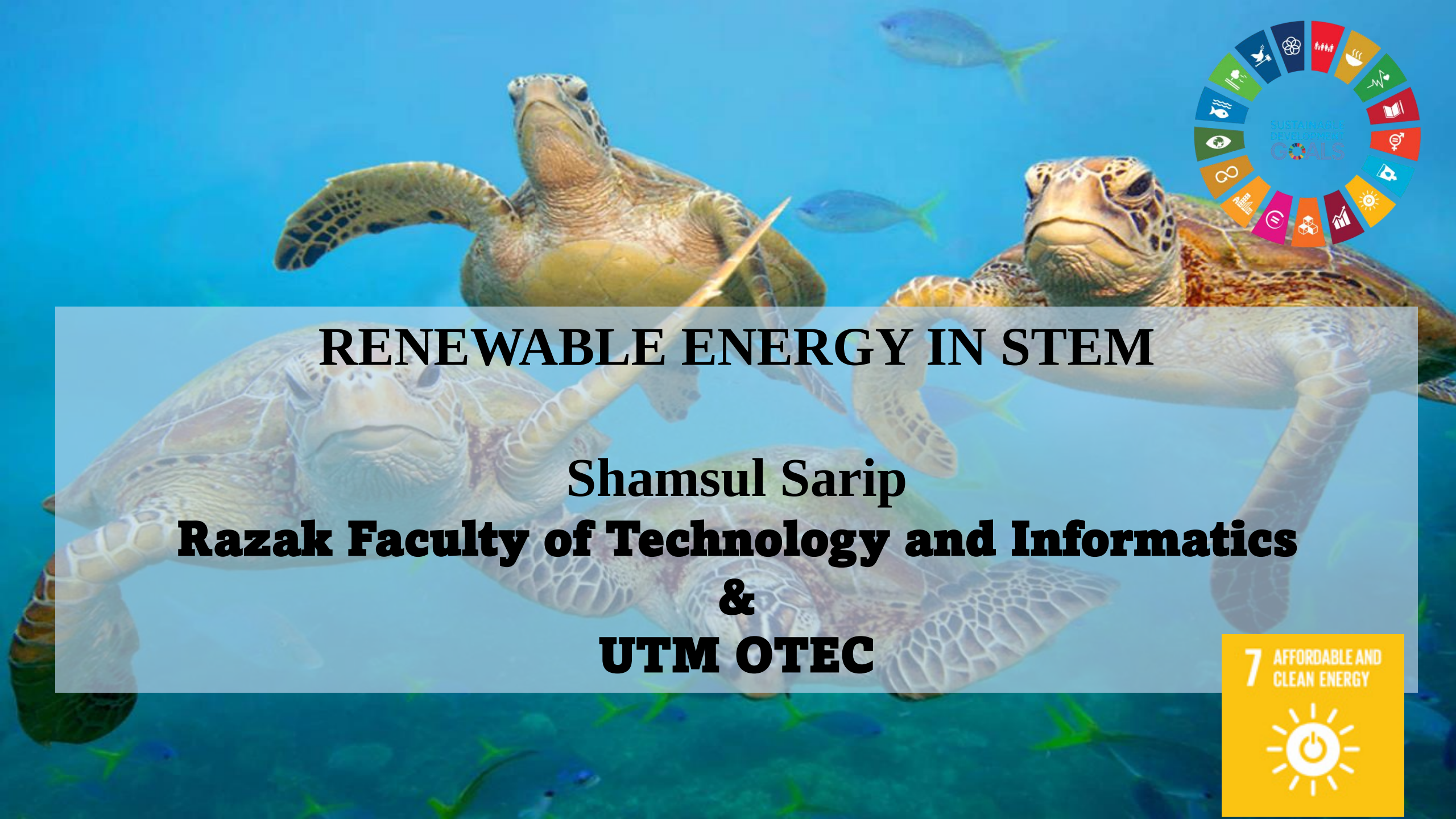

RENEWABLE ENERGY IN STEM

Shamsul Sarip

Razak Faculty of Technology and Informatics

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UTM OTEC

With 17 Goals, 169 Targets and more than 244 Indicators covering 5 dimensions namely People, Planet, Prosperity, Peace and Partnership

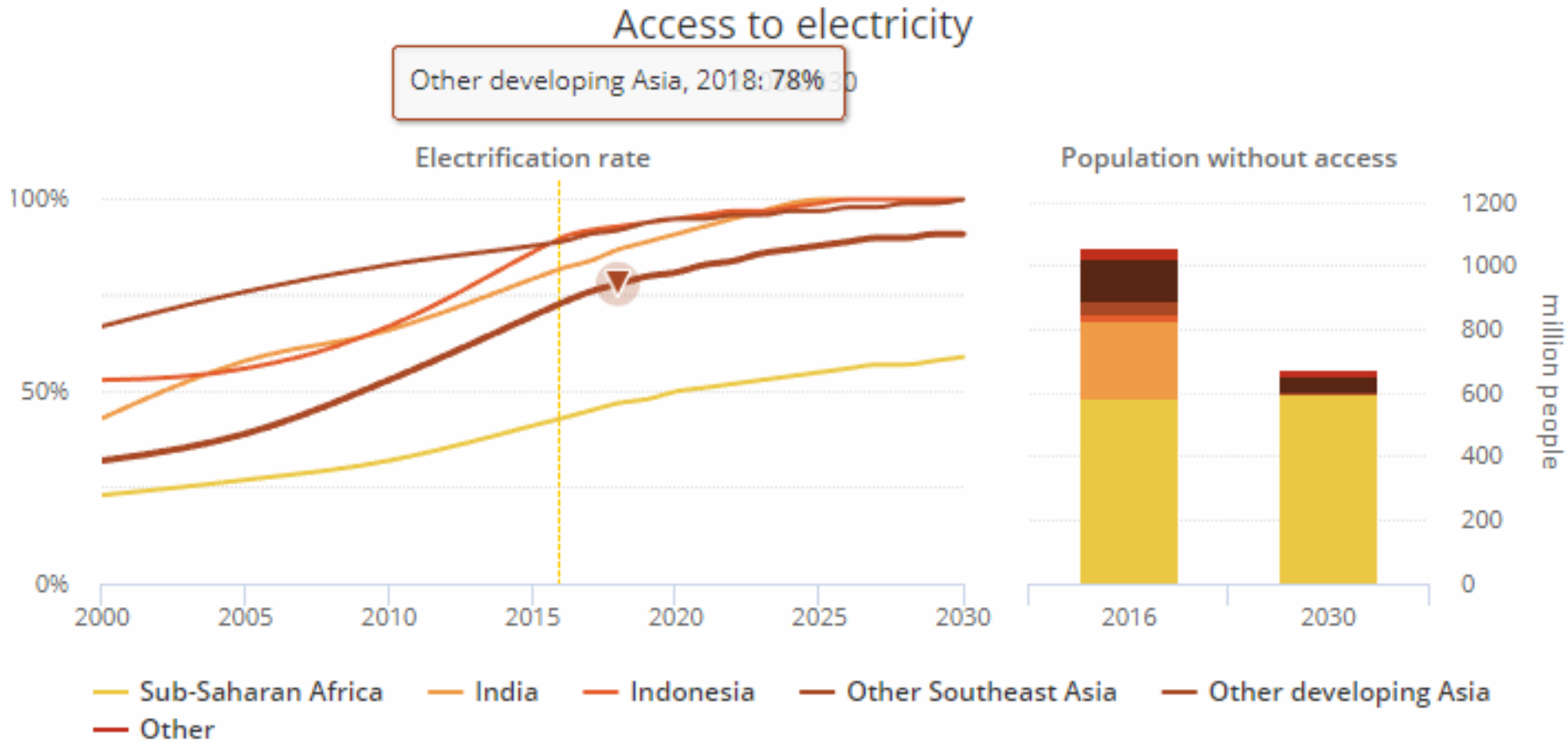
Sustainable Development Goals (SDG)

Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all

- An increasing proportion of the population have gained access to electricity, but 1.1 billion people still live without it
- Orang Asli villagers have not had electricity since 1963

Access to electricity

- Currently, 1.2 billion people worldwide - one in every six people on the planet - do not have access to electricity (World Economic Forum)
- Orang Asli villagers have not had electricity since 1963



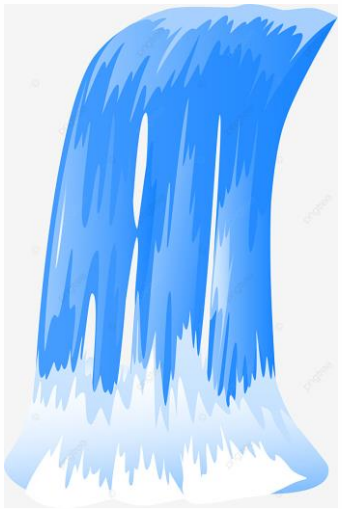
THE IMPACT RANKINGS 2023

7 AFFORDABLE AND CLEAN ENERGY

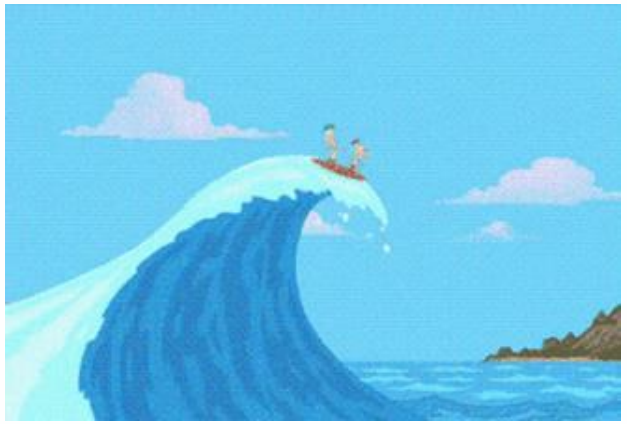
MARINE ENERGY SOURCE

RENEWABLE ENERGY

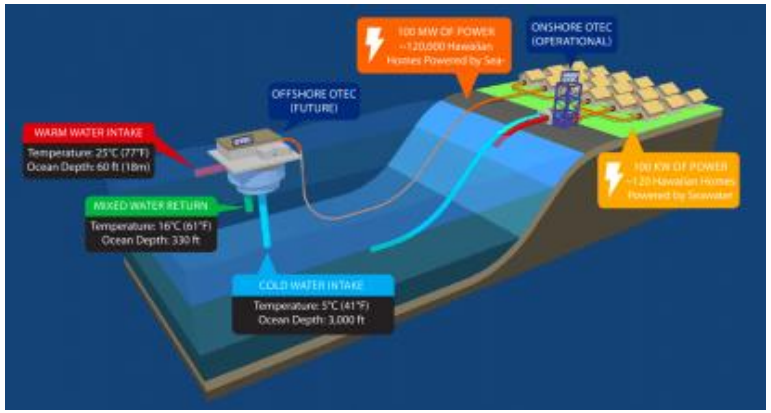
Sun



Water

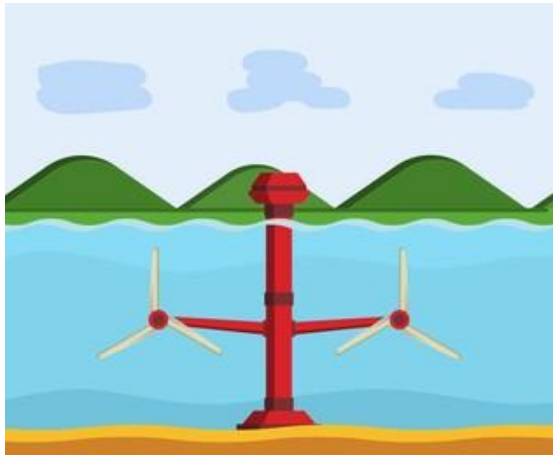


Wave



OTEC

Wind

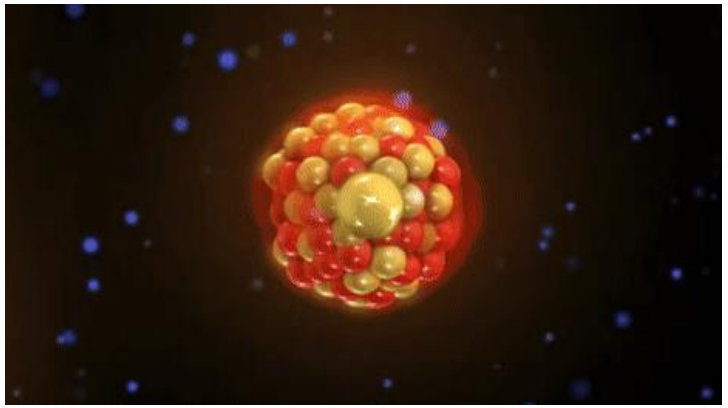


Tidal

Salinity Gradient

ENERGY SOURCE

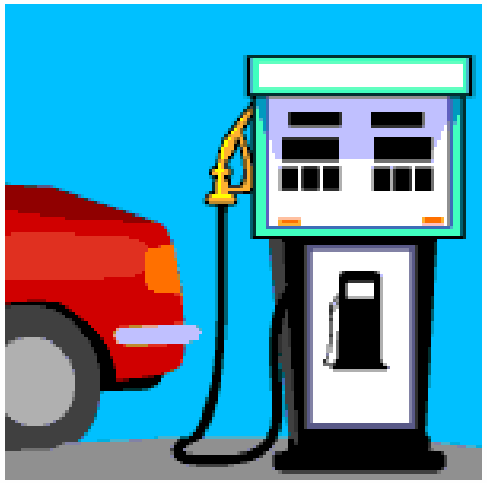
NON-RENEWABLE ENERGY



Nuclear

Natural Gas

Coal



Petroleum

Students can engage with renewable energy

- Renewable Energy Workshops: Conduct workshops on renewable energy technologies and applications. Students can learn about solar panels, wind turbines, energy storage systems, and other renewable energy devices. They can get hands-on experience in building and testing renewable energy systems, which can enhance their practical understanding of the concepts.

- Science Competitions: Encourage students to participate in science competitions that focus on renewable energy. These competitions often involve designing and building renewable energy devices or conducting experiments related to renewable energy technologies. Competing against other students can foster creativity, critical thinking, and problem-solving skills.

- Renewable Energy Clubs: Establish a renewable energy club in the school where students can come together to discuss and engage in renewable energy projects. This club can organize hands-on activities, guest speaker sessions, and field trips to renewable energy installations. It can also serve as a platform for students to collaborate on research projects and share their knowledge with others.

- Community Outreach: Engage students in community outreach activities related to renewable energy. They can organize awareness campaigns, workshops, or energy-saving initiatives within their school or local community. Encouraging sustainable practices and educating others about the benefits of renewable energy can have a positive impact and inspire further interest in the field.

You cannot protect the environment unless you empower people, you inform them, and you help them understand that these resources are their own, that they must protect them.

-Wangari Maathai

SUSTAINABLE Campus
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Thank you