Editorial

Kenneth Irvine BSc (Hons), CEng, MICE, MStructE
Civil Engineering and Management Consultant, Energy Sector, Elderslie, UK

Writing before the Covid-19 crisis, Guresci (2020) covered the importance of biomass in the energy cycle in Turkey. Like other countries with limited or negligible reserves in fossil fuels or nuclear energy, Turkey has embraced biomass, and in many rural areas it contributes up to 50% towards overall energy supplies. Guresci describes the process and importance of biomass energy production and in doing so addresses the efficiency and sustainability and speculates about future security. What could not have been predicted are the circumstances stemming from the pandemic in 2020. One can only guess about the effect that this may have had on forestry production and the recycling of waste materials that provide valuable feedstock.

Debates continue about the carbon neutrality, sustainability and renewability of bio-diesel/biomass. This writer encountered some conflicting information while exploring the subject. The reader should probably do their own research into the pros and cons to catalyse their opinion. One thing is clear: that for low-key domestic production in developing regions, bio-diesel can provide an option that, similar to the biomass covered by Guresci (2020), does not rely on the more traditional, large energy providers and is here to stay. The paper by Kadapure *et al.* (2020) is a chemical engineering study into improving the bio-diesel yield using different feed oils.

It is testament to resilience of academia that the flow of papers to this journal between March and September this year continued at around the same levels as pre-Covid-19 times. It is not clear whether the authors achieved this by working from home, or whether facilities remained accessible in the respective universities. Either way, research in all fields is important and the need for universities to maintain infrastructure and to allow studies and research to continue whether remotely or on campus could not be emphasised more. It is particularly noted at the time of writing (late September 2020) that lockdown restrictions are increasing globally, whilst simultaneously university students have started taking up their places on

campus. I hope that the institutions can maintain safe working environments for all students and staff.

Returning to these Proceedings, in many less-developed economies, solar power production lags far behind the sector leaders of China, USA and the EU. However, India has recently shown potential to move up to the forefront. Tiwari and Saini (2020) examine solar power storage systems. For a solar power scheme to be successful it needs an efficient storage arrangement that will level out the peaks and troughs of the supply. The paper addresses the efficiencies of the storage system, in particular the heat-transfer fluid, using both water and oil as the medium.

The next paper is on solar stills. Utilising solar power whilst simultaneously providing a low-cost/low-energy method of purifying water, they are tried and tested technology. They have been widely used historically, from pre-Incan peoples in the Andes to present-day survivalists. More commonly, the solar still is seen as a basic, inexpensive alternative that works well in rural economies in the developing world. They provide a low-key local substitute to the central desalination plants that demand huge energy input. Tayeb *et al.* (2020) look at efficiency improvements and performance enhancements of a basin-type solar still with a basin area of 1 m². They note productivity improvements achieved by adding a solar water heater upstream in the system and by using copper filings as energy storage materials.

In addition to themes around solar energy and biofuels, there is another common thread running through these papers and that is efficiency. Kadapure *et al.* are concerned with the efficiency of biodiesel production, while the Tiwari and Saini and Tayeb *et al.* papers look at more-efficient means of harnessing solar energy. It is important that we generate our energy efficiently and constantly seek new advancements to limit the amount of it that we use, particularly in populous developing countries and growing economies. On that subject, Gavali and

Ralegaonkar (2020) look at dwellings in India of one to three storeys and examine means of improving thermal insulation and thus reducing household energy demands, by developing alkali-activated brick walling material fully compliant with Indian Standards.

The editorial panel of *Energy* is currently seeking new members. The panel is drawn from a mix of academic and industry backgrounds. However, whatever the professional background the panel strives to balance gender, race and international composition with the range of expertise. We would invite readers to send their CV to the journal office and if, like me, you are a working civil engineer I can vouch that involvement in the panel leads you into reading of papers by other disciplines in the fields of engineering and economics that you may not usually encounter. This inevitably provides a greater understanding of the issues faced in the pathways towards net-zero 2050.

The journal wishes to support innovation in all aspects of energy within the context of ‘transitions in the era of climate change’. Contributions with an emphasis on whole-life carbon dioxide and cost reduction are particularly encouraged. There are several themed issues planned and papers on these topics are particularly welcome, two of which are: ‘Ocean/wave energy’ (abstract deadline: November 2020) and ‘Energy storage’. Additionally, if you are a specialist in any of these fields and would like to contribute but don’t have a paper in you, a succinct briefing document may be something that would interest you. Authors should contact the journal office for information on submissions.

This year has seen great disruption to normal life and work due to the Covid-19 pandemic. In April, delivery of printed copies of the journal was halted due to reduced Airmail and

delays at Customs. Readers can be reassured that purchased 2020 printed journal issues will be posted to them before Christmas. In January, we will see another change as the journal moves to solely online-only format. PDF is now the most common format in which to read the journal, reflecting the preference of institutional libraries and the desktop convenience for readers of finding, receiving and sharing articles in PDF. We expect this trend to continue, with fewer subscribers opting to pay extra for issues to be printed and posted to them. If you are one of our readers who does like to receive a hardcopy, these will be available to purchase on a per issue and per volume basis. Prices will be announced in the New Year. Readers who require a printed copy for accessibility reasons should contact journals@ice.org.uk.

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