Church of England: The route to Net Zero Carbon by 2030 I 0 Yr Action Plan

<u>INITIAL DRAFT</u> Contribution by The National Society (Church of England and Church in Wales) for the Promotion of Education ('National Society') or Church of England Education Office

Introduction

The objects of the National Society are the 'promotion, encouragement and support of education in accordance with the principles of the Church of England, in England and in Wales and in any other part of the world where the Church of England or churches in communion with it may be at work'. Climate change is a global problem and 9/10 young people do not feel that the Church is doing enough. The influence of schools extends into the wider community, family and home. Schools are hubs for the community, places for ideation and provide a foundation for authentic social, cultural and spiritual action. Good education plants seeds that can inspire and bear fruit for generations to come. This is a challenge that schools can look forward to, not just in terms of reaching the zero carbon target but also to utilise the influence that they have on the wider community. It should be noted that at the point at which this document is received by Synod, we have in fact only eight years within which to realise this mission.

Scope

There are approximately 4,700 Church of England schools which are estimated to contribute 52% of total carbon emissions by building type² for the whole church. It is for this reason that schools are integral to the Church's mission to work towards net zero as a whole Church. The scope of the target for 2030 includes those schools where the Diocesan Board of Education has 'a significant degree of influence (generally Voluntary Aided & Diocesan Academy Trusts³) including halls/other buildings'. It should also be noted that work related travel including school trips are also within scope. Out of scope of the target (but still within our mission to influence) are 'those Church of England schools over which DBEs have very limited influence (generally Voluntary Controlled Schools which are fully controlled by Local Authorities)'.

Vision

The National Society is striving to support Diocesan Boards of Education as they work with their family of diocesan schools to fulfil the Church's commitment to Net Zero carbon by 2030. A starting point has been to inspire and to encourage Church of England schools to sign up to a vision of sustainable schools that create better outcomes for all children and young people, to conserve the environment and to enable the planet to flourish for future generations.

School governing boards are supported to make a formal declaration⁴ to become carbon zero by 2030, and Ex-officio governors are also encouraged to share good practices across the school and church community on this issue. Schools could also consider establishing an 'eco charter' for school councils to implement, identifying personal pledges to work towards the target as a collective⁵. It would be great to also encourage young people onto the Diocesan Environment Working Group, to capture the voice of young people on this issue. Additionally, schools are asked to consider providing an 'Annual Resilience Statement' to review

¹ Burning Down The House - We Are Tearfund

² GS Misc 1262 'Rising to the Challenge: reaching Net Zero by 2030' A Background Paper from the Environment Working Group Primary Schools were 33% and Secondary 19%

³ Accounts for approx. 64% of schools

⁴ UK Climate Change • Lets Go Zero

⁵ A good example of this work can be found at the Five Islands Academy Trust, please see <u>Eco Exhibition Presentation 2019 to 2021</u> (2).pdf - Google <u>Drive</u>

their declaration. A suggestion is that this would be a statement setting out how directors/governors are measuring the school's climate resilience and targets, and addressing challenges over the short, medium and long-term, including risks posed by climate change. Future planning and decision making should also be taken with consideration of any impact on future generations.

Buildings & Data (direct action)

Information is the first step in the journey toward the zero carbon target. Boards of Education and schools need to gather and collate current information on their school in terms of its energy and carbon performance.

The vision is for each school's declaration to be underpinned by energy data. DBEs and their community of schools can collate data through DEC reports, school energy bills and smart meters. However, information about school's energy consumption is currently inconsistent and variable. To aid in the process of assimilating data, an Energy Footprint Toolkit ('EFT') for schools is being created through the Church of England Environment Programme.

The National Society is also working to support the establishment of a network of regional hubs to help DBEs access consultants and technical support to implement a programme of energy audits (Heat Decarbonisation Plans) for schools; as required to maximise the establishment of an estate vision and strategy, including accessing future funding opportunities.

Technical Solution - Decarbonisation

Once schools understand how they are performing they need to be able to identify what the technical route is to achieve zero carbon. The best way of doing this is to produce a Heat Decarbonisation Plan ('HDP'). The key to progressing schools toward the target is for each to understand the bespoke route by commissioning these audits, and establishing business cases to bid for funding required to deliver the projects that are identified. Without the information and an appreciation of the technical solution then progress is halted. An estimated £7M of funding is required to complete HDPs for all Church of England schools. There is currently no direct funding route for energy audits.

Dioceses are encouraged to support schools to use their limited sum of DFC⁶ to commission audits where there is likely to be a resulting project, the difficulty is that the resulting project requires additional funding which is not guaranteed.

Decarbonisation needs to be integrated into estate strategy and planning in schools, and efforts need to be increased to ensure that schools work to set a sustainable strategy and vision for their estates. Integrating environmental considerations, an understanding of climate risks and where adaptations are required, is key to driving change.

Phased Planning

The HDPs provide a roadmap toward the zero carbon target. From these plans there can be developed at a strategic level with Boards of Education, a phased plan for implementing the HDP. A significant amount of the capital works required to meet the HDP will be fabric work (to roofs and windows) which can be funded through school capital funding⁷. HDPs will also identify 'low-hanging fruit' and will discuss habits and working practices that could be addressed relatively easily.

⁶ Devolved Formula Capital Funding Capital income - Consistent financial reporting framework: 2021 to 2022 - Guidance - GOV.UK

⁽www.gov.uk)

⁷ Funding routes include through CIF and SCA, although CIF is unlikely to provide support for decarbonisation projects directly without a significant contribution from the Academy.

Schools and DBEs that hold capital funding, are required to assess the school's current approach and consumption of resources which will help to motivate sustainable practices. Effective buildings maintenance, glazing, insulation and draught proofing are all important to improving efficiency.

Schools also must consider other improvements to energy efficiency for example through swapping to LED lighting, and to include provision for any planned installation of renewables on buildings such as solar PV. This also has the benefit of reducing energy demand and the possibility that schools may have to review incoming electricity supply. An example of a net zero carbon school can be found at St Andrews CofE Primary School.

Funding and Investment

Dioceses are encouraged to support the allocation of a significant proportion⁸ of the capital funding received, including capital funding for Boards of MATs⁹, to fund projects outlined in HDPs. This would demonstrate progress against the HDP. Other capital works such as solar panels and LED lights could also be funded through school capital¹⁰. The significant barrier is the cost of the actual heat decarbonisation, for example, moving from gas/oil to air source heat pump or ground source heat pump (especially as this will cost perhaps 3 or 4 time more than a gas replacement). Where sustainable technology is comparatively expensive, it becomes difficult to justify and prioritise the limited sum of school capital funding available. These are issues that will have to continue to be addressed collectively as the we progress towards 2030.

New School Buildings

Some local authorities, who have responsibility for school places, have resolved to build greener and more efficient school buildings. Dioceses should support this policy and there should be an understanding that all new buildings – whether funded through PSPB¹¹, SCA or Basic Need ¹²or any other means – would have to have a non-carbon heat source and in effect be a net zero carbon building.

Switching to Renewable Energy

Importantly schools are being encouraged to switch to 100% green energy tariffs (for example using 'School Switch' available through the Crown Commercial Services). Switching to renewable tariffs is an easy way for schools to reduce reliance on fossil fuels.

Travel and Off-setting

Schools are being encouraged to promote <u>walking buses</u> and the use sustainable transport where possible, and to plan for the installation of Electric Vehicle charging points where applicable.

There are further considerations to be made by each school community, in terms of habits and to off-set the carbon that schools cannot avoid using. For example, there could be a multi-year plan with ideas on how to reduce travel, fund-raise for changing points, plant trees, or off-set by other creative ways.

Dioceses should also consider the use of well-established Glebe land and woodland as an asset not only in terms of offsetting for the diocese but also for use as forest schools and other activities that raise awareness and appreciation of the natural environment.

Curriculum and the Community (schools as educators and influencers)

There are many ways in which schools can integrate the environment into their programme; from utilising data from smart meters within the classroom to inspire sustainable habits, to exploring the grounds of the adjoining church yard and looking at plants to learn new scientific knowledge and skills. Schools are

⁸ 60% allocation is suggested.

⁹ (CIF or SCA as above)

¹⁰ through <u>SCA</u>

¹¹ Priority School Building Programme (PSBP) - GOV.UK (www.gov.uk)

¹² Basic need allocations - GOV.UK (www.gov.uk)

encouraged to identify and outline ways to teach this agenda, with a commitment to share resources where possible with their local church, and to share stories and experiences. This is also helping to encourage community projects, such as shared electric vehicle charging points. Schools are also to consider other policies such as creating recycling points, for example battery recycling, which can be used by the whole community.

Challenges from Target Setting to Delivery

Communicating the urgent need for action and ownership of the target in all communities and bringing our family of diocesan schools along with the target is a challenge. It requires a credible plan of action for all school communities. It is difficult from a DBE perspective to ensure local decisions are compatible with the commitments made by the Church.

The shortfall of funding, along with competing priorities for funding is a fundamental barrier. Schools do not currently have any available funding to pay for energy efficiency and carbon reduction works or for energy audits. The recent closure of a government loan scheme for schools after 16 yrs of successful operation and the vast oversubscription of the public sector decarbonisation schemes (in which schools were not competitive against other sectors¹³), means that for the first time since 2005 there is no Government supported public sector funding solution for schools to reduce their energy consumption and carbon emissions. This situation needs to be urgently reviewed if schools are going to be supported to meet the Net Zero target.

A further challenge is ensuring that the incoming electricity supply for schools is sufficient to meet the anticipated additional demand and pressure. Connection fees and network reinforcement costs can prove to be a significant obstacle.

DBEs have been asked to prioritise the School Condition Allocation capital funding¹⁴, which is held on behalf of VA schools, however the scope of this funding is limited by the small amount available, and the uncertainty regarding the level of funding, which means that funding is often applied reactively to urgent health and safety matters.

A key factor will be encouraging participation in the Energy Footprint Toolkit to establish benchmarks and a measure of impact. Ensuring each governing board creates and implements an estate vision and strategy is an area of work that has not been undertaken before. Schools do not necessarily have a plan or strategy in place for building maintenance, it is often difficult for schools to forward plan as there is a need to meet immediate issues¹⁵.

Climate resilience is also a factor, the climate is changing and will bring about greater extremes in the weather, further consideration is needed about how we ensure our school buildings are estates are prepared for the future. Furthermore, additional considerations that are not in scope for 2030 include: impact from buildings projects, waste disposal, work related email and internet usage, and a food strategy to look at the environmental impact of school meals.

Another challenge for DBEs is creating a potential framework for local delivery in each context and establishing community centered projects as one way in which to share good practice and take collective ownership of the journey toward net zero carbon; an example of a joint community project can be found in St Wenn, Cornwall, the Church and School shared a biomass heating project.

The pandemic has been unifying in the impact that it has had on communities, and arguably there are three areas of learning; firstly, the importance of preparation and funding, secondly the ability of communities to adapt and work together swiftly when it is needed; and lastly that change is achieved where clear

¹³ Schools and academies put in 711 applications for a combined value of £429 million against the total applications of £2.4bn made to the PSDS1 scheme. Schools and academies therefore made up 17.9% of the value all applications received. However, schools were not competitive, as from the results of those awarded funding schools made up only 3.4% of the value of the successful grant applications totalling £31.63m.

14 Suggested 60% of funding held.

¹⁵ Understanding funding decisions related to maintaining school buildings in England | Ipsos MORI

communication and information is provided. Schools are already expressing high levels of enthusiasm for becoming more sustainable. The urgent challenge includes a concern to bring the whole family of diocesan schools together to understand what the current position is and identify rapid yet sustainable changes to the way in which school estates operate. To support our schools in the extremely fast-moving and competitive nature of the decarbonisation grant funding landscape.



Vision 2030: Opportunities to Decarbonise

•Schools to make a declaration to meet the net zero carbon target (and incorporate an 'annual resilience statement' into their work agenda)

Data

- Energy Footprint Toolkits and Assessments (to assess a school's energy use);
- Heat Decarbonisation Plans (to identify opportunities to decarbonise).

Insulate

- Upgrade thermal envelopes (where required) such as walls, windows, roofs, floors.
- Focus on big win/ lower cost items first such as roof insulation

Heat & Fu

- •Install energy efficient boilers and heating equipment powered by green energy tarrifs OR;
- •install carbon heating systems and/ or energy sources (wind, biomass, air source, ground source, solar, etc)
- •switch to Energy efficient lighting and other building systems
- Focus on big win/lower cost items first, such as green energy tarrifs, energy efficient lighting.

Transnort

- •Create a low carbon transport action plan and implement
- •Could include new initiatives such as walking buses & EV charge points

Funding

•The greatest threat is lack of funding

Engagement

- Lack of internal buy in (within C of E, DfE etc.)
- Lack of stakeholder engagement (at school level)
- Lack of local champions

Knoweldge

- Lack of knoweldge/ not having the right expertise in place
- Expertise applies to all areas (finance, technology, project management etc.)

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- Climate crisis worsens quicker than expected (current technology is not enough)
- Economy / Recession (can no longer fund green investment)
- Pandemic threats (current and possibly future)

<u>Technology</u>

- •The current available technology might not go far enough or could be too expesive Vs gain
- •green tarrifs are not as green as they state they are
- •Installed technology fails or does not last expected lifespan or is too short

Action Plan (how to Start):

- 1. Establish 'Regional School Environment Groups' (school leaders¹⁶, diocesan buildings officers, diocesan environmental officers ¹⁷, local authority¹⁸, consultants, local champions¹⁹, people with technical expertise)- 2021/2022
- 2. Schools, children and young people to produce key documents (flyers, presentations, info sheets etc.) to make the declaration to work toward net zero visible to the community²⁰- 2021.
- 3. School boards to integrate an 'Annual Resilience Statement' into their agenda items 202121
- 4. Schools to establish an estates vision and strategy (which will be informed by HDPs) 2021/22
- 5. CEEO to engage with schools and communities (through flyers, webinars, presentations etc) end 2021.
- 5. Commence data collection- EFT pilot in the autumn for formal launch of the EFT in January 2022
- 7. Each school to undertake a HDP (2022/23)
- 8. Regional Environment Groups are to work with schools to identify opportunities to decarbonise from the data (22/23)
- 9. Regional Environment Groups to look at batching applications for funding where possible
- 10. School Governing Boards are to establish execution plans (funding, delivery method, programme etc)end 2023 which will feed into their estates vision and strategy
- 11. Project delivery overseen by Regional Environment Groups and reported to the Diocesan EWG
- 12. Each school to switch to renewable energy tariffs.

Key Barriers and Against Route to 2030 - Barrier Mitigation Plan:

- Establish Regional Environment Groups (including lead, technical expertise and local champions)
 to identify funding opportunities, minimise the risk of low stakeholder engagement and lack of
 knowledge.
- 2. Engage with School Business Managers and seek school stakeholders who are likely to buy-in to the process and aid in data collection.
- 3. Establish possible funding methods (particularly for HDPs) early in the assessment process.
- 4. Utilise classroom resources to help produce project information that is easy to read and gains instant buy-in (e.g., presentations, flyers, websites etc.) that can be shared with the wider community.
- 5. Ensure data gathered is consistent, robust and easily understood by all (collect all data within a dashboard and highlight only the critical info).

¹⁶ Ideally including a MAT representative

¹⁷ Invite the diocesan environment officer to contribute, it would be great to have a young person who also sits on the Diocesan Environment Working Group included here.

¹⁸ Where applicable the local authority project leads are a good source of advice and guidance

¹⁹ It would be good to have school governors included in this group.

²⁰ This could be displayed in the school and church and could include prayers from the children.

²¹ School boards to also make a commitment that future planning and decision making must be taken with consideration of any impact on future generations - 2021.