

Appendix 1

Target Setting

For any action plan to be effective it needs to be based on targets which are not only ambitious, but also specific, measurable, achievable, realistic and timed (SMART). The LGR process means that we can only set this type of targets for the next year, as beyond that we cannot guarantee resources or capacity to carry them out. There is also uncertainty in regard to what policies and support will be provided by national government, which could either help or hinder any actions. Additionally, as highlighted previously, SNC is limited in the actions it can take directly and so careful consideration is needed to define what targets can be set to ensure SNC can be as effective as possible.

Deciding the extent of the targets themselves is also a challenge, ultimately, to be in line with the national target, the goal is net-zero carbon emissions across the district by 2050. As we cannot achieve this within a year, a decision has to be made as to how best to contribute to this overall target. Further to this, a target of net-zero by 2050 does not, in itself, provide very much, only the end goal, not any guidance on how or how quickly we should be working towards achieving it. As shown in Figure 1, it is possible to achieve net-zero at any speed, in theory even taking no action at all until 2049 and then acting drastically to slash emissions all in one year. A slower approach not only means that more drastic action will be required in later years, but it also decreases the possibility of achieving the Paris agreement's target of keeping global heating 'well-below' 2°C above pre-industrial levels: The slower we act the more greenhouse gases will be released into the atmosphere in the intervening years and this will mean that more global heating is 'locked-in' as these gases persist in the atmosphere for a very long time. The more global temperatures increase, the more drastic the impacts will be.

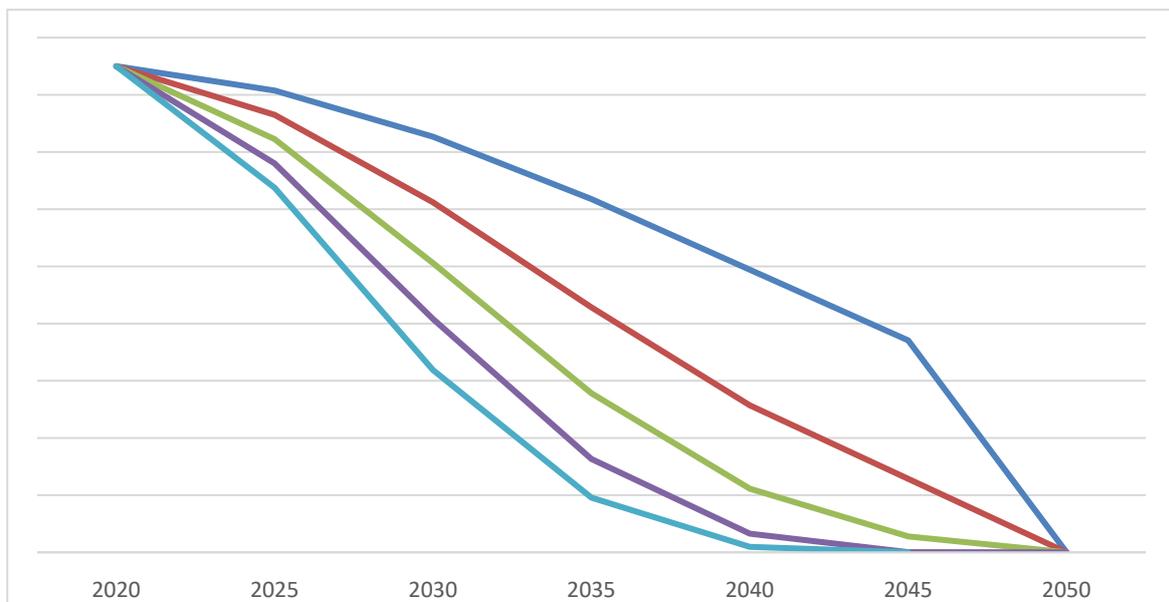


Figure 1: Illustrative examples showing some of the pathways which could be taken to achieve net-zero emissions by 2050

The Tyndall Centre at Manchester University have established targets for local authorities to assist them in achieving net-zero carbon in their areas¹. They have done this by using a ‘carbon budget’ approach, which means not only will they be able to achieve net-zero, but they will do so in a way which should keep global heating to below 2°C. This approach means allocating each area a ‘fair share’ budget of carbon which they have left to use, this approach does not allow for slow or delayed action, in fact, if SNC were to continue generating emissions at their current rate then they would use up their entire budget within six years from 2020. The targets are for direct emissions only (from energy and transport) and are for CO₂ only and do not account for other greenhouse gases, so other actions beyond those they recommend will be required to manage other emissions.

This approach requires radical and immediate action if SNC is to stay within its allocated budget and rapid de-carbonisation as Table 1 and Figure 2 both shows.

Table 1: 5-yearly reduction targets against a 2015 baseline

Year	Reduction in Annual Emissions (based on recommended pathway)
2020	20.6%
2025	63.6%
2030	83.3%
2035	92.3%
2040	96.5%
2045	98.4%
2050	99.3%

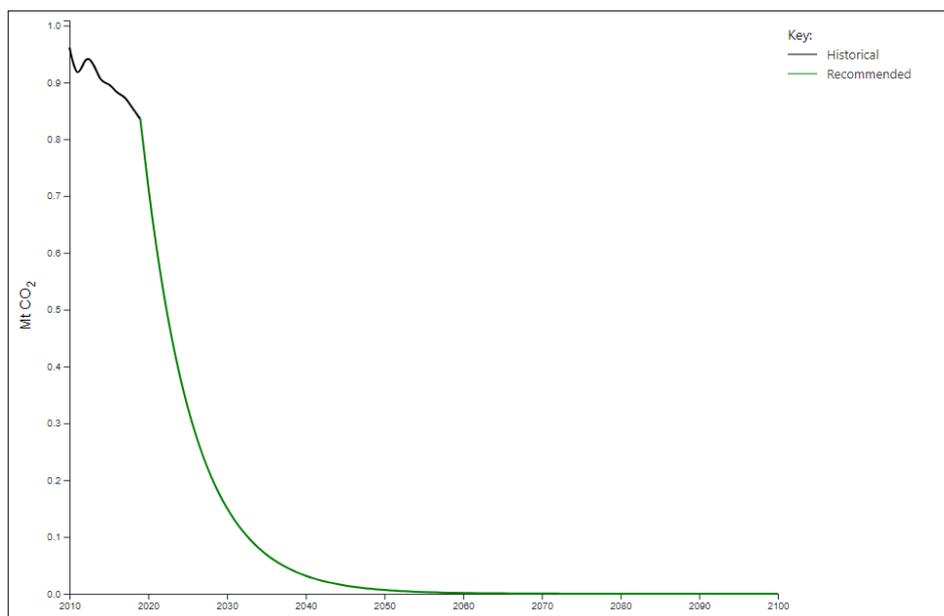


Figure 2: Emissions reductions required to remain within CO₂ budget

¹ <https://carbonbudget.manchester.ac.uk/reports/E07000155/>

The Tyndall Centre report also offers a number of suggested targeted actions to complete in order to remain within this carbon budget, these are outlined in Table 2.

Table 2: Suggested targeted actions identified by Tyndall Centre for South Northamptonshire

Sector	Current situation	Target
Housing	Only 42% of homes well insulated	Upgrade insulation in 2063 homes per year up to 2030
	9% households in fuel poverty	
	Only 292 government funded eco-heating systems	Fit 1314 eco-heating systems each year
Transport	Commuting = 5% by public transport, 1% cycle, 7% walk	40% commuting by public transport, cycling or walking by 2030
	Car share = 6% of commuters	Increase car sharing for remaining car users
	10 EV charge points	Minimum 59 EV chargers by 2030
Energy	124MW renewable power	Minimum 176MW renewable power as soon as possible
Trees	7% of South Northamptonshire is woodland	Minimum 20% tree cover as soon as practicable
Waste	61% of municipal waste reused, recycled or composted	70% of municipal waste reused, recycled or composted by 2025 with zero waste as soon as possible

Adopting the targets above would be the most effective way for SNC to make a meaningful reduction to emissions in the district, it would also provide the greatest chance of South Northamptonshire contributing its fair share toward keeping global temperatures below 2°C. However, it is not possible for SNC to carry out most of these actions directly, instead they need to encourage and enable action from others. As it is not possible to know what others will do, it is not possible to know what can be achieved, as such it is tempting to set much less ambitious targets and focus only on things that SNC control directly such as emissions from its own operations. Given the scale and urgency of the climate change problem this approach could not really be considered to be appropriate.

Moving rapidly to net-zero across the UK is an unprecedented ambition and requires action from everyone, as such there is a great deal of uncertainty and it is not going to be possible to set wide-reaching targets, such as those recommended by the Tyndall Centre, with total confidence of the outcomes. However, at some point these objectives will need to be achieved and delaying any attempts will mean more drastic action will be needed in the future, more emissions will be emitted in the coming years and lessons will still need to be learned as to how to achieve them. Rather than only setting targets that can definitely be achieved which are likely to make little impact, SNC will instead use this last year as a district authority to aspire to achieve targets that will have a significant impact. Whilst setting these targets it is important to acknowledge that they may well not be achievable, but by trying and likely failing, it should be possible to learn the lessons that WNC will need to be successful in the future. This will include developing best practice, identifying resource and knowledge gaps and better understanding the role of the local authority.