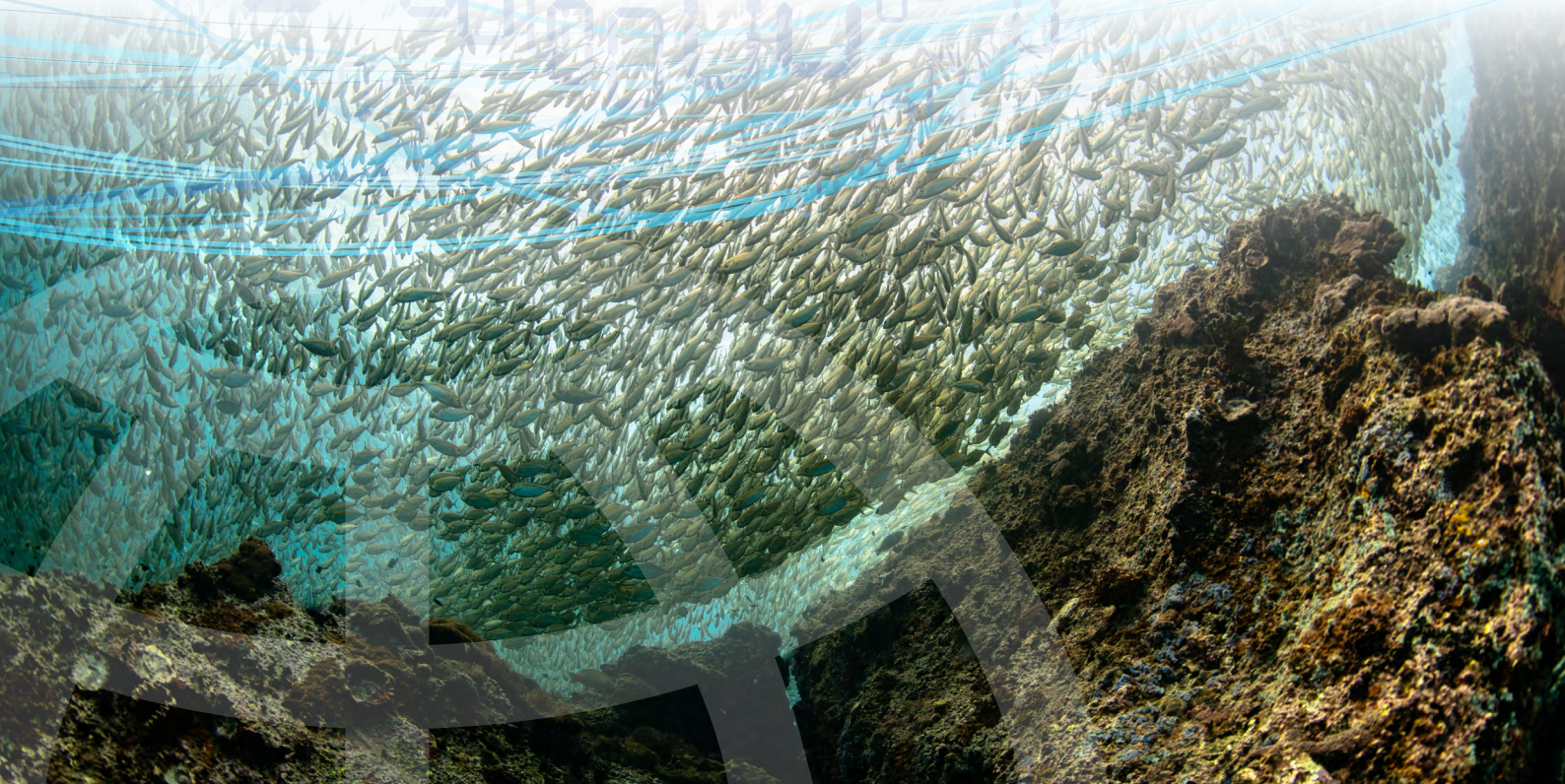




International Federation of Consulting Engineers
The Global Voice of Consulting Engineers

/Executive summary and recommendations

/SOW2021



2020 and 2021 will most likely be remembered for the Covid pandemic but there is also another significant trend which has been occurring. This is the general improvement in the recognition, perception and importance of addressing UNDP's SDG 13 on climate change, its associated transition to reducing CO₂ emissions as well as UNDP's SDG 12 on sustainable consumption and production

COP26 will see global leaders, industries and individuals meet, to once again discuss this important issue and to ask important questions such as are we doing enough?

Following the latest August 2021 IPCC AR 6 report, it is becoming increasingly clear that not only is meeting the SDGs important, but efforts may need to go significantly beyond the 2030 targets. This is where the understanding of Net Zero and commitments to Net Zero emissions are increasingly important.

FIDIC adopts the Net Zero definitions provided by IPCC:

Net Zero CO₂ emissions – *Net Zero carbon dioxide (CO₂) emissions are achieved when anthropogenic CO₂ emissions are balanced globally by anthropogenic CO₂ removals over a specified period. Net Zero CO₂ emissions are also referred to as carbon neutrality.*

In most instances the measurement of the change in carbon emissions mentioned above is baselined against 1990 levels. Looking at country commitments to Net Zero there is a positive trend with 136 countries², with a combined population of over five billion individuals, setting target dates. Of these, however, only 26 (approximately 19%) have plans in place to meet these target dates.

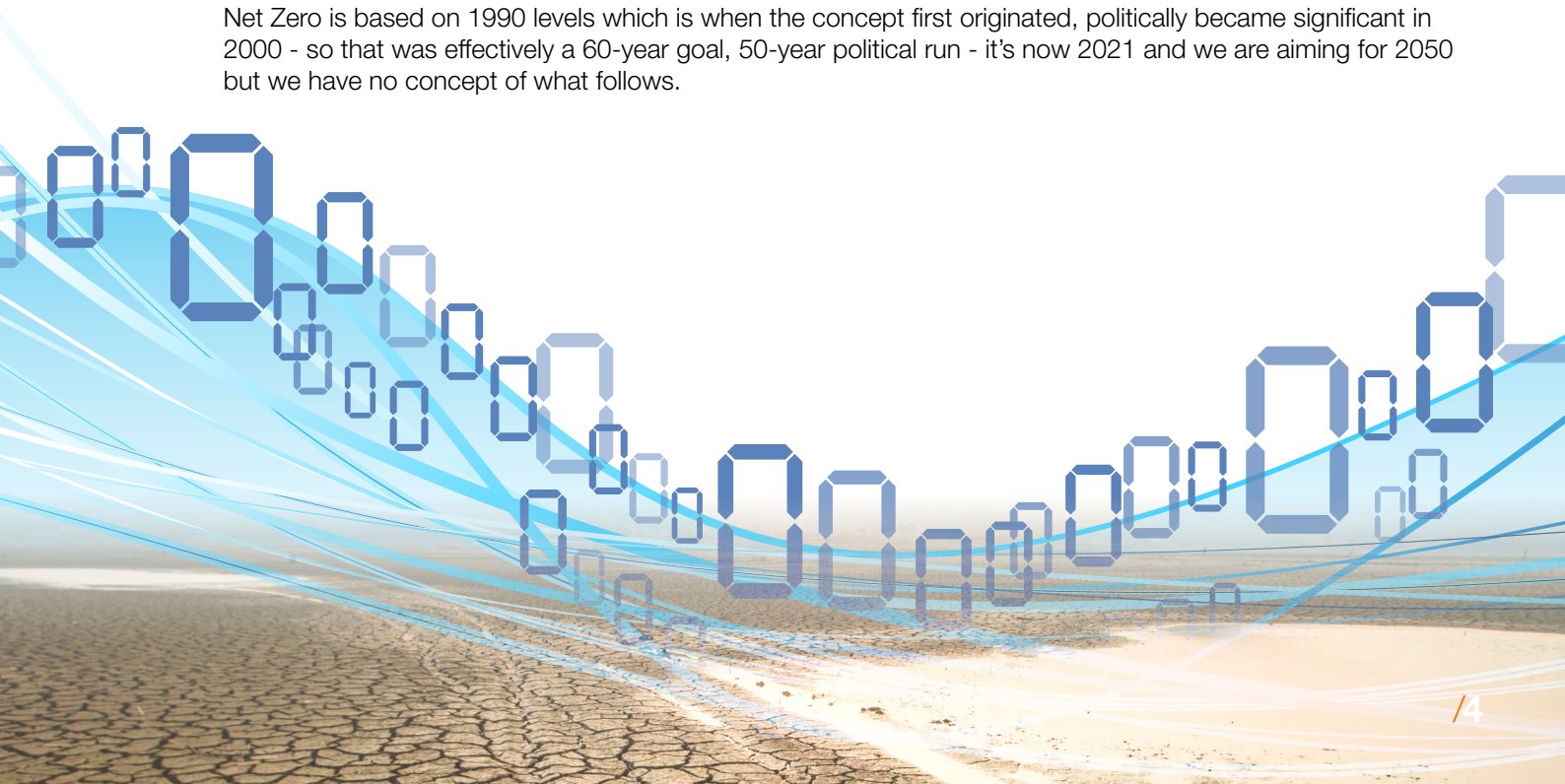
Looking at companies, between July 2019 and June 2020, over 230 companies committed to reach net-zero emissions as part of the Business Ambition for 1.5°C campaign, an urgent call-to-action for companies to set emissions reduction targets in line with a 1.5°C future.³

There are, however, multiple schemes that track companies' commitments and so it is hard to get a definitive number. For example, the Energy Climate Intelligence Unit⁴ lists 419 companies which have made Net Zero commitments of which 212 (approximately 50%) have published plans to meet these targets.

Most companies are targeting a 2050 date but there is a far greater variation than the country targets which ranged from 2030 up to 2060 as opposed to the companies which ranged from 2005 to 2075 with 52 companies having targets prior to 2020 and so should already be operating at their Net Zero target.

But is Net Zero enough and how difficult will it be to achieve? This report demonstrates using various scenarios that meeting Net Zero will by no means be an easy challenge. It does, however, seem that some countries and companies are very aware of the prospect that 2050 will be too late.

Net Zero is based on 1990 levels which is when the concept first originated, politically became significant in 2000 - so that was effectively a 60-year goal, 50-year political run - it's now 2021 and we are aiming for 2050 but we have no concept of what follows.





Recommendation 1 - Net Zero: The aim of reaching Net Zero should be brought forward to 2045 instead of 2050. This would not only provide impetus but would significantly accelerate progress to minimize the problems highlighted as part of the latest IPCC AR 6 report.



Recommendation 2 – Global readiness is a key measure which will indicate the likelihood of success of achieving Net Zero by 2050. There are clear steps on the road to Net Zero from signing up to the Net Zero target, developing a national government policy, legislating targets and systems to achieve the targets, carbon trading and offset schemes, effective governance, investment and the actual emission reductions. It is a clear learning from implementation of the MDGs and SDGs that in relation to Net Zero, we need those countries and industries with the capability and/or the opportunity to reduce emissions more quickly than others to do so as quickly as possible.

The rationale for this is that there are a number of countries and companies that can develop faster than the current 2050 target and where those are able to do so they should be encouraged to take such action, but also because FIDIC is suggesting the creation of a 2060 target which goes beyond simply considering carbon. This it is envisaged will work with Net Zero and so aid its delivery.

In the focus to achieve Net Zero there has been much research on the circular economy and sustainable infrastructure, all of which are beginning to drive us in the right direction. But as with the SDG goals, carbon reduction alone cannot be the only target, hence sub-goals that sit below it will be required to further drive and guide this transition.

A headline target is, however, essential as this is what engages the public and society. This therefore needs to be achieved, to ensure society actively engages in the journey. As the way we live changes expectations will have to change but expectations take time to change.

There is then the additional question of, what next? The SDGs are due to be achieved by 2030, Net Zero is widely considered to be achieved by 2050 but what is beyond this? How do we manage the transition between various targets and how do we ensure we maintain progress and further improve this globally?

To set such targets takes time and engagement across a variety of stakeholders. As such, FIDIC proposes that conversations around the next target need to begin sooner rather than later. Having considered the Net Zero carbon target and the increasing efforts to integrate circular economy thinking into activities we believe a good starting point for these conversations would be based on a net resource target.



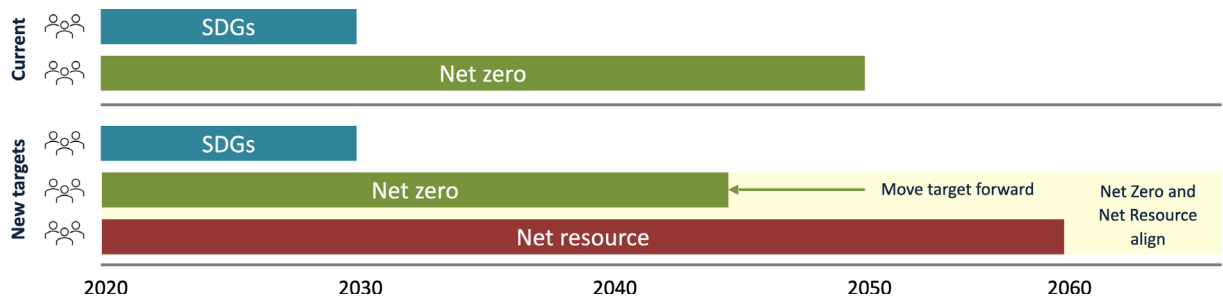


Recommendation 3 – It is time for the world to get behind a new and ambitious target that works with the Net Zero target to create a complimentary 2060 Net Resource target. Resources can be considered to be biotic or non-biotic; this includes everything from rare minerals (non-living) to the fish (living) and food stocks we consume. Managing our natural resources is moving towards a truly circular economy and this focus needs to not only happen as part of Net Zero targets but will have to be sustainable beyond.

Net Resource - Resources should be used and continue to be used in a way where the use, creation and/or need of materials, products and services are designed to eliminate waste in the first place and generate minimal detrimental effect on the need for additional resources in the future, thereby, ensuring sustainability for future generations with no overall waste due to the underutilisation.

The truth is if we are to be truly sustainable, we need to have targets that interact with each other, that are informed well in advance, can be flexible and engage all stakeholders from policy makers, investors and the industry all the way to the individual household members.

Creating overlapping and connected targets



Recommendation 4 – industry leading the way: The engineering sector will be instrumental in developing the technology, industry and infrastructure of the future and achieving and exceeding the Net Zero and net resource targets above. It will, however, also need to look at its own impact to meet such targets.

Infrastructure is important to these goals not just because it requires large amounts of resources and carbon to build, but because it plays a critical role in determining economic and social activity/behaviours, which will need to change to achieve these goals.

This report is aligned with the recent launch of FIDIC's climate change charter and will continue to be further developed in line with the UN SDG goals, changes in future data and science, to ensure that industry not only commits, but can develop and implement the tools required to meet such targets.

This report is a call to the consulting engineering sector to engage with such ambitions.

