

JOINT EVENT

5th World Conference on **Climate Change**

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16th Annual Meeting onOctober 04-06, 2018
London, UK**Environmental Toxicology and Biological Systems****Bringing *algae* to the data centers**Niveditha Kakinada and Sai Guna Ranjan Emani
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The main problem faced by both modern and traditional data centers is carbon usage efficiency (CUE) and power usage efficiency. As per a report, in over 10 years, data centers will waste over £0.5M in power charges and emit 80% of CO₂, but the chances of increasing the percentage in coming years are more, thus creating data centre a 'villain-destroyer of Earth'. This paper illustrates and explains about the new algae concept for carbon usage efficiency and power usage efficiency. *Algae*, a unicellular microorganism are a billionaire solution for all the current data centers. It can absorb tons of carbon dioxide in few minutes, whereas a single tree can't even do in its life time. Algae undergo photosynthetic reaction and gives biogas and biofuel as a by-product, thus, turning CO₂ into valuable products leading to significant changes in data centers. This new CO₂ controlling technique to save the environment with the help of *algae* panels can give us the most profitable business. By moving to *algae* centered power plant (ACPP) model, we can achieve sustainability, energy efficiency and global conservation. Data center operators are no longer a pure consumer, but they are also becoming a producing consumer—a "prosumer". The opportunities to change a data center from the consumer to prosumer are more diverse here. This technology is a pioneer in green *algae* power and carbon neutrality. Using this *algae* technology, data centre can change its image from "CO₂ villain to an environment savior".

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