

Annual review 2020/21



From Ambition to Action



In recent months, heatwaves, wildfires and droughts have brought home the consequences of climate chaos and the critical importance of turning emission reduction targets into credible action.

In the run up to the COP26 climate conference in Glasgow, the UK has set ambitious targets to cut emissions. In some areas this has translated into plans and action. In too many areas, however, difficult decisions are being kicked down the road.

Regen's focus this year has been working with you, our members, on the detailed actions needed to turn ambition into action. We have published a series of 'a decade to make a difference' papers on key areas of the energy transition and provided a strong expert voice with government and regulators. Our pioneering projects on ensuring our energy system is ready for net zero and on local energy plans to achieve net zero aim to address barriers and unlock billions of pounds of investment in clean energy. We have been contributing our collective clean energy expertise through secondment into the COP Unit in the Cabinet Office.

In the face of the scale of the climate challenge, your achievements in transforming the energy sector are a source of hope and inspiration. Our commitment is to work tirelessly with you to drive forward the decarbonisation of the whole energy system and help put us on course to avoid climate chaos.

Merlin Hyman

Chief executive, Regen

Our mission

Regen is a not-for-profit centre of energy expertise and market insight whose mission is to transform the energy system for a zero carbon future.

Energy is the beating heart of our communities, an unseen web that binds us together. Radical change in such a critical system is not going to be easy.

Our strategy is to accelerate the transition to a decarbonised, decentralised and democratic energy system by working in three ways:

- Pioneering new energy models at the cutting edge of the energy transformation
- Transforming policy and regulation
- Championing a diverse, engaged and democratic renewable energy sector

We know we can't deliver this mission alone, so we want to work with you, our members, to be a strong, informed and independent force for change.

THE GREEN JOBS OPPORTUNITY

WHERE DO

CURRENT

SKILLS BEST

ALIGN WITH

GREEN JOBS?

There are currently 200,000 full-time equivalent employees working in the low carbon and renewable energy sector in the UK¹...

... which will significantly increase with investment in clean energy

.. providing a net increase in UK employment, compensating for the decline in high-polluting

... and supporting a green recovery by providing futureproof jobs in the places that would benefit most.

The Local Government Association estimates there could be 700,000 direct low carbon and renewable energy jobs by 2030 in England alone ².

The UK government is aiming to support 2 million green jobs by 2030, having launched the Green Jobs Taskforce in 2020 3 .

UKERC modelling shows that the long-term employment impact of renewable technologies dwarfs nuclear and fossil fuel impacts ⁴.

Analysis shows clear net job creation from a transition to a low carbon economy ⁵.

These new green jobs are likely to be created where there are the skilled people to do them. Regen has used ONS data to analyse where the workforce with the right skills for low carbon and renewable jobs is located ^{1.6}.

In many cases, this aligns with high levels of deprivation or unemployment, where **levelling-up** must be targeted ⁷.



- 1 Low carbon and renewable energy economy, UK; 2 Local green jobs acceleration a sustainable economic recovery
- 3 UK government launches taskforce to support drive for 2 million green jobs by 2030; 4 "Green Industrial Revolution" and the long-term effect...; 5 Low carbon jobs: The evidence for net job creation; 6 Business Register and Employment Survey; 7 Unemployment Office for National Statistics

Leading the energy transition

We have the technologies, expertise and innovation to decarbonise our energy system. We have investors ready to deploy capital at speed and scale. Increasingly, we have public support and recognition of the need for radical change.

However, we know that we are moving too slowly to address the scale of the challenge.

Regen has been working tirelessly with its members and in partnership with key players in the energy system to accelerate progress by addressing the critical challenges to decarbonisation:

- We are pioneering innovative approaches to a decarbonised, decentralised and democratic energy system and sharing learning with policy and decision makers.
- We are using our expertise to work with local government, devolved administrations and key energy utilities to chart a bottom-up path to zero carbon power, heat and transport.
- And we are bringing industry, policy makers and communities together to enable us all to rise to the net zero challenge by sharing ideas and building partnerships.



It was a great & informative session today, and really inspiring to be among so many women working in the energy transition.

CATE LYON, DELTA-EE

Democratic and diverse clean energy sector

With our mission to decarbonise the energy system comes a responsibility to do so in a just way. An ongoing focus of our work is therefore making sure the clean energy sector is diverse, engaged with communities, and part of a broader movement for change. We published an **Equality, Diversity and Inclusion statement** this year to keep us accountable.

Our **Women in Renewable Energy Network** has continued to address gender imbalance in the clean energy sector through mentoring, thought leadership and events, providing a space for women to contribute their expertise to issues at the cutting-edge of the energy transition.

We continue to make sure the voice of community energy groups is heard as an important and unique local stakeholder. This year, we delivered the **Community Energy State of the Sector** reports, having survey 424 community energy groups nationally.

We also worked with network operators across the whole of the UK to run community energy training sessions and to develop engagement strategies.



I have been reviewing Regen's DFES and I wanted to highlight the fantastic level of detail that has gone into these scenarios. I am very impressed by the work.

SIMON GILL, HEAD OF WHOLE SYSTEM AND TECHNICAL POLICY. SCOTTISH GOVERNMENT

Smart and local

A locally-led energy transition can bring the jobs, investment and resilience needed for a green recovery and to put the country on course for net zero. With the majority of local authorities having declared climate emergencies, we have relaunched our Local Authorities, Cities and Regions membership to support local net zero action planning and we have developed the annual Net Zero Dashboard to track progress. Our projects have involved working with local authorities across the UK to develop innovative models to source and support local renewable electricity.

Smart uses of data can also support the local green recovery by enabling greater innovation in local energy systems. Our Local Energy Data Innovation project involved engaging with stakeholders to identify challenges in local energy systems that data applications could help solve, from supporting developers of renewable generation to identify sites, to providing

services that facilitate bill reductions for





Future energy infrastructure

Regen has developed a bottom-up, stakeholder-led approach to future energy scenarios at a regional level to provide robust, evidence-based data that can be used for network planning and inform investment appraisal and business planning.

This year, we worked with Western Power Distribution to consult with over 125 local authorities, project developers, asset owners and community energy groups to directly influence the models and assumptions made in the future energy analysis. We also worked alongside Scottish and Southern Electricity Networks (SSEN) to take an industry-first step in forecasting how the roll out of energy efficiency measures is likely to offset expected increases in electricity demand at a regional level. Our findings illustrate what meeting national net zero targets will mean for the homes, businesses and communities in SSEN's licence areas.

Innovation

Finding new and better ways to decarbonise our energy system, and creating scalable solutions across local, regional, and national levels, is a key area of our work. Working with Western Power Distribution, Wales and West Utilities and West of England Combined Authority, we are trialling a new integrated way of developing local energy plans to enable network investment that facilitates local decarbonisation targets. At a regional level, we have been developing investment-ready business models for the Greater Manchester Local Energy Market under Innovate UK's 'Prospering the Energy Revolution' challenge to enable a radical change in the way energy is generated, transported and consumed in the region.

We also worked on a leading international smart grid innovation project, DEMOCRASI, which involved developing new products to give greater visibility to distributed energy resources. By combining products from Great Britain and Canada into a joint solution, the project delivers better outcomes for the network and system operators, and lower costs for consumers.

Shaping public policy

As a membership organisation, we form our policy responses from our 200 business, local authority and community energy members that support our mission to transform the whole energy system. We have extensive experience of guiding the sector through shifts in the energy system over the last decade and influencing change at the heart of government.

In times of rapid change, like those we face now, our mission becomes even more important. We are looking forward to working with you, our members, to transform energy and build a decarbonised, decentralised and democratic future.

We have been working towards six policy priorities this year.

1 Local energy planning and investment

Aim: A new model for local governance of energy which allows local bodies to plan for and invest in energy policies which can deliver their ambitious climate goals.

Building on our **paper** launched last year which sets out a major programme to devolve powers and funding on energy, we have continued to push for better support from national government to unleash the full potential of local energy leadership. Through our relaunched **Local Authorities**,



Cities and Regions membership and regular interactive forums, we have ensured that the views of local authorities on localism in energy are clearly communicated to policymakers and regulators.

Regen's work in collaboration with members and stakeholders has helped inform a number of policy wins this year, including preventing the local authority ceiling for energy efficiency standards, significant overtures in the National Infrastructure

Strategy to greater devolved powers and leadership for local bodies, removing the 50 MW planning threshold for storage projects meaning all sized projects will be decided at the local level and the roll-out of the locally-delivered arm of the Green Homes Grant.

2 Creating a fair, regulatory framework for low carbon generation and technologies

Aim: A regulatory and market framework that has net zero at its core. Ofgem and the network operators must have clearly defined statutory remits to prioritise decarbonisation.

Through pressure from Regen and across the industry, carbon is increasingly raised as an issue at all Ofgem engagement events, and the policy limitations constraining networks' progress towards decarbonisation an increasing concern. We have been continuing to press for net zero to be at the forefront of Ofgem's strategic decisions, including through our position on Ofgem's new Full Chain Flexibility Forum. The announcement in the Energy White Paper to clarify Ofgem's remit in a Strategy and Policy Statement from BEIS was a positive culmination of our campaigning.

Through the Charging Futures Forum and Challenge Group, we have closely shaped the future of network charging arrangements and their impact on decarbonisation, as documented through regular **blogs**, **reports** and **member updates**. Some of the positives we have been calling for to help electricity networks enable net zero came to fruition in Ofgem's minded-to decision on Access and Forward-looking Charges reform.

With a focus on making things happen, I have seen first-hand the industry changes that have been implemented thanks to Regen and the Electricity Storage Network's work. This has undoubtedly led to even more rapid growth of the storage sector.

MIKE RYAN, HABITAT ENERGY

3 Decarbonisation of heat and energy efficiency

Aim: Tangible, ambitious action on the decarbonisation of heat and the roll out of new and retrofit energy efficiency measures.

Closing the gap between policy commitments and delivery has been an area of focus for Regen's heat decarbonisation work this year. We have been feeding members' views through meetings with BEIS to inform the rollout of the Green Homes Grant and the Heat and Buildings Strategy and we ran a campaign calling for the implementation of key policies set out in our **letter** to the energy minister. We also joined leading energy sector organisations in calling for a **Fair Heat Deal** from government and stepped up our work

on building consumer perspectives into future policy.





Aim: Markets that function effectively in a net zero system, incentivising the right kind of assets in the right places.

BEIS is now taking positives steps to enable the shifts needed to build a net zero electricity system, such as Contracts for Difference being extended to solar and onshore wind assets, and consultations to map out a future market in a renewable world. We worked closely with members and the sector to provide input into the **Enabling a high renewable**, **net zero electricity system** call for evidence, including our **event with industry leaders**, the outputs of which we are now developing into a thought leadership paper.

Working with the Electricity Storage Network, we have informed the development of the new **Smart Systems and Flexibility Plan**, with many of the recommendations set out in our letter to the energy minister coming to fruition in the Plan, including our work on valuing carbon in electricity markets.

5 Hydrogen – costs, feasibility, applications and funding

Aim: We are stepping up our research on hydrogen, following our successful research, modelling and thought leadership papers.

With hydrogen increasingly appearing in energy and net zero discussions, we have been looking into the role that hydrogen can play within a low carbon energy system. As part of our 'hydrogen insight series', we've produced a thought leadership paper

on the development of the hydrogen value chain, a **podcast** on the opportunities and challenges of integrating hydrogen into the energy system, **analysis** of hydrogen production projects in Great Britain and a **blog** on the role of hydrogen in decarbonising industry. This work has informed our policy asks as we've worked closely with BEIS to input into the Hydrogen Strategy.



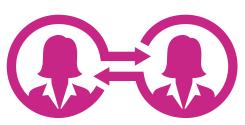
6 EV charging and its impacts on the electricity network

Aim: Understanding, analysing and communicating the impacts of EV charging on the electricity network.

With the government having brought forward the phase-out date for the sale of new petrol and diesel cars and vans to 2030, we have been stepping up our work to help enable this target, focusing particularly on the impacts on the electricity system through our EV and Electricity System Forum. The release of the **Transport Decarbonisation Plan** and associated consultations provides important opportunities which we will be using to influence government policy.



3 THOUGHT LEADERSHIP EVIDENCE-BASED PUBLICATIONS



cutting-edge blogs shaping the debate on energy transformation









POLICY RESPONSES



COMMITMENT TO NET ZERO

podcast conversations with

pioneering women in clean energy

'Women Like Me'

by 2030 under the Race To Zero campaign

POLICY AGENDA



podcast episodes covering hotly debated topics



Priority areas for 2021/22

In 2021/22, we will focus our work on turning ambition into action. The Climate Change Committee has called out the government's habit of kicking the can down the road on key decisions. We will be pressing for transformational policies on heat, power and transport to drive the shift to net zero energy, supporting devolved and local government to put in place net zero action plans, and transforming our critical energy system infrastructure so that these action plans can be delivered.

We will do this by engaging closely with our membership, using Regen's detailed knowledge of the whole energy system and continuing our evidence-backed approach.

Shape zero carbon policy

The UK hosting the international climate conference, COP26, creates a window of opportunity for action to address key challenges on the journey to net zero. We will be pressing for measures to phase out fossil fuel heating and achieve a net zero power system by 2035.

Heat and buildings

The UK desperately needs to tackle the decarbonisation of buildings and the provision of low-cost to run, efficient homes. We will focus on radical rather than incremental improvements to the building stock.

Zero carbon smart power

We will press for policy, regulation and system operation to support a decentralised and flexible power system, with very high levels of renewables. We will be shaping the design of the markets and system operation that a net zero power system will require.

Fair and local

We will be pressing for policies that devolve energy powers and funding to localities to engage diverse communities in a just transition that supports local jobs. We will work with local authorities and groups, cities, and regions to shape an energy transition that works for their communities.



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Simon Gill, head of whole system and technical policy, Scottish Government



Regen bring the right people together – you work with Whitehall, you work with local and community groups, and you have the ability to speak both those languages and bridge the gap.

Alison Sleightholm, resources and external affairs director, Western Power Distribution



Regen is consistently the best at bringing together practitioners, policymakers and researchers. Its meetings are where I come to get ideas about what's happening next in renewables.

Jonathan Thompson, Green Nation

Key partners

We would like to thank all our members, partners and clients.





































Join us

Together with our members, we provide an expert and highly influential combined industry voice for the transformation of the whole energy system – guiding shifts across power, heat and transport. Get plugged in through our policy and market insights, sector knowledge and extensive network developed through ground-breaking research and pioneering projects.

Being a member of Regen provides us with an invaluable opportunity to network with key stakeholders from across the whole sector, which we've found really beneficial to inform the transition to Distribution System Operation. Their detailed market insight keep us up to date with key changes happening across the fast-moving sector and helps us understand the impacts of those changes for our network planning. STEVE ATKINS, DSO TRANSITION MANAGER, SSEN

Membership benefits

Have influence

- Set the agenda by joining our working groups and forums, working closely with BEIS, Ofgem, National Grid, DNOs and local authorities, with annual opportunities to become chair
- Collaborate on Regen policy documents and provide input into written responses to government consultations
- Connect with the sector by attending Regen's events and have the first option to sponsor or exhibit, plus receive discount on selected third-party events

Stay informed

- Receive timely updates on sector developments, fortnightly newsletters with the latest policy activity, and monthly market insight reports
- Gain support from our unique and talented team, whose technical expertise covers all aspects of sustainable energy delivery

Raise your profile

- Partner with us on thought leadership projects, such as our recent Decade to Make a Difference series
- Develop business relationships by featuring in our members' directory and reach industry talent by advertising job vacancies on the Regen website
- ➤ Join Regen's network for women in renewable energy to take action on **gender diversity** and inclusion in our sector

If you aren't yet a member please contact Hannah Stanley, events manager, hstanley@regen.co.uk





Our members

Otter Energy
Gore Street Capital

Ampersand Partners

Tewdric Energy

Cragside Energy

Susgen

VEST Energy

Wiltshire Wildlife Community Energy

Devon Energy Collective

B3 New Energy Amp X Limited

One Planet

Energy Law Unlimited

StorTera

Royds Withy King

Prevera

Low Carbon Estates

Eden Geothermal Limited

Mentone Energy

Energy & Power Tech

GA Solicitors

The Microgrid Foundry Valda Energy Limited Modo Energy

Envirotech Energy Solution Limited

Conrad Energy

OM-3

Schneider Electric Low Carbon Alliance

Gresham House Voltalia UK

Habitat Energy

National Grid Zenobe Energy

GridIMP

Fluence Energy, LLC

Aura Power

RNA Energy

Renewable Exchange

Dale Power Solutions

Enso Energy ESB Energy

Awel Aman Tawe

Newcastle University

Moixa GRIDSERVE Andigestion Ltd

Engie

Gemserv

South Dartmoor Community Energy

ZLC Energy Sembcorp

TRESOC

Storelectric Ltd

University of Bristol

South Brent Community Energy

Society

Solarsense UK Ltd

Scottish Power Renewables

The Quarry Battery Company Limited

Open Energi

Low Carbon Contracts Company

Immersa Ltd Highview Power

Freeths

Frazer Nash Consultancy

Flexitricity

Ethical Power Ltd

ElectraLink

EDF Energy

Denchi Group

Community Power Cornwall

Clarke Energy UK/Clarke Energy UK

Brook Green Innovation
Banks Renewables

Arenko Cleantech Limited Electricity North West Ltd Sustainability Practice

Scottish and Southern Electricity

Networks

Energy Systems Catapult

Thrive Renewables
The Holme Estate
Carlton Power

Zero Carbon Marine Ltd Yealm Energy Community

Windcluster 2000 Ltd

West Solent Solar Cooperative

Wales & West Utilities Ltd

University of Plymouth

TLT LLP

Triodos Bank

The Landmark Practice

Teign Energy Communities

Swanbarton Energy Storage

Consultants

Solar Trade Association

Solar South West Ltd

RWE Innogy Renewables UK Ltd

Roadnight Taylor

Renewables First Ltd

Renewable Energy Association (REA)

Renew Legal

Pure Planet Limited

Pure Energy Professionals Ltd

Public Power Solutions

Powervault

Portland Harbour Authority

Pegasus Planning Group

Osborne Clarke

Opus Energy

Naturesave Insurance and The

Naturesave Trust

Nadder Community Energy

Mypower

Michelmores LLP

Low Carbon Gordano

Laurence Associates

Keynvor Morlift Ltd

Jonathan Packer & Associates

Infinergy Ltd

Harrison Clark Rickerbys

Greenshop Solar Ltd

Green Nation

Good Energy Ltd

GoBe Consultants Ltd

GJ Renewables Itd

Geneco

G2 Energy

Foot Anstey

Energymyway (UK) Ltd

Energy4All Ltd

Energy-Tec Ltd

Energy Saving Trust

Empire Engineering Limited

EDF Energy Renewables

EDEN Sustainable Ltd

Dunster Heat Ltd

Dunster Biomass Heating

Dorset Community Energy Ltd

DNV GL

Cooks Plumbing and Heating Ltd

(Cooks Energy)

Community Energy Scotland

Communities for Renewables CIC

Clean Energy Prospector

Chelwood Community Energy

Cenin Renewables Ltd

Burges Salmon LLP

Bristol Energy Coop

Bristol City Council

Brendon Hill Tree Services Ltd

Bath and West Community Energy

(BWCE)

Association of Decentralised Energy

(ADE)

Ashfords

Alfen

South West Water

Federation of Master Builders (FMB)

Argand Solutions Ltd

Midas Group Ltd. - Midas Energy

Devon County Council

Community Energy England

Stephens Scown

Somerset County Council

Bath & North East Somerset Council

(B&NES)

South Gloucestershire Council

Plymouth Energy Community

Exeter Community Energy

Tamar Energy Community

Solar PV Tech

Eco Nrg Ltd

Sungift Energy Ltd





Regen accounts summary

Profit and loss account for the year ended 31 December 2020		
	2020	2019
	£	£
Turnover	1,493,079	1,474,368
Cost of sales	(733,375)	(824,220)
Gross profit	759,704	650,148
Administrative expenses	(612,124)	(494,655)
Exceptional item	5,744	0
Operating surplus	153,324	155,493
Interest receivable and similar income	1,659	2,452
Surplus on ordinary activities before taxation	154,983	157,945
Tax on ordinary activities	(29,497)	(29,813)
Surplus on financial year after taxation	125,486	128,132

Balance Sheet for the year ended 31 December 2020				
	2020		2019	
	£	:	£	:
Fixed assets				
Tangible assets	45,974		59,425	
Current assets				
Debtors	306,270		490,061	
Cash at bank	966,066		611,217	
	1,272,336		1,101,278	
Creditors				
Amounts falling due within one year	(326,319)		(291,673)	
Net current assets	946,017		809,605	
Provisions for liabilities		(8,659)		(11,184)
Net assets		983,332		857,846
Capital and reserves				
Profit and loss reserves		983,332		857,846

The information on this page has been taken from the company's financial statements for the year ended 31 December 2020, audited by Simpkins Edwards and approved by the Regen board in May 2021. Full copies of the accounts can be obtained from Regen.

Regen team

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Board of directors

Sonya Bedford	partner, Stephens Scown Solicitors
Philippa Eddie	commercial finance specialist, Infrastructure and Projects Authority
Johnny Gowdy	Regen
Michael Huntingford	chairman, Regen; Director, Zero Carbon Marine Ltd
Merlin Hyman	Regen
Alan John	consultant, Osborne Clarke
Jonathan Johns	director and principal, Climatechangematters Ltd
Cathy McClay	director of strategy, Policy and Regulation, Sembcorp Energy UK
Kayte O'Neill	head of markets, National Grid ESO
James Vaccaro	associate director, Cambridge Institute for Sustainable Leadership; Senior Advisor, Triodos Bank