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PAPER CLASSIFICATION: OPEN

Council

WORLD CAFÉ BRIEFING

(Paper by Ian Phillips. If you have any questions on this paper please contact Ian Phillips by email on ian.phillips@ietvolunteer.org)

1. Issue

To provide background and guidance for a World Café break-out session.

2. Timing

Council meeting, 25 March 2021.

3. For Discussion

Council is invited to discuss the questions outlined in attached Appendix during the World Café session.

4. Climate Change and the IET

Details of the World Café session on Climate Change and the IET are attached as an Appendix.

5. Risk

None identified.

6. Resources

None identified.

World-Cafe - Climate Change and the IET

Introduction ...

In 2019 the 16 yr old Greta Thunberg achieved what scientists and activists have been trying to do for around 30 years; she made world leaders take Climate Change seriously. Plucking the heartstrings of every parent, she told how the empty-words of our leaders had stolen her childhood and dreams [1]. She pointed to the science in the UN's IPCC 2018 report on climate change [2] and asked why its calls for immediate and significant action to avoid the worst of Climate Change were not being heeded. It had taken a child (sic) to realise that leaders actually follow public opinion; by grabbing the public mind, she guaranteed the attention and the agenda of those leaders; shaming them into action ...

Climate [3] is a term for the state of the Earth's five climate systems: the atmosphere, the hydrosphere (water), the cryosphere (ice), the land surface and the biosphere. The biosphere is the narrow zone on Earth where land, water, air interact with each other to support life. It is the whole environment in which we humans live; the space we share with all other lifeforms, many of which we depend on for our air, food, water and shelter. Climate Change [4] as the broader range of changes that are happening to our planet. Whilst Global Warming is specifically the long-term warming of the planet. It adds that the terms are sometimes used interchangeably, but strictly refer to slightly different things. So Global Warming, Carbon Neutrality, Zero-Carbon, Sustainable Planet, Pollution, Reuse, etc. are subsets of Climate Change. They are complementary, but not synonymous and should not be confused!

... With this in mind, Council discussed the engineering implications of climate change at its meeting on 6 Jun 2019, making recommendations to the Board of Trustees (BoT) soon after in the paper 'Engineering Implications Of Climate Change World Café Consolidated Outputs': CO(19)34 [5]. It pointed out the urgency of the climate situation; and IET's excellent position to lead ameliorative actions. At its meeting on 8 November 19, the BoT accepted it without comment, referring it to the Director of Governance and External Engagement for action [6]. This was an important paper and as no formal progress had been reported back to Council, then it was appropriate to look around the IET channels for evidence of its deployment ...

Climate Change is an important and immediate issue which is aligned with IET current strategy, so it is reasonable to expect it would be amongst the headlines on the IET Web home page; it is not. One layer down, a 'Sustainability and Climate Change' tile [7], links to some Climate Change content which is introductory in nature and aimed at societal audiences. There are no professional links here, or indications of it being a priority issue in the IET. The 'Green Preferences Survey' results are interesting, though many of the technical conclusions are dubious as they are just public opinion, confirming public opinion. It was noted that there is no 'Technical and Professional Network' (TPN) for any climate related issues. Elsewhere on IET there is a Our knowledge solutions tile [8], with links to Inspec, Books, Journals, Member News, IET.tv and E&T. There is undoubtedly a lot of uncorrelated but useful Climate Change data and links in/through here, though E&T and IET.tv entries need better coordinates. Under Energy-Factfiles is a document, Engineering Priorities for

Delivering Net-Zero [9], which lists things that need to be done to achieve net-zero (complementary to Climate Change), but is really just a call for action. Nowhere is there indication of IET strategy, intent, plans or leadership for any Climate Change issues.

The IET Strategy 2030 [10], was also examined. It acknowledges contribution from Knowledge Services and Solutions, Membership and Professional Development, and Volunteer Engagement; but none from Council. It uses Climate Change, Sustainable Planet and other 'green' terms interchangeably without defining them. Whilst CO(19)34 is not specifically recognised, many of the messages it included can be found here, though in a general context. However the long-term staged approach it espouses: Foundation building 2020-2023; Opportunity creation 2023-2027 and Consolidate 2027-2030, doesn't fit with the immediacy of the Climate Change issue.

... Overall, it does not appear that IET has made significant progress in adopting the recommendations of CO(19)34. Of course 2020 was severely disrupted by the COVID-19 pandemic, which may have affected IET plans relating to this.

COVID-19 was a medical emergency, and its successful handling and outcome was due in no small part, to the contribution of the medical-science communities; who turned out to be well organised and networked. Contrasting this was the chaotic response to the few calls on the physical-sciences (PPE, Ventilators and Sanitization), showing our communities were much less prepared.

So as the pandemic (hopefully) recedes, Climate Change will re-emerging as the existential threat it still represents. Humanity lost a year in 2020; but the greater danger is we have lost the momentum. Last month Mark Carney, UN Climate Envoy and former Governor of the Bank of England, warned [11]: "Climate crisis deaths will be worse than Covid", pointing out that "You cannot self isolate from climate change". Also in February, David Attenborough addressed the UN Security Council, saying [12]: "We face the collapse of everything" ... We must heed these warnings. The Climate Crisis is here today; and unchecked it will cause a lot more damage to humanity than COVID-19.

Though Climate Crisis is now widely accepted by public and scientific minds, steps toward its amelioration are indeed slow and inadequate. Alas, the 'significant action' called for is unpalatable because of its large impact on the financial status-quo [13]. Accordingly engineers and scientists are being challenged to apply their ingenuity to find solutions to Climate Change, and to do so whilst maintaining the growth of GDP! Physical-sciences is at the front line of this war, but we will be unable to deliver without significant political, financial, legal, business and societal participation. Positioning science as a 'white knight', is naive, wishful thinking or disingenuous. The scientific-professions need a voice so that technical truths can be heard ... Society needs the scientific-professions to be heard for our children to have a future. We need a leader ...

The Institution of Engineering and Technology (IET) is a multi-discipline Professional Engineering Institution (PEI), a Registered Charity [14], a Business operation, and a society of 158,000 global Professionals from 150 countries. And it is a licensed gatekeeper for the Engineering Council, the UK's regulatory body for the engineering professions. At this time society needs to be reliably informed, educated and protected from charlatan engineers. The

engineers and scientists involved need to know where to find appropriate and reliable information, and how it might be effectively applied. And Governments and Media need explanations of Scientific and Engineering truths ... Echoing CO(19)34, there is no professional institution better placed to take a lead in coordinating this than the IET. It is within its remit, would be for public benefit in accordance with its charitable status, and is aligned with its current strategic priorities ... And it would meet our members expectations of it!

World Cafe ...

As the issue of Climate Change was raised by Council nearly two years ago, and IET progress has only been modest, it is appropriate to take a more imperative position as we consider ...

What actions do you think the IET should be taking to address the Climate Change issue?

And as IET presents three Faces to the world, then discussion will focus around these ...

Societal: Informing and guiding The Public and Public Policy. Also the provision of trustworthy and capable engineers to meet society's needs.

Professional: Guiding, educating, coordinating and informing the professions in its domain. Also setting and maintaining professionalism and technical standards.

Corporate: Meeting its Societal, Professional and Corporate obligations; professionally, ethically and legally. Also to be the institution we are all proud to be active members of and that others will want to join.

... Due to the prevailing COVID situation, the Council Meeting and the World Cafe will be held on Zoom (or similar). Three Breakout Rooms will be formed with one third of Councillors in each and a Facilitator. There will be 15 minutes to discuss each topic; before rotating. Though the major observations from the breakouts will be captured by the Facilitator on Yammer; you will be expected to input your thoughts individually into Yammer in the topic "Council - Climate Change & the IET" under the appropriate thread. These will remain open for two weeks after (and one before!), so you will have adequate opportunity to capture your individual thoughts and suggestions.

References ...

[1] You have stolen my dreams and my childhood with your empty words. Greta Thunberg (16yr). Presentation at the United Nations, 23 Sept 2019.

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[2] Intergovernmental Panel on Climate Change (IPCC) Special Report on the impacts of global warming of 1.5°C. 2018.

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[3] Wikipedia. Definition and information about Climate and the Climate System.

https://en.wikipedia.org/wiki/Climate_system

- [4] Wikipedia. Definitions and information about Climate Change
https://en.wikipedia.org/wiki/Climate_change
- [5] Council paper: "Engineering Implications Of Climate Change World Café Consolidated Outputs" 26sep19 (CO(19)34). Private and Confidential.
<https://ietvolunteer.sharepoint.com/:b:/r/sites/council/Board%20Papers/2019-20%20session/3%20October%202019/co1934-climate-change.pdf?csf=1&web=1&e=i3JmAE>
- [6] Council paper: "Response to Council Proposals". (CO(20)1). Appendix A: Notes to Council from Board of Trustees meeting of 8nov19.
[https://ietvolunteer.sharepoint.com/:b:/r/sites/council/Board%20Papers/2019-20%20session/8%20January%202020%20\(Skype%20meeting\)/co201-response-to-council.pdf?csf=1&web=1&e=5LafVc](https://ietvolunteer.sharepoint.com/:b:/r/sites/council/Board%20Papers/2019-20%20session/8%20January%202020%20(Skype%20meeting)/co201-response-to-council.pdf?csf=1&web=1&e=5LafVc)
- [7] "Sustainability and Climate Change". IET public website.
<https://www.theiet.org/impact-society/sustainability-and-climate-change>
- [8] "Our knowledge solutions" tile at <https://www.theiet.org/publishing/>
- [9] "Engineering priorities for delivering net-zero". Sep 2019 <https://www.theiet.org/impact-society/factfiles/energy-factfiles/energy-generation-and-policy/engineering-priorities-for-delivering-net-zero>
- [10] "The IET Strategy 2030". Published 29 October 2020. IET Private and Confidential. (Un-numbered). Visible to Council and Board of Trustees in Feb21.
- [11] Mark Carney, United Nations envoy for climate action and finance (formerly governor of the Bank of England) <https://www.bbc.co.uk/news/business-55944570>
- [12] 'We face the collapse of everything'. 'I don't envy the responsibility that this places on all of you and your governments'. David Attenborough to the UN Security Council. 23feb21.
<https://www.bbc.co.uk/news/av/science-environment-56175715>
- [13] "Dasgupta Review on the Economics of Biodiversity". Feb 2021
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/957291/Dasgupta_Review_-_Full_Report.pdf
- [14] The Charities Act says: A charity is an institution which is established for charitable purposes only. <https://www.gov.uk/government/publications/what-makes-a-charity-cc4/what-makes-a-charity-cc4>