms of savings in energy costs, in both winter (increased night-time insulation) and summer (combatting overheating).
- Identified the role of solar shading in maintaining and improving the comfort of those using the space.
- Called on the Government to consider tax breaks and other financial incentives for shading products.
- Urged the shading industry to unite and step up efforts to better communicate the advantages of its products to architects, specifiers and constructors, while also educating end users better.
- Identified an untapped market for retrofitting shading systems.



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### TRUSTEES' ANNUAL REPORT (INCORPORATING THE DIRECTORS' REPORT) *(continued)*

#### YEAR ENDED 31 MARCH 2017

We used the knowledge gained from this investigation in a further piece of work for BBSA, resulting in us recommending better legislative guidance on solar shading in the Approved Documents of Building Regulations Part L, the Standard Assessment Procedure (SAP) and the Simplified Building Energy Model (SBEM).

#### **Energy Envoys – enthusing the next generation of energy savers**

By the end of March 2017, 142 young people had signed up to Energy Envoys, our volunteering scheme through which Duke of Edinburgh's Award participants can save money, energy and carbon in their communities. All those who completed the scheme during 2016-17 provided very positive feedback. Completed projects engaged an average of 114 community members each.

During the year, we focused on promoting the scheme and raising awareness of how Energy Envoys can make a difference, contacting over 7,000 schools, DofE centres, licensed organisations and regional offices across the country. Funding was secured from Glasgow Airport's Flightpath Fund to visit nine schools in the Glasgow area, and we visited others in Edinburgh, Aberdeen, King's Lynn and Bedford. In total, we presented to 550 students and four of the schools we visited have now made Energy Envoys their default DofE volunteering option.

#### **Show homes – inspiration for domestic retrofit report**

Our study findings demonstrated the benefits of show homes in promoting energy savings through retrofit and renovation, and recommended that the government should provide additional support. *Show Homes: An effective force for inspiring domestic retrofit* looked at how show homes can:

- Raise public awareness of energy efficiency and renewable energy measures.
- Generate interest among visitors to install similar measures in their own homes.
- Provide benefits for consumers and the population as a whole, and contribute to meeting the government's carbon emissions targets.

The report also highlighted the effectiveness of our award-winning network of over 200 SuperHomes as a beacon of inspiration.

#### **Keeping Kids Cosy**

In September 2016 we launched Keeping Kids Cosy, a new project aimed at families with young children living in areas of deprivation who are struggling to keep their houses warm and their energy bills down. It provides targeted outreach and builds on our established Affordable Warmth Network. The project offers small grants for energy efficiency measures and insulation, and is working across the whole of Oxfordshire and Buckinghamshire. Keeping Kids Cosy is funded by Scottish Power Energy People's Trust, is supported by local authorities in the two counties and can offer:

- Advice and guidance on reducing energy bills, and heating a home affordably and efficiently.
- Small grants for energy efficiency measures such as draughtproofing, thermostatic radiator valves and LED lightbulbs.
- Advice and help with switching energy tariff or supplier.
- Small grants which can be put towards a customer contribution for ECO part-funded measures such as cavity wall and loft insulation.
- Housewarming hampers full of energy efficiency products.
- Referral for further grants, financial assistance and income maximisation services.

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#### YEAR ENDED 31 MARCH 2017

By the end of March, Keeping Kids Cosy had already had a significant impact:

- Given advice and assistance on fuel bills, saving energy and keeping warm over winter to around 1,000 people at outreach events.
- Delivered training on fuel poverty and its impacts on children's health and wellbeing to 140 frontline staff.
- Attended more than 40 children's centre events.
- Provided 60 housewarming hampers to vulnerable families and those most in need.
- Provided funding towards the installation of thermostatic radiator valves, new boilers and double glazing.

The project runs until August 2017 and we have additionally started to provide funding for customer contributions for loft insulation under the new ECO II Transition.

#### **Better Housing, Better Health**

This is the name given to our scheme providing advice and energy efficiency measures for people whose health might be impacted by a cold or damp home, which came to an end during the year. A total of £222,600 was offered through Better Housing, Better Health in grant funding to 107 residents, and 500 people were supported by the scheme's Citizens Advice caseworkers to check they are claiming the benefits they are entitled to, to cut their energy bills and to manage any fuel debt.

Having evaluated the project and produced a final report, we found that Better Housing, Better Health is likely to save the NHS £108,000 per year, with wider annual savings to society of £270,000. This suggests a direct payback period for the NHS within two years with investments paying for themselves in under a year if wider savings to society are taken into account. In addition, 71% of grant recipients reported an improvement in at least one health or wellbeing measure and 69% reported a reduction in use of at least one health service three months after having improvements made to their homes.

This project enabled us to develop a proven, workable and effective model (ideally suited for busy professionals) and one which we can easily replicate in other projects. We are keen to continue making an impact in this important area, and welcome conversations with anyone who can either provide access to funding or is interested in working with us. There is more about Better Housing, Better Health from the short video on the NEF YouTube account.

#### **State of the Nation: Low Energy Retrofit in Social Housing**

Registered providers of social housing have had to contend with some challenging policy changes recently – not least the reduction of rents by 1% per year through to 2020. These changes have resulted in a mix of financial pressures and an increasingly complex operating environment. At the same time, the drive to increase property development rates, diversify commercial services and deliver substantial savings across operating costs have also contributed to the challenging context.

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#### YEAR ENDED 31 MARCH 2017

Despite this, our work with both new and existing partners in the social housing sector has sought to help ensure that topics such as fuel poverty, health and environmental concerns remain top priorities. During the summer of 2016, our State of the Nation: Low Energy Retrofit in Social Housing survey provided insights from over 170 registered providers who we estimate manage approximately two million properties, 50% of the total social housing stock. Encouragingly, 84% of respondents cited reducing fuel poverty as the main driver for retrofitting and 85% of respondents stated that the main source of funding for their retrofit projects came from their companies' own internal budgets. However, at the same time, 40% of social housing providers felt that retrofit is actively championed at board level and 44% of registered providers had low to medium confidence in data relating to the energy efficiency of their housing stock, citing good data as vital in helping to make the business case for retrofit. Most respondents' organisations monitor only up to 10% of their properties for pre or post-retrofit performance factors.

The report identified the challenge of making the business case for retrofit in the face of funding difficulties, competing priorities and unclear policies. It also highlighted the need to bring data together from different areas and change the culture of siloed thinking. We used insights from the survey to help develop our new service offering (iAIM, see below) which takes a joined-up approach to tackling fuel poverty and other issues facing registered providers, such as long void periods, complaints and affordability.

#### **iAIM research project – portfolio analysis for a large housing association**

During the year, we successfully completed our 12 month iAIM feasibility project, which applied BIM Level 2/3 to the housing stock of the Joseph Rowntree Housing Trust and culminated in a successful pilot of our performance appraisal tool. Our tool scores a range of sustainability indicators (from profitability to levels of fuel poverty, building energy efficiency and neighbourhood desirability) from 0 to 1, with scores above 0.5 considered 'good' based on relevant thresholds for each underlying parameter.

We populated the appraisal tool with 30 data items per property, for a sample of around 400 homes from the Trust's stock. It identified 'good' sustainable performance (overall iAIM score) across the sample, with the vast majority of properties achieving 'good' performance against both iAIM's financial (profitability and affordability) and social (desirability, poverty, health and neighbourhood stability) metrics.

Further analysis revealed that the majority of the sample scored above 50% with regard to affordability. We also found a correlation between poor occupant health and poverty, thereby opening up opportunities to target socially beneficial intervention at 'high risk' tenants. The Trust described the benefits of iAIM as enabling it to:

- Refine its disposals register.
- Prioritise social, economic and environmental value.
- Measure the impact of its investment works.
- Replace its social value statement with social value outputs from the tool.

Following the pilot, we launched a new service, iAIM – portfolio performance made simple, and are looking to work with housing associations keen to identify similar strategic investment opportunities across their portfolios.

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#### YEAR ENDED 31 MARCH 2017

##### **Lakes Estate Phase 2 monitoring for Milton Keynes Council**

This project provided Milton Keynes Council with impartial evidence, enabling the council to make a decision on the refurbishment and retrofit of the Lakes Estate in Bletchley, and to address quality and comfort concerns around retrofit.

We measured electricity and gas consumption and environmental parameters (internal and external temperatures, internal relative humidity levels and carbon dioxide concentrations), both before and after the refurbishment works, at eight representative properties. We also tested building fabric performance (wall and roof U-values, and air permeability) pre and post-retrofit and conducted a Standard Assessment Procedure (SAP) evaluation based on 'as measured' and SAP default values. In addition, we conducted a 'before and after' Building Occupancy Survey to understand how tenants used energy within their houses.

##### Our findings:

- On average, SAP energy efficiency ratings improved by 19% and the environmental impact by 25%.
- Post-retrofit electricity and gas consumption was between the average and lower than minimum National Energy Efficiency Data Framework (NEED) figures.
- Infrared thermal imaging confirmed that previously installed blown mineral wool was not 100% complete, and only partially reduced heat loss through external walls. Consequently 'as measured' external wall U-value was higher (worse) than the 'calculated' average value.
- Air permeability was found to be better than the current building regulations in six out of eight properties pre-retrofit, and in all properties post-retrofit.
- Average 'as measured' roof U-value was significantly lower (better) than the 'calculated' and demonstrated that the material used and the works associated with the flat roof replacements were of a high standard.
- Although two properties had significant overheating in their bedrooms post-retrofit, there was insufficient data for comparison with pre-retrofit conditions. All properties except one performed well with regard to internal air quality - the exception was a single storey bungalow, which showed higher CO<sub>2</sub> concentrations than 'typical'.
- There were no significant changes in relative humidity between pre and post-retrofit. All tenants reported that they felt warmer post-retrofit, and believed they paid less for their energy.

Experience in this and similar projects will help our Chief Executive as she leads the Measurement, Monitoring & Verification workstream of the Each Home Counts implementation.

##### **Assessment of renewable energy performance**

Drawing on our expertise in the built environment and renewable energy sectors, we work with a range of clients (including the police and trading standards) in providing expert witness, technical and financial design reviews, together with technical dispute resolution and arbitration services.

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During the year, we provided expert witness services to trading standards on 18 solar photovoltaic installations, sold and installed by one company across three counties, to determine whether there were any grounds to suspect mis-selling based on exaggerated system performance. We surveyed and assessed each installation, and made comparisons between the original sales documentation provided to homeowners and the results of approved calculation methodologies. We found that in all instances there was an overestimation of the electrical energy generation. On average, this overestimation was approximately 18% equating to approximately £443 per year, per installation; or more than £8,860 per installation over the 20 year lifetime of the Feed-in Tariff.

#### **Energiesprong**

Energiesprong solutions deliver a nonintrusive retrofit that can usually be completed within one week and without residents having to move out. The finished result is a warm and affordable home that is modern and attractive with a long-term performance guarantee. The development of Energiesprong in the UK is being funded through two European programmes, Transition Zero (Horizon2020) and E=0 (Interreg NWE). Transition Zero focuses on creating the right market conditions for refurbishments for a volume deal of 5,000 properties, and E=0 focuses on getting the first refurbishments done. NEF is helping to deliver both projects, is the lead partner on Transition Zero (which includes UK, Dutch and French partners) and is coordinating on the E=0 programme. The funding from Interreg will support early market demonstrator houses for Clarion Housing Group (previously Affinity Sutton) and Moat Housing.

*The Transition Zero project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 696186.*

#### **Assured Performance Process**

During the year, we continued the development and delivery of our Assured Performance Process (APP) for new homes. This whole house system approach identifies potential energy 'performance gap' risks and mitigations at each stage of a development from concept through to handover. This helps to ensure that risks are minimised and managed through subsequent stages of delivery.

All too often the actual energy performance of new homes and buildings fails to meet the intended design performance or standards. Evidence from recent government research shows that new homes typically use at least twice as much energy as predicted at design. The causes of this energy performance gap occur at every stage of development, from concept to handover and beyond. APP is a process oriented, risk mitigation approach that identifies performance gap 'contributors' and eliminates or reduces their negative impact on the performance of the completed building at every stage.

The first development to undergo all stages of APP is Quebec Park, at Whitehill & Bordon, in Hampshire. It's a new development of 100 homes by Radian with building contractor Drew Smith. East Hampshire District Council worked with NEF to pioneer the full implementation of APP, and residents will benefit from homes that should deliver the energy and carbon performance they were designed to. We also produced CITB-funded pilot training modules on APP, to upskill the site workforce at Quebec Park. These modules will provide a lasting legacy as they will subsequently be offered through the new Future Skills Centre serving the whole of the Whitehill & Bordon development.

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#### OTHER ACTIVITIES

**Retrofit standards** As part of the implementation phase to act on the findings and recommendations of Each Home Counts, NEF is undertaking a review of pertinent retrofit standards and regulations, under contract to BSI. The objective is to identify where effective standards exist and where there are gaps so that the Retrofit Standards Task Group, convened by BSI, can take action and ensure a fit for purpose standards landscape for retrofit in the UK.

**Sustainable Cities** Our Chief Executive, Kerry Mashford, contributed the opening chapter in *Sustainable Cities* – a new book that offers valuable insights for addressing one of the key issues confronting us today – how we make our growing cities sustainable. The book evaluates our urban environments and assesses the progress that is being made towards achieving urban sustainability. Kerry's chapter focuses on energy use in buildings and how this contributes to city energy, both directly and through secondary effects such as exacerbating the urban heat island.

**SuperHomes, Yougen and Logpile** We continue to offer web-based advice and information to householders able to pay for their energy, but looking for high quality or innovative solutions incorporating the latest technologies in near zero energy homes, building integrated renewable energy and wood fuelled heating. Our websites contain lively and challenging blogs, as well as practical information to help find a good quality installer; the SuperHomes project is additionally supported by an annual weekend of open homes enabling people to see innovations at first hand.

**Build Test Solutions** To help bring the PULSE air test (developed by NEF and our partners) to market, a new company was set up by NEF, Elmhurst Energy and Absolute Air and Gas. Build Test Solutions (BTS) Ltd aims to identify, develop and commercialise game changing building performance verification and monitoring solutions. PULSE, which can quickly and easily test the true infiltration characteristics of new and existing buildings, is the first BTS product offering. This new technology has the potential to transform the existing market for air permeability testing, and to create new markets – for example in the testing of critical environments such as energy intensive cleanroom labs and refrigeration facilities. Since its formation, BTS has created a number of jobs and has embarked on two largescale research projects.

**Energy Savings Opportunities Scheme (ESOS)** We have undertaken follow on work from our ESOS audits, as well as performing initial opportunities assessments for some late registering organisations. Feedback from clients indicated that our ESOS evidence packs were well structured and in post-implementation audits, all our calculations and methodology stood up to the compliance tests, and the predicted 15% savings (with a payback of less than two years) were confirmed. We are now working with clients who missed the first ESOS period and those preparing for the 2019 deadline. To date, we have identified further annual savings totalling 32 GWh of energy, equivalent to a cost saving of £3.1 million.

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### TRUSTEES' ANNUAL REPORT (INCORPORATING THE DIRECTORS' REPORT) *(continued)*

#### YEAR ENDED 31 MARCH 2017

**Independent Reports on Metering Arrangements (IRMAs)** Independent Report on Metering Arrangements (IRMA) inspection reports and heat loss calculations are required for installations to receive subsidies for up to 20 years under the UK Government's Renewable Heat Incentive (RHI) scheme. Competent persons are needed to audit each installation and confirm to Ofgem that an installation seeking accreditation has metering arrangements in place which meet the eligibility requirements, and that the installation is in accordance with the regulations. During the year, our specialist staff produced and authorised IRMA reports for eight anaerobic digestion and biomass installations for two clients across four counties including over 6.2MWth CHP systems, totalling over 47.3MWth heat capacity. We then worked with our clients to ensure that IRMAs and heat loss calculations were provided as part of their successful RHI applications.

**Voluntary Display Certificates – VolDECs** We continued to work with a number of landlords on a voluntary display certificate, utilising the same basic methodology as for public sector Display Energy Certificates (DECs), but with enhancements to include landlord/tenant splits and extensions for water and waste usage. In the coming year, the VolDEC process will be streamlined enabling certificate production over the web.

#### THE NATIONAL ENERGY CENTRE

The National Energy Foundation is keen to demonstrate that it can use less energy than for a typical charity of its size. This is exemplified by the National Energy Centre, which consists of two purpose-built low-energy buildings.

The South Building, constructed in 1999, is occupied by its former subsidiary, National Energy Services Limited. The building design incorporates high levels of insulation and thermal mass, the optimum use of natural daylighting and passive ventilation and is heated by a high efficiency gas condensing boiler – the original boiler needed to be replaced in late 2016, after almost 18 years of continuous service. The Foundation has installed a 39.2kWp photovoltaic array on the South-facing roof of the building which continues to perform in line with expectations. Surplus electricity is sold back into the National Grid.

The Foundation has occupied the North Building since 2004, which demonstrates a contrasting approach to low-energy buildings. This is an all-electric building with a low thermal mass, using more natural materials (and so a lower embodied energy) and was built to an even greater standard of energy efficiency. It incorporates several renewable energy features, including light tubes, heating via a Ground Source Heat Pump, a small pellet stove, 6.5kWp of photovoltaic panels and solar water heating. Energy monitoring data shows that this building, which is occupied by the charity but owned by a third party, is performing well, although 2016-17 suffered from a lengthy breakdown in the PV generation. The table below summarises the performance of the North Building.

# THE NATIONAL ENERGY FOUNDATION

## COMPANY LIMITED BY GUARANTEE

### TRUSTEES' ANNUAL REPORT (INCORPORATING THE DIRECTORS' REPORT) *(continued)*

#### YEAR ENDED 31 MARCH 2017

	2017	2016
Net metered electricity use (kWh)	<b>33,169</b>	28,285
PV generated on North Building (kWh)	<b>1,308</b>	5,067
Gross energy consumption (kWh)	<b>34,475</b>	33,352
CO2 from building electricity (tCO2)	<b>13.7</b>	13.1
Average building employees	<b>26</b>	25
Net energy per square metre (kWh/m2)	<b>77.1</b>	65.8
Gross energy per square metre (kWh/m2)	<b>80.2</b>	77.6
Gross energy per employee (kWh)	<b>1,352</b>	1,334
PV generation on South Building (kWh)	<b>35,611</b>	37,263

Energy consumption rose slightly in the year, but imported electricity (net metered energy use) rose sharply as onsite generation fell, owing to a faulty inverter. Attempts to get this replaced revealed a problem in the UK renewable energy industry – although there are numerous firms focusing on new installations, few have any troubleshooting capability and the cost of replacing system components can exceed the economic value from doing so. As in previous years, the energy generated by the newer solar panels on the South building (owned, but not occupied, by the Foundation) still exceeded the net energy consumed by the Foundation, before taking into account wider transport energy which is monitored, but not reported here as it varies significantly with the geographical mix of clients.

#### FINANCIAL REVIEW

As the charity lacks core funding, the majority of its services are funded by:

- Local authorities, to deliver services for residents
- Housing associations, to improve services for tenants
- Government, through programmes and research grant funding (InnovateUK)
- The European Union, through the Horizon 2020 research programme and ERDF funds, including Interreg
- Service users, including some organisations in the non-domestic sector

Trustees are of the opinion that all remunerated services constitute primary purpose trading and are charitable. The charity occasionally receive grants and donations from private funders, and also own a building that is let at a commercial rent.



# THE NATIONAL ENERGY FOUNDATION

## COMPANY LIMITED BY GUARANTEE

### TRUSTEES' ANNUAL REPORT (INCORPORATING THE DIRECTORS' REPORT) *(continued)*

#### YEAR ENDED 31 MARCH 2017

In 2016-17, the charity recorded an excess of expenditure over income of £352,065, compared to an excess of expenditure of £66,267 in the previous year. While this was disappointing, it reflects a number of factors including a continued squeeze on local authority funding for both affordable warmth projects and more technical reports, as well as wider business uncertainty after the Brexit vote. It also takes into account the conscious decision of Trustees to continue to invest in projects that should have a long term impact, including PULSE airtightness testing, the Assured Performance Process (APP) and Voluntary Display Certificates (VoDECs). A greater proportion of work undertaken has been at rates that do not fully account for the overheads essential to running a small organisation; these generally make a positive contribution to cash flow but do not show an overall surplus.

Recognising that the UK is likely to have a prolonged period of uncertainty, and that public funding is unlikely to return to the levels seen in the late 2000s, Trustees instituted a programme of redundancies to reduce the full time equivalent staffing levels by around 20% in the final quarter of 2016-17. While it is intensely disappointing to lose committed and good staff in this way, the Trustees believe that the structure of the charity should now be better able to cope with the prevailing economic conditions. All additional costs associated with redundancies have been accounted for in the financial year, even where staff had yet to leave the charity at 31 March 2017.

Following the restructuring in March 2017 the Foundation continued to invest in its own projects and in beneficial outreach. Revenue has not yet begun to flow from strategic projects which has resulted in a further depletion of free reserves. Trustees are reviewing forward plans to ensure sufficient reserves continue to be available to fund activities. Trustees maintain a close oversight of the cash position alongside activities being pursued to ensure continued financial viability.

#### **Investment and reserves policies**

The charity, having regard to its liquidity requirements and historic losses associated with investments in other entities, maintains most of its free reserves in interest bearing deposit accounts with major UK banks. In addition it has an investment building (Phase I of the National Energy Centre) that is let at a commercial rent.

The charity's reserves policy, adopted in September 2011 and kept under regular review since then is: *"The Trustees believe that adequate reserves should be held to maintain the work of the Foundation in promoting energy efficiency and renewable energy. After consideration, the Trustees have determined that the free reserves equivalent to six months normal recurring expenditure will suffice, after allowing for the Foundation's investment in fixed assets."* In practice, the Trustees have approved investment in activities that will reduce free reserves below the six month threshold in order to maintain its impact.

#### **Plans for future periods**

Trustees concluded a strategic review of the activities of the charity in 2015, and confirmed its applicability in 2016-17. The charity has confirmed the desirability of offering services to improve the use of energy in buildings occupied both by those in fuel poverty (through its affordable warmth strand) and the able to pay, including some non-domestic properties where they can contribute to the financial benefit of the charity and are supportive of its main charitable objects (primary purpose trading).

# **THE NATIONAL ENERGY FOUNDATION**

## **COMPANY LIMITED BY GUARANTEE**

### **TRUSTEES' ANNUAL REPORT (INCORPORATING THE DIRECTORS' REPORT) *(continued)***

#### **YEAR ENDED 31 MARCH 2017**

A second aim is to continue to invest in its own projects and programmes that will achieve significant impact, including the Assured Performance Process (APP), Voluntary Display Certificates (VolDECs), the WHISCERS insulation method patents, and an enhanced data platform, enabling us to offer better services to housing associations. Most of these initiatives are also designed to limit the need for the charity to take part in competitive bidding for work, where it appears that larger organisations have increasingly been prepared to win work below cost.

#### **TRUSTEE DIRECTORS' RESPONSIBILITIES STATEMENT**

The charity trustee directors, who are also directors for the purposes of company law, are responsible for preparing the Trustees' report and the financial statements in accordance with applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice).

Company law requires the charity trustees to prepare financial statements for each year which give a true and fair view of the state of affairs of the charitable company and the incoming resources and application of resources, including the income and expenditure, for that period.

In preparing these financial statements, the trustees are required to:

- select suitable accounting policies and then apply them consistently;
- observe the methods and principles in the applicable Charities SORP;
- make judgments and accounting estimates that are reasonable and prudent;
- state whether applicable UK Accounting Standards have been followed, subject to any material departures disclosed and explained in the financial statements;
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the charity will continue in business.

The trustees are responsible for keeping adequate accounting records that are sufficient to show and explain the charity's transactions and disclose with reasonable accuracy at any time the financial position of the charity and enable them to ensure that the financial statements comply with the Companies Act 2006. They are also responsible for safeguarding the assets of the charity and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

# THE NATIONAL ENERGY FOUNDATION

## COMPANY LIMITED BY GUARANTEE

### TRUSTEES' ANNUAL REPORT (INCORPORATING THE DIRECTORS' REPORT) *(continued)*

YEAR ENDED 31 MARCH 2017

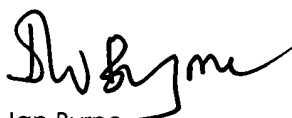
#### Auditor

Each of the persons who is a trustee director at the date of approval of this report confirms that:

- so far as they are aware, there is no relevant audit information of which the charity's auditor is unaware; and
- they have taken all steps that they ought to have taken as a director to make themselves aware of any relevant audit information and to establish that the charity's auditor is aware of that information.

The auditor is deemed to have been re-appointed in accordance with section 487 of the Companies Act 2006.

The trustee directors' annual report and the strategic report were approved on 5.12.2017 and signed on behalf of the board of trustees by:



Ian Byrne  
Company Secretary

# **THE NATIONAL ENERGY FOUNDATION**

## **COMPANY LIMITED BY GUARANTEE**

### **INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF THE NATIONAL ENERGY FOUNDATION**

#### **YEAR ENDED 31 MARCH 2017**

We have audited the financial statements of The National Energy Foundation for the year ended 31 March 2017 which comprise the statement of financial activities (including income and expenditure account), statement of financial position, statement of cash flows and the related notes. The financial reporting framework that has been applied in their preparation is applicable law and the United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice), including FRS 102 "The Financial Reporting Standard applicable in the UK and Republic of Ireland".

This report is made solely to the charity's members, as a body, in accordance with chapter 3 of part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the charity's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the charity and the charity's members as a body, for our audit work, for this report, or for the opinions we have formed.

#### **Respective responsibilities of directors and auditor**

As explained more fully in the directors' responsibilities statement, the trustees (who are also the directors for the purposes of company law) are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view. Our responsibility is to audit and express an opinion on the financial statements in accordance with applicable law and International Standards on Auditing (UK and Ireland). Those standards require us to comply with the Auditing Practices Board's Ethical Standards for Auditors.

#### **Scope of the audit of the financial statements**

An audit involves obtaining evidence about the amounts and disclosures in the financial statements sufficient to give reasonable assurance that the financial statements are free from material misstatement, whether caused by fraud or error. This includes an assessment of: whether the accounting policies are appropriate to the charity's circumstances and have been consistently applied and adequately disclosed; the reasonableness of significant accounting estimates made by the directors; and the overall presentation of the financial statements. In addition, we read all the financial and non-financial information in the directors' report to identify material inconsistencies with the audited financial statements and to identify any information that is apparently materially incorrect based on, or materially inconsistent with, the knowledge acquired by us in the course of performing the audit. If we become aware of any apparent material misstatements or inconsistencies we consider the implications for our report.

# THE NATIONAL ENERGY FOUNDATION

## COMPANY LIMITED BY GUARANTEE

### INDEPENDENT AUDITOR'S REPORT TO THE MEMBERS OF THE NATIONAL ENERGY FOUNDATION *(continued)*

YEAR ENDED 31 MARCH 2017

#### Opinion on financial statements

In our opinion the financial statements:

- give a true and fair view of the state of the charity's affairs as at 31 March 2017 and of its incoming resources and application of resources, including its income and expenditure, for the year then ended;
- have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice; and
- have been prepared in accordance with the requirements of the Companies Act 2006.

#### Opinion on other matter prescribed by the Companies Act 2006

In our opinion the information given in the directors' report for the financial year for which the financial statements are prepared is consistent with the financial statements.

#### Matters on which we are required to report by exception

We have nothing to report in respect of the following matters where the Companies Act 2006 requires us to report to you if, in our opinion:

- adequate accounting records have not been kept, or returns adequate for our audit have not been received from branches not visited by us; or
- the financial statements are not in agreement with the accounting records and returns; or
- certain disclosures of directors' remuneration specified by law are not made; or
- we have not received all the information and explanations we require for our audit.



SIMON J GILL FCCA  
(Senior Statutory Auditor)  
For and on behalf of  
KEENS SHAY KEENS MK LLP  
Chartered Accountants  
& Statutory Auditor

Sovereign Court  
230 Upper Fifth Street  
Central Milton Keynes  
MK9 2HR

08/12/2017

**THE NATIONAL ENERGY FOUNDATION**  
**COMPANY LIMITED BY GUARANTEE**  
**STATEMENT OF FINANCIAL ACTIVITIES**  
**(INCLUDING INCOME AND EXPENDITURE ACCOUNT)**

**31 MARCH 2017**

		2017		2016
		Unrestricted funds	Total funds	Total funds
	Note	£	£	£
<b>Income and endowments</b>				
Charitable activities	5	1,381,274	<b>1,381,274</b>	1,239,371
Investment income	6	117,969	<b>117,969</b>	139,637
<b>Total income</b>		<u>1,499,243</u>	<u><b>1,499,243</b></u>	<u>1,379,008</u>
<b>Expenditure</b>				
Expenditure on charitable activities	7,8	1,851,308	<b>1,851,308</b>	1,445,275
<b>Total expenditure</b>		<u>1,851,308</u>	<u><b>1,851,308</b></u>	<u>1,445,275</u>
<b>Net expenditure and net movement in funds</b>		<u>(352,065)</u>	<u><b>(352,065)</b></u>	<u>(66,267)</u>
<b>Reconciliation of funds</b>				
Total funds brought forward		2,073,528	<b>2,073,528</b>	2,139,795
<b>Total funds carried forward</b>		<u>1,721,463</u>	<u><b>1,721,463</b></u>	<u>2,073,528</u>

The statement of financial activities includes all gains and losses recognised in the year.  
All income and expenditure derive from continuing activities.

The notes on pages 24 to 35 form part of these financial statements.

# THE NATIONAL ENERGY FOUNDATION

## COMPANY LIMITED BY GUARANTEE

### STATEMENT OF FINANCIAL POSITION

31 MARCH 2017

		2017	2016
		£	£
<b>FIXED ASSETS</b>			
Tangible fixed assets	14	1,290,986	1,329,213
Investments	15	20,003	3
		<u>1,310,989</u>	<u>1,329,216</u>
<b>CURRENT ASSETS</b>			
Debtors	16	495,980	514,802
Cash at bank and in hand		716,119	2,310,763
		<u>1,212,099</u>	<u>2,825,565</u>
<b>CREDITORS: amounts falling due within one year</b>	17	<u>801,625</u>	<u>2,081,253</u>
<b>NET CURRENT ASSETS</b>		<u>410,474</u>	<u>744,312</u>
<b>TOTAL ASSETS LESS CURRENT LIABILITIES</b>		<u>1,721,463</u>	<u>2,073,528</u>
<b>NET ASSETS</b>		<u>1,721,463</u>	<u>2,073,528</u>
<b>FUNDS OF THE CHARITY</b>			
Unrestricted funds – General		353,720	680,511
Unrestricted funds - Designated		1,367,743	1,393,017
<b>Total charity funds</b>	19	<u>1,721,463</u>	<u>2,073,528</u>

These financial statements were approved by the board of trustees and authorised for issue on 6 Dec 2017 and are signed on behalf of the board by:

  
 .....  
 Chris Hall

Trustee/Director

Company number: 02218531

The notes on pages 24 to 35 form part of these financial statements.

# THE NATIONAL ENERGY FOUNDATION

## COMPANY LIMITED BY GUARANTEE

### STATEMENT OF CASH FLOWS

YEAR ENDED 31 MARCH 2017

	2017 £	2016 £
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>		
Net expenditure	(352,065)	(66,267)
<i>Adjustments for:</i>		
Depreciation of tangible fixed assets	47,041	47,903
Dividends, interest and rents from investments	(117,969)	(139,637)
Accrued expenses	(21,764)	24,772
<i>Changes in:</i>		
Trade and other debtors	18,822	(140,584)
Trade and other creditors	(78,663)	(180,769)
EU Horizon 2020 funds received in advance	(1,179,201)	1,685,487
Cash generated from operations	(1,683,799)	1,230,905
Net cash (used in)/from operating activities	(1,683,799)	1,230,905
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>		
Dividends, interest and rents from investments	117,969	139,637
Purchase of tangible assets	(8,814)	(6,185)
Purchases of other investments	(24,000)	—
Proceeds from sale of other investments	4,000	—
Net cash from investing activities	89,155	133,452
<b>NET (DECREASE)/INCREASE IN CASH AND CASH EQUIVALENTS</b>	(1,594,644)	1,364,357
<b>CASH AND CASH EQUIVALENTS AT BEGINNING OF YEAR</b>	<b>2,310,763</b>	<b>946,406</b>
<b>CASH AND CASH EQUIVALENTS AT END OF YEAR</b>	<b>716,119</b>	<b>2,310,763</b>

The notes on pages 24 to 35 form part of these financial statements.



# **THE NATIONAL ENERGY FOUNDATION**

## **COMPANY LIMITED BY GUARANTEE**

### **NOTES TO THE FINANCIAL STATEMENTS**

**YEAR ENDED 31 MARCH 2017**

#### **1. GENERAL INFORMATION**

The charity is a private company limited by guarantee, registered in England and Wales and a registered charity in England and Wales. The address of the registered office is The National Energy Centre, Davy Avenue, Knowlhill, Milton Keynes, MK5 8NG.

#### **2. STATEMENT OF COMPLIANCE**

These financial statements have been prepared in compliance with FRS 102, 'The Financial Reporting Standard applicable in the UK and the Republic of Ireland', the Statement of Recommended Practice applicable to charities preparing their accounts in accordance with the Financial Reporting Standard applicable in the UK and Republic of Ireland (FRS 102) (Charities SORP (FRS 102)) and the Charities Act 2011.

#### **3. ACCOUNTING POLICIES**

##### **Basis of preparation**

The financial statements have been prepared on the historical cost basis, as modified by the revaluation of certain financial assets and liabilities and investment properties measured at fair value through income or expenditure.

The financial statements are prepared in sterling, which is the functional currency of the entity.

##### **Going concern**

There are no material uncertainties about the charity's ability to continue.

##### **Consolidation**

The charity is not required to prepare consolidated accounts in accordance with the Charities Act 2011, and has taken advantage of the option not to prepare consolidated financial statements contained in Section 398 of the Companies Act 2006 on the basis that the charity and its subsidiary undertakings comprise a small group.

##### **Judgements and key sources of estimation uncertainty**

The preparation of the financial statements requires management to make judgements, estimates and assumptions that affect the amounts reported. These estimates and judgements are continually reviewed and are based on experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

Accounting estimates and assumptions are made concerning the future and, by their nature, will rarely equal the related actual outcome. The key assumptions and other sources of estimation uncertainty that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are the depreciation and amortisation of tangible fixed assets; prepayments and accrued income; accruals and deferred income.

# **THE NATIONAL ENERGY FOUNDATION**

## **COMPANY LIMITED BY GUARANTEE**

### **NOTES TO THE FINANCIAL STATEMENTS** *(continued)*

**YEAR ENDED 31 MARCH 2017**

#### **3. ACCOUNTING POLICIES** *(continued)*

##### **Fund accounting**

Unrestricted funds are available for use at the discretion of the trustees to further any of the charity's purposes.

Designated funds are unrestricted funds earmarked by the trustees for particular future project or commitment.

Restricted funds are subjected to restrictions on their expenditure declared by the donor or through the terms of an appeal, and fall into one of two sub-classes: restricted income funds or endowment funds.

##### **Incoming resources**

All income is included in the statement of financial activities when entitlement has passed to the charity, it is probable that the economic benefits associated with the transaction will flow to the charity and the amount can be reliably measured. The following specific policies are applied to particular categories of income:

- income from grants is recognised in accordance with the terms of each individual grant. Typically this will be when the Foundation has delivered outcomes expected by the agency making the grant, although on longer term grants, such as those from the European Union, it may be based on staff time, including an allowance for overheads, or other expenditure made.

- income from donations is recognised when the donation is received.

- no financial value has been attributed to the contribution of volunteers. There were no other donated goods or services.

- income from contracts for the supply of services is recognised with the delivery of the contracted service. All income is classified as unrestricted funds unless there is a contractual requirement for it to be spent on a particular purpose and returned if unspent, in which case it may be regarded as restricted.

##### **Resources expended**

Expenditure is recognised on an accruals basis as a liability is incurred. Expenditure includes any VAT which cannot be fully recovered, and is classified under headings of the statement of financial activities to which it relates:

- expenditure on raising funds includes the costs of all fundraising activities, events and non-charitable trading activities.

- expenditure on charitable activities includes all costs incurred by a charity in undertaking activities that further its charitable aims for the benefit of its beneficiaries, including those support costs and costs relating to the governance of the charity apportioned to charitable activities.

- other expenditure includes all expenditure that is neither related to raising funds for the charity nor part of its expenditure on charitable activities.

**THE NATIONAL ENERGY FOUNDATION**  
**COMPANY LIMITED BY GUARANTEE**  
**NOTES TO THE FINANCIAL STATEMENTS** *(continued)*  
**YEAR ENDED 31 MARCH 2017**

**3. ACCOUNTING POLICIES** *(continued)*

**Resources expended** *(continued)*

All costs are allocated to expenditure categories reflecting the use of the resource. Direct costs attributable to a single activity are allocated directly to that activity. Shared costs are apportioned between the activities they contribute to on a reasonable, justifiable and consistent basis.

**Operating leases**

Lease payments are recognised as an expense over the lease term on a straight-line basis. The aggregate benefit of lease incentives is recognised as a reduction to expense over the lease term, on a straight-line basis.

**Tangible assets**

Tangible assets are initially recorded at cost, and subsequently stated at cost less any accumulated depreciation and impairment losses. Any tangible assets carried at revalued amounts are recorded at the fair value at the date of revaluation less any subsequent accumulated depreciation and subsequent accumulated impairment losses.

An increase in the carrying amount of an asset as a result of a revaluation, is recognised in other recognised gains and losses, unless it reverses a charge for impairment that has previously been recognised as expenditure within the statement of financial activities. A decrease in the carrying amount of an asset as a result of revaluation, is recognised in other recognised gains and losses, except to which it offsets any previous revaluation gain, in which case the loss is shown within other recognised gains and losses on the statement of financial activities.

**Depreciation**

Depreciation is calculated so as to write off the cost or valuation of an asset, less its residual value, over the useful economic life of that asset as follows:

Freehold property	-	2% straight line and 5% straight line
Equipment	-	2 to 8 years straight line
Leasehold improvements	-	20% straight line and the remaining lease term

**Investments**

Fixed asset investments are initially recorded at cost, and subsequently stated at cost less any accumulated impairment losses.

**Investments in joint ventures**

Investments in jointly controlled entities accounted for in accordance with the cost model are recorded at cost less any accumulated impairment losses.

# **THE NATIONAL ENERGY FOUNDATION**

## **COMPANY LIMITED BY GUARANTEE**

### **NOTES TO THE FINANCIAL STATEMENTS *(continued)***

#### **YEAR ENDED 31 MARCH 2017**

#### **3. ACCOUNTING POLICIES *(continued)***

##### **Investments in joint ventures *(continued)***

Investments in jointly controlled entities accounted for in accordance with the fair value model are initially recorded at the transaction price. At each reporting date, the investments are measured at fair value, with changes in fair value taken through income or expenditure. Where it is impracticable to measure fair value reliably without undue cost or effort, the cost model will be adopted.

Dividends and other distributions received from the investment are recognised as income without regard to whether the distributions are from accumulated profits of the joint venture arising before or after the date of acquisition.

##### **Impairment of fixed assets**

A review for indicators of impairment is carried out at each reporting date, with the recoverable amount being estimated where such indicators exist. Where the carrying value exceeds the recoverable amount, the asset is impaired accordingly. Prior impairments are also reviewed for possible reversal at each reporting date.

For the purposes of impairment testing, when it is not possible to estimate the recoverable amount of an individual asset, an estimate is made of the recoverable amount of the cash-generating unit to which the asset belongs. The cash-generating unit is the smallest identifiable group of assets that includes the asset and generates cash inflows that largely independent of the cash inflows from other assets or groups of assets.

##### **Financial instruments**

A financial asset or a financial liability is recognised only when the entity becomes a party to the contractual provisions of the instrument.

Basic financial instruments are initially recognised at the amount receivable or payable including any related transaction costs, unless the arrangement constitutes a financing transaction, where it is recognised at the present value of the future payments discounted at a market rate of interest for a similar debt instrument.

Current assets and current liabilities are subsequently measured at the cash or other consideration expected to be paid or received and not discounted.

Debt instruments are subsequently measured at amortised cost.

Where investments in shares or preference shares are publicly traded or their fair value can otherwise be measured reliably, the investment is subsequently measured at fair value with changes in fair value recognised in income and expenditure. All other such investments are subsequently measured at cost less impairment.

**THE NATIONAL ENERGY FOUNDATION**  
**COMPANY LIMITED BY GUARANTEE**  
**NOTES TO THE FINANCIAL STATEMENTS** *(continued)*  
**YEAR ENDED 31 MARCH 2017**

**3. ACCOUNTING POLICIES** *(continued)*

**Financial instruments** *(continued)*

Financial assets that are measured at cost or amortised cost are reviewed for objective evidence of impairment at the end of each reporting period. If there is objective evidence of impairment, an impairment loss is recognised under the appropriate heading in the statement of financial activities in which the initial gain was recognised.

Any reversals of impairment are recognised immediately, to the extent that the reversal does not result in a carrying amount of the financial asset that exceeds what the carrying amount would have been had the impairment not previously been recognised.

**Operating lease agreements**

Rentals applicable to operating leases where substantially all of the benefits and risks of ownership remain with the lessor are charged against profits on a straight line basis over the period of the lease.

**Defined contribution plans**

Contributions to defined contribution plans are recognised as an expense in the period in which the related service is provided. Prepaid contributions are recognised as an asset to the extent that the prepayment will lead to a reduction in future payments or a cash refund.

**4. LIMITED BY GUARANTEE**

The charity is a company limited by guarantee. The members of the company are the trustees, and in the event of the charity being wound up, the liability in respect of the guarantee is limited to £1 per member of the charity.

**5. CHARITABLE ACTIVITIES**

	Unrestricted Funds £	<b>Total Funds 2017 £</b>	Unrestricted Funds £	Total Funds 2016 £
Project income	<u>1,381,274</u>	<u><b>1,381,274</b></u>	<u>1,239,371</u>	<u>1,239,371</u>

# THE NATIONAL ENERGY FOUNDATION

## COMPANY LIMITED BY GUARANTEE

### NOTES TO THE FINANCIAL STATEMENTS *(continued)*

YEAR ENDED 31 MARCH 2017

#### 6. INVESTMENT INCOME

	Unrestricted Funds £	Total Funds 2017 £	Unrestricted Funds £	Total Funds 2016 £
Income from investment activities	<u>117,969</u>	<u>117,969</u>	<u>139,637</u>	<u>139,637</u>

#### 7. EXPENDITURE ON CHARITABLE ACTIVITIES BY FUND TYPE

	Unrestricted Funds £	Restricted Funds £	Total Funds 2017 £
Support costs	<u>1,851,308</u>	<u>-</u>	<u>1,851,308</u>

	Unrestricted Funds £	Restricted Funds £	Total Funds 2016 £
Support costs	<u>1,410,001</u>	<u>35,274</u>	<u>1,445,275</u>

#### 8. EXPENDITURE ON CHARITABLE ACTIVITIES BY ACTIVITY TYPE

	Support costs £	Total funds 2017 £	Total funds 2016 £
Programme delivery	324,408	<b>324,408</b>	486,919
Advancing knowledge	630,057	<b>630,057</b>	311,461
Strategic development	320,538	<b>320,538</b>	182,864
Other support costs	553,252	<b>553,252</b>	445,411
	<u>1,828,255</u>	<u>1,828,255</u>	<u>1,426,655</u>
Governance costs	23,053	<b>23,053</b>	18,620
	<u>1,851,308</u>	<u>1,851,308</u>	<u>1,445,275</u>

#### 9. ANALYSIS OF SUPPORT COSTS

	Support costs £	Total 2017 £	Total 2016 £
Staff costs	1,081,682	<b>1,081,682</b>	1,016,617
Premises	86,519	<b>86,519</b>	86,510
General office	33,499	<b>33,499</b>	27,590
Governance costs	23,053	<b>23,053</b>	18,620
Other support costs	271,128	<b>271,128</b>	247,128
Depreciation	47,041	<b>47,041</b>	47,903
Third party costs and expenses on EU-funded projects	308,386	<b>308,386</b>	907
	<u>1,851,308</u>	<u>1,851,308</u>	<u>1,445,275</u>

**THE NATIONAL ENERGY FOUNDATION**  
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**NOTES TO THE FINANCIAL STATEMENTS** *(continued)*  
**YEAR ENDED 31 MARCH 2017**

**10. NET EXPENDITURE**

Net expenditure is stated after charging/(crediting):

	<b>2017</b>	2016
	<b>£</b>	£
Depreciation of tangible fixed assets	<b><u>47,041</u></b>	<u>47,903</u>

**11. AUDITORS REMUNERATION**

	<b>2017</b>	2016
	<b>£</b>	£
Fees payable for the audit of the financial statements	<b><u>9,028</u></b>	<u>10,802</u>

**12. STAFF COSTS**

The total staff costs and employee benefits for the reporting period are analysed as follows:

	<b>2017</b>	2016
	<b>£</b>	£
Wages and salaries	<b>943,864</b>	887,685
Social security costs	<b>95,783</b>	89,658
Employer contributions to pension plans	<b><u>42,035</u></b>	<u>39,274</u>
	<b><u>1,081,682</u></b>	<u>1,016,617</u>

The average head count of employees during the year was 30 (2016: 27). The average number of full-time equivalent employees during the year is analysed as follows:

	<b>2017</b>	2016
	<b>No.</b>	No.
Number of management and admin staff	<b>5</b>	5
Number of other staff - project, sales and technical	<b><u>21</u></b>	<u>22</u>
	<b><u>26</u></b>	<u>27</u>

The number of employees whose remuneration for the year fell within the following bands, were:

	<b>2017</b>	2016
	<b>No.</b>	No.
£60,000 to £69,999	<b>2</b>	2
£100,000 to £109,999	<b><u>1</u></b>	<u>1</u>
	<b><u>3</u></b>	<u>3</u>

**Key Management Personnel**

Key management personnel include all persons that have authority and responsibility for planning, directing and controlling the activities of the charity. The total compensation paid to key management personnel for services provided to the charity was £282,400 (2016: £202,650).

# THE NATIONAL ENERGY FOUNDATION

## COMPANY LIMITED BY GUARANTEE

### NOTES TO THE FINANCIAL STATEMENTS *(continued)*

#### YEAR ENDED 31 MARCH 2017

#### 13. TRUSTEE REMUNERATION AND EXPENSES

No trustees received any remuneration for their services as a trustee (2016 nil). During the year 6 trustees received reimbursed expenses totalling £1,113 (2016: 7 trustees received £919).

#### 14. TANGIBLE FIXED ASSETS

	Freehold property & improve- ments £	Equipment £	Leasehold improve- ments £	Total £
<b>Cost</b>				
At 1 April 2016	1,734,984	129,968	4,811	1,869,763
Additions	–	5,256	3,558	8,814
<b>At 31 March 2017</b>	<b>1,734,984</b>	<b>135,224</b>	<b>8,369</b>	<b>1,878,577</b>
<b>Depreciation</b>				
At 1 April 2016	439,320	99,893	1,337	540,550
Charge for the year	39,463	4,271	3,307	47,041
<b>At 31 March 2017</b>	<b>478,783</b>	<b>104,164</b>	<b>4,644</b>	<b>587,591</b>
<b>Carrying amount</b>				
<b>At 31 March 2017</b>	<b>1,256,201</b>	<b>31,060</b>	<b>3,725</b>	<b>1,290,986</b>
At 31 March 2016	1,295,664	30,075	3,474	1,329,213

The cost figures for freehold property and improvements include a sum of £352,500 (2016: £352,500) at valuation for the land on which the National Energy Centre building is situated. This land was granted to the Foundation by the Commission for the New Towns.



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**YEAR ENDED 31 MARCH 2017**

**15. INVESTMENTS**

	Shares in group under- takings £	Other investments £	Total £
<b>Cost or valuation</b>			
At 1 April 2016	3	–	3
Additions	–	24,000	24,000
Disposals	–	(4,000)	(4,000)
	<u>3</u>	<u>20,000</u>	<u>20,003</u>
<b>At 31 March 2017</b>			
<b>Impairment</b>			
At 1 April 2016 and 31 March 2017	–	–	–
	<u>–</u>	<u>–</u>	<u>–</u>
<b>Carrying amount</b>			
At 31 March 2017	<u>3</u>	<u>20,000</u>	<u>20,003</u>
At 31 March 2016	<u>3</u>	<u>–</u>	<u>3</u>

All investments shown above are held at valuation.

The principal companies in which the charity is carrying an interest of more than 20% are as follows:

<b>Company</b>	<b>Principal Activity</b>
Energy Advisory Services Limited	Dormant company
The National Energy Centre Limited	Dormant company
The Home Energy Rating Scheme Limited	Dormant company

All of the above companies are 100% subsidiaries. The charity owns one share in each company and a second share in each is owned by a fellow subsidiary. All of the above companies are registered in England & Wales.

The company also owns 33.33% of Build Test Solutions Limited, a company registered in England and Wales whose principal activity is the commercialisation of air testing equipment.

**16. DEBTORS**

	2017 £	2016 £
Trade debtors	234,164	372,564
Prepayments and accrued income	251,299	125,493
Other debtors	10,517	16,745
	<u>495,980</u>	<u>514,802</u>

# THE NATIONAL ENERGY FOUNDATION

## COMPANY LIMITED BY GUARANTEE

### NOTES TO THE FINANCIAL STATEMENTS *(continued)*

#### YEAR ENDED 31 MARCH 2017

#### 17. CREDITORS: amounts falling due within one year

	2017	2016
	£	£
Trade creditors	39,945	42,117
Accruals and deferred income	64,904	86,668
Social security and other taxes	55,701	68,642
EU Horizon 2020 funds received in advance	506,286	1,685,487
Other creditors	134,789	198,339
	<u>801,625</u>	<u>2,081,253</u>

The balance shown under EU creditors in 2016 include amounts held temporarily on behalf of a Horizon 2020 consortium for onward transmission to members of that consortium, and amounts received by the Foundation for future delivery of the Transition Zero project (no. 696196). The balance in 2017 only includes amounts for future delivery of the project.

#### 18. PENSIONS AND OTHER POST RETIREMENT BENEFITS

##### Defined contribution plans

The amount recognised as an expense in relation to defined contribution plans was £42,035 (2016: £39,274).

#### 19. ANALYSIS OF CHARITABLE FUNDS

##### Unrestricted funds

	At 1 April 2016	Income	Expenditure	At 31 March 2017
	£	£	£	£
General funds	680,511	1,499,243	(1,826,034)	353,720
Building funds	1,393,017	–	(25,274)	1,367,743
	<u>2,073,528</u>	<u>1,499,243</u>	<u>(1,851,308)</u>	<u>1,721,463</u>

#### 20. ANALYSIS OF NET ASSETS BETWEEN FUNDS

	Unrestricted Funds	Total Funds 2017
	£	£
Tangible fixed assets	1,290,986	1,290,986
Investments	20,003	20,003
Current assets	1,212,099	1,212,099
Creditors less than 1 year	(801,625)	(801,625)
<b>Net assets</b>	<u>1,721,463</u>	<u>1,721,463</u>

**THE NATIONAL ENERGY FOUNDATION**  
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**NOTES TO THE FINANCIAL STATEMENTS** *(continued)*  
**YEAR ENDED 31 MARCH 2017**

**21. OPERATING LEASE COMMITMENTS**

The total future minimum lease payments under non-cancellable operating leases are as follows:

	<b>2017</b>	2016
	<b>£</b>	£
Not later than 1 year	<b>58,036</b>	56,500
Later than 1 year and not later than 5 years	<b>174,874</b>	226,000
	<b><u>232,910</u></b>	<u>282,500</u>

**22. RELATED PARTIES**

During the year, the company entered into the following transactions with related parties:

**Encraft Limited**

A company in which one of the trustees, Matthew Rhodes is a director.

	<b>2017</b>	2016
	<b>£</b>	£
Income received	<b>120</b>	120
Expenditure	–	6,554

**Open Homes Networks Limited**

A company limited by guarantee in which one of the trustees, John Doggart is a director.

	<b>2017</b>	2016
	<b>£</b>	£
Income received	<b>5,181</b>	7,165

**Interfacing Limited**

A company in which the Chief Executive, Dr Kerry Mashford is a director.

	<b>2017</b>	2016
	<b>£</b>	£
Income received	<b>1,667</b>	–
Expenditure	<b>34,047</b>	–

**Green Deal Together CIC**

A community interest company in which the Foundation held 35,000 shares.

	<b>2017</b>	2016
	<b>£</b>	£
Income received	<b>4,787</b>	23,367
Expenditure	–	11,121

**THE NATIONAL ENERGY FOUNDATION**  
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**YEAR ENDED 31 MARCH 2017**

**22. RELATED PARTIES** *(continued)*

**Build Test Solutions Limited**

A joint venture company in which the Foundation holds a one-third shareholding.

	<b>2017</b>	2016
	<b>£</b>	£
Trade debtor	<b>324</b>	—
Income received	<b>324</b>	—

**Energiesprong (UK) Limited**

A company limited by guarantee with some officers in common.

	<b>2017</b>	2016
	<b>£</b>	£
Trade debtors	<b>12,000</b>	19,404
Income received	<b>20,021</b>	26,104

**Sustainable Energy Academy**

During the year, the charity received a donation from Sustainable Energy Academy, a charity and company limited by guarantee with some officers in common, as part of its winding up and transfer of residual assets to the Foundation.

	<b>2017</b>	2016
	<b>£</b>	£
Income received	<b>11,195</b>	—