**Class plan**

**(detailed)**

Teaching module: **Social Impact of Energy Technologies. S-LCA**  Session: 2. **Develop an S-LCA analysis** Class time: **3x45min**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| No. | Activity name | Procedure | Teaching guide | Method | Interaction type | Expected outcome | Materials | Overall time |
| 1. | Introductory presentation of the case study  | 1. Presentation of the case study by chosen group of Ss.
2. Discussion and clarifications.
 | Ss present the case study in class. T complements the information if needed | * Presentation from Ss
* Discussion
 | Ss <-> SsT <-> Ss | * Understanding of the case study.
 | * TM4-S2-AM1
* TM4-S2-AM2
 | 20 min |
| 2.  | Basic steps in the SLCA methodology | 1. Short presentation
 | T reminds the analysis to be developed and the SLCA methodology. | * Presentation
 | T -> Ss | * Reminder of the basic steps in SLCA
 | * TM4-S2-AM1
* TM4-S2-AM2
 | 5 min |
| 3.  | Definition of scope: boundaries | 1. Group work on Boundaries of the analysis.
2. Discussion in class
 | Ss discuss in the groups and work together. T goes around the groups and answers questions.  | * Workshop
* Discussion in working groups
* Class discussion
 | Ss <-> Ss | * Understanding how to define goal and scope in SLCA
 | * TM4-S2-AM1
* TM4-S2-AM2
* TM4-S2-RM3
* TM4-S2-RM2
 | 10 min  |
| 4. | Definition of scope: stakeholders | 1. Group work on Boundaries of the analysis.
2. Discussion in class
 | Ss discuss in the groups and work together. T goes around the groups and answers questions.  | * Workshop
* Discussion in working groups
* Class discussion
 | Ss <-> Ss | * Understanding how to define goal and scope in SLCA
 | * TM4-S2-AM1
* TM4-S2-AM2
* TM4-S2-RM3
 | 15 min  |
| 5. | Inventory analysis | 1. Short presentation on data collection
2. Presentation on categories in order to prepare for the next activity.
 | T reminds the main steps in LCIA and provides some clues in order to prepare for the next activity. | * Presentation
 | T -> Ss | * Reminder of main features of the Life Cycle Inventory Analysis
 | * TM4-S2-AM1
* TM4-S2-AM2
 | 15 min |
| 6. | Impact assessment: subcategories and indicators | 1. Short introduction by teacher
2. Group work on impact subcategories and indicators
3. Discussion
 | T advices Ss that the LCIA activity intends only to be an example of the method. Ss discuss in their working groups on the methodological approach and follow the guidelines. T goes around the group and answers questions. | * Workshop
* Discussion in working groups
* Class discussion
 | Ss <-> SsT <-> Ss | * Understanding how to select subcategories and indicators for local impact in SLCA.
 | * TM4-S2-AM1
* TM4-S2-AM2
* TM4-S2-RM3
* TM4-S2-RM2
* TM4-S2-RM4
* TM4-S2-AM3
 | 20 min  |
| 7. | Impact assessment: weighting factors | 1. Short introduction by teacher
2. Group work on weighting factors
3. Discussion
 | T advices Ss that the LCIA activity intends only to be an example of the method. Ss discuss in their working groups. T goes around the group and answers questions. | * Workshop
* Discussion in working groups
* Class discussion
 | Ss <-> SsT <-> Ss | * Practising the aggregation of indicators in SLCA.
 | * TM4-S2-AM1
* TM4-S2-AM2
* TM4-S2-RM3
* TM4-S2-AM3
* TM4-S2-AM4
 | 15 min  |
| 8. | Impact assessment: getting values for the indicators | 1. Short introduction by teacher
2. Group work on indicators
3. Discussion
 | Ss discuss in their working. T goes around the group and answers questions. | * Workshop
* Discussion in working groups
* Class discussion
 | Ss <-> SsT <-> Ss | * Understanding on how to assess the local impact in SLCA.
 | * TM4-S2-AM1
* TM4-S2-AM2
* TM4-S2-RM3
* TM4-S2-AM3
* TM4-S2-RM5
* TM4-S2-RM6
 | 20 min |
| 9. | Results, discussion and conclusions | 1. Short introduction by teacher
2. Discussion
3. Conclusions of the course.
4. Statement of the homework
 | Ss discuss on the quality of their assessments and the adequacy of SLCA. T summarises discussion and the whole TM.  | * Presentation
* Discussion
 | T <-> SsSs <-> Ss | * Identify lessons learnt
 | * TM4-S2-AM1
* TM4-S2-AM2
 | 15 min |

Interaction type:

**T** – teacher

**S** – student

**Ss** – students

**->** - one way

**<->** - two way