

The Race to Net Zero in the ICT sector- Exploring African Priorities

Virtual meeting 28 Sept 2021



High emitting inefficient servers



Resource inefficient cloud servers using RE



Resource efficient cloud servers using RE



Resource efficient cloud servers using RE substituting inefficient computing



Digitalization with cloud supporting dematerialization of operations where cloud solutions are implemented



Optimization of the value chain serving a core need with AI cloud solutions and blockchain

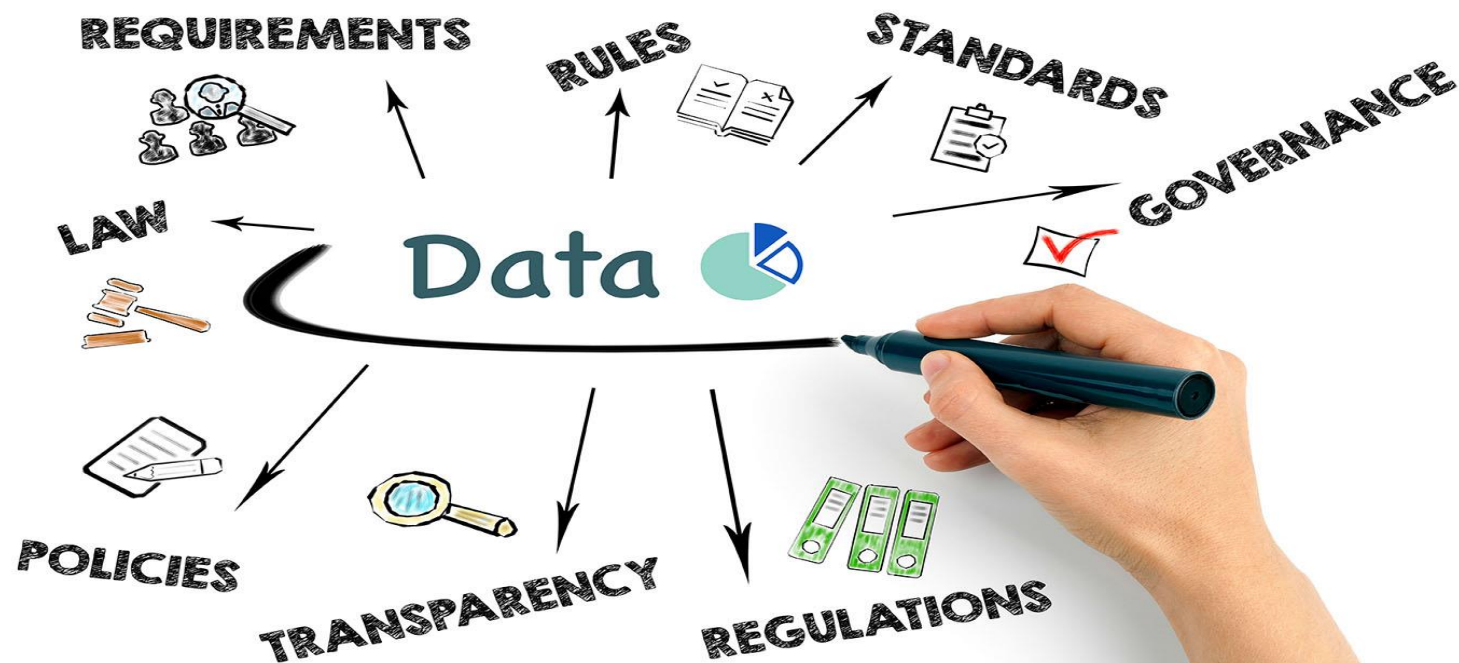


Transformation of business towards 1.5C global sustainability through innovations such as cloud supported business based on service rather than product, AI-tools for 1.5C compatibility through strategic simulation,

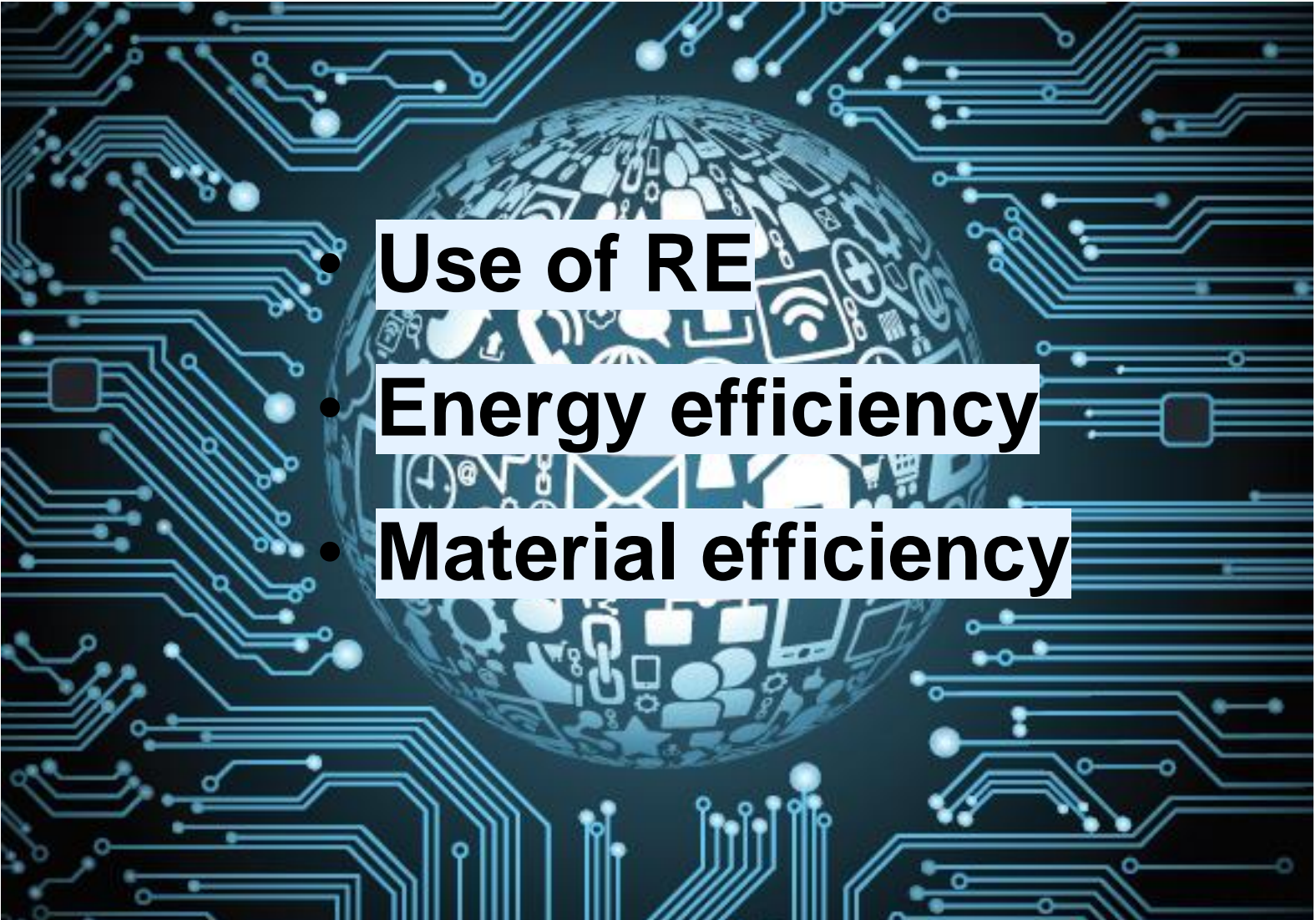


Use of ICT for climate policy making

Data for Effective Policy Making



EQUIPMENT PRODUCTION: SECTOR-BASED PROBLEM-ORIENTED APPROACH TO CLIMATE ACTION

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- **Use of RE**
 - **Energy efficiency**
 - **Material efficiency**

MATERIAL OPERATION: SECTOR-BASED SOLUTION-ORIENTED APPROACH TO CLIMATE ACTION

- Energy efficient equipment
- Longer lifetime
- Recyclable part



SUSTAINABLE USE

- **Renewable energy**
- **Cloud service computing with Software as a Service, Infrastructure as a Service and Platform as a Service**



Displacement of more carbon intensive value-chains

- **telecommuting replacing commuting trips to work and office buildings**
- **Distance learning replacing trips to educational institutions and school buildings**
- **Online banking replacing trips to financial institutions and bank buildings**
- **Social media replacing trips to social events and their buildings**
- **Teleconferencing replacing trips to conference venues and the conference venues**



Displacement of more carbon intensive value-chains

- **Virtual entertainment replacing trips to event venues**
- **E-commerce replacing trips to stores and the physical stores**
- **Electronic documents replacing trips to deliver courier and mails**
- **Digital sensors, IoT and DLTs replacing professional and work trips (e.g. onsite verifications)**



Digital-enabled emission reductions amount to 12.1 GtCO₂e in 2030, decoupling emissions from economic growth

