

## SDC 2019 Annual Meeting Abstracts

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**Title: The E4C Solutions Library: A Tool to Analyze Essential Technologies for Reaching the SDGs**



Deployment of innovative and appropriate technologies are essential to reaching the targets set by the United Nations Sustainable Development Goals. However, in the global development sector particularly, there are many challenges related to the development, transfer and dissemination of essential technologies. Engineering for Change (E4C) has been working since 2011 to prepare, educate and activate the international engineering workforce to improve the quality of life of underserved communities via a digital platform and network that now exceeds 1 million people. E4C drives the production of higher quality, essential technology and infrastructure solutions by delivering contextual insights, connections to relevant communities of practice and due-diligence support in the form of codified information and analysis frameworks across the sectors of water, sanitation, energy, health, ICT, transport, habitat and agriculture. One such tool, the Solutions Library, is an open-source online database of over 800 real, technology solutions from the field. Co-designed with a network of technical experts, the Solutions Library establishes a performance analysis framework that includes engineering design parameters, manufacturing and implementation performance data, and academic research, among other prioritized information. This framework, introduced in our presentation, not only allows products to be compared side-by-side, but also encourages practitioners to take a holistic approach when designing and implementing new or existing technologies or solutions. Open platforms such as the Solutions Library represent an important tool for institutions to select and mobilize the serious science, robust engineering, and inventive business models of current and future essential technologies to meet the SDGs.