

ICT & Climate Change in Malaysia

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What are the impacts or contributions of the rapid pace of development in the field of ICT in developing countries like Malaysia?

How about the sustainability of the climate change related ICT project itself?

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Current trends of ICT

- Miniaturisation (chips) – smaller appliances & applications
- Digitisation – enable development of applications and management for all sort of data
- Convergence of formerly seperated networks (telecommunication, computer, tv) into single infrastructure (with text, image, voice & data)
- Integration (protocols, standards & architectures) – everything through internet?
- Intelligence applications and networks

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What ICT can contribute ?

- Miniaturisation & digitation lead to dematerialisation – fewer materials are needed to perform the same function. Digitisation means products are available digitally rather than materially
- Increase possibilities of communications – actions & activities can be carried out anywhere – less movement/transportation
- Faster exchange of information leads to better and more efficient organisation - activities can be performed more efficiently
- Smarter and more intelligent applications & appliances – automation, possible to regulate & more efficient use of energy

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What ICT can contribute (continue) ?

- Improve yield and quality of harvest with precision agriculture & farming – reduce harmful effect to environment
- Less waste due to computerisation and integration, etc.

“The use of more ICT appliances may lead to more use of electricity and energy”

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Are we tapping from these benefit ?

- ICT as the main channel of providing info on climate change
- Industries, transportations and buildings – regulation of energy use more environmental friendly applications/machineries, electronic fuel injections, catalytic converter
- Management and monitoring soil, land use and forest – remote sensing
- Monitoring and assesment of air pollution, forest fire management
- Climate change mitigation program – meteorological applications
- Less waste – due to automation and intergation (e-Government, e-Bussiness, intranet)

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Are we tapping from these benefit (continue)?

- Cyberjaya – hostility concept of harmonising people, nature & technology (smart schools, smart homes, smart buildings....)

“Lack of research or study to measure the success of climate change related ICT projects”

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Successful approaches

- It must be built on local needs
- Economically sustaining
- Innovate creative uses
- Easy to use
- Extend benefits beyond “technology” people & must reach rural population
- Voice the concerns of disadvantaged
- Share the successes (or failure)

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Successful approaches (continue)

- Contain local content and easy to understand
- Good planning & infrastructures

Consideration & planning must include the sustainability of project (after implementation). Many projects “not very successful” or “dormant” due to failure to consider this issue at planning stage, particularly:

- Human resource
- Capacity building
- Maintenance & infrastructure costs (after implementation)

THANK YOU