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#ESDfor2030

UNIVERSITÉ TOULOUSE III PAUL SABATIER

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World Conference on Education for Sustainable Development

**Sustainable Development in Electrical Engineering Curricula
Why-What-How ?**


Session 8 - Technological advancement

Berlin, Germany

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Sustainable Development, the 3P + E concept

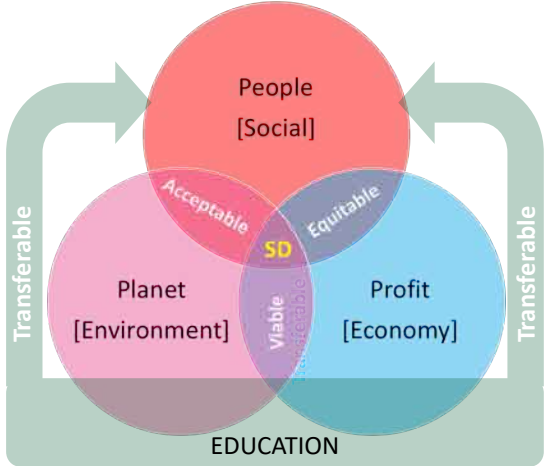


Sustainable Development (SD) should be “Acceptable, Equitable and Viable” but it needs to be “Transferable”.

This is the role of Education !

Some drawbacks

- ✓ Definition of SD is somehow discouraging for future engineers;
- ✓ SD is by essence trans-discipline, but, Engineering cursus are very often mono-discipline;
- ✓ Engineering cursus designs are constrained by requirements that may strongly vary from country to country, from university to university...




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1st step: “ThinkYoung”

Transforming learning environments




Empowering and mobilizing youth



“...we have a responsibility to ensure that the students we teach and train, who will be the leaders of tomorrow, have the skills necessary to create not just the future we want, but the future we need...”

Pam Chasek (International Institute of Sustainable Development)

Sustainable development can be defined as development that meets the needs of the present **without compromising the ability of future generations** to meet their own needs.





Sustainable development can be defined as development that meets the needs of the present **by contributing to the ability of future generations** to meet their own needs.

Marc Méquignon (Univ. Toulouse 3)

Universities not only should mandatory incorporate SD in their engineering cursus, but, it must give students the opportunity to become actors in Sustainable Development !

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- ✓ Grenoble's Agreement
- ✓ White book

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2nd step: International cooperation
Building capacities of educators

Two examples

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Develop new international cursus in Electrical Engineering starting from SD needs

ELNAB

Promoting Energy Efficient Lighting Education in Nepal and Bhutan

A Master degree on raising awareness in efficient lighting management, artificial light impact on humans, resources and biotopes. Economics of energy efficient lighting for developing regions.

Develop energy efficient lighting courses and lighting laboratory to offer the possibility to local authorities to engage an efficient lighting market transformation thanks to locally trained young engineers and technical capacities

MESFIA

Mastering Energy Supply Focusing on Isolated Areas

A Master degree on Sustainable Energy Systems, covering Energy Management, Sustainable Energy Use, Energy Conservation and Sustainable Development. Energy policies and standards

Create job opportunities for native young people to encourage them not leaving their native islands and remote regions...

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Accelerating local level actions

Empowering and mobilizing youth

Advancing policy

Erasmus+ capacity building

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Contact

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