

Environmental management and sustainability

WAT Course, Week 4

Meeri Karvinen Sept 28 2020



Environmentally extended input-output (EE IO) analysis
 Calculation exercise using the RaMa-Scene tool <https://www.ramascene.eu>
 The instructions are given separately. You may use this background excel as a support, but send your final answers as one Word- or PDF-document.

Fill in the green cells
 Copy Tables 1-4 to the Word document

Task 1
Total GHG emissions (kg CO2 eq)

	PBA			CBA		
	1995	2011	Change (%)	1995	2011	Change (%)
Europe						
Russia						
The EU*						

*Use "Europe minus Russia" as a proxy for the EU throughout the exercise.

Table 1. Total GHG emissions (kg CO2-eq) of the EU

	1995	2011	Change (%)
PBA			
CBA			

Task 2
Energy sector
 Note that you can use the RaMa-Scene analyses you run in Task 1. Just check the energy sector's share (%) of the total PBA emissions (also, by bringing the mouse on the top of the sector, you can see the actual amount in kg CO2-eq).

Energy sector, PBA (kg CO2 eq)

	1995	2011	Change (%)
Europe			
Russia			
The EU*			

Table 2. The production-based GHG emissions (kg CO2-eq) of energy sector in the EU

	1995	2011	Change (%)
PBA			

Building sector
 For this analysis, it may be easiest to run a new analysis in the RaMa-Scene by selecting just the three sectors of interest: Building sector, CBA (kg CO2-eq).

PERSPECTIVES AND VALUES

Sustainable development



Agenda for today

TODAY

9.00 Introduction to the week (Meeri)

9.20 Introduction to LCA & weekly exercise (Juudit Ottelin)

12 – 13 Lunch break

Independent/pair work with the weekly exercise

Week 4

MONDAY: Introduction to the week & weekly exercise + LCA lecture

TUESDAY: Individual work with the weekly exercise

WED:

Morning (11-12): Wrap-up of the Weekly exercise

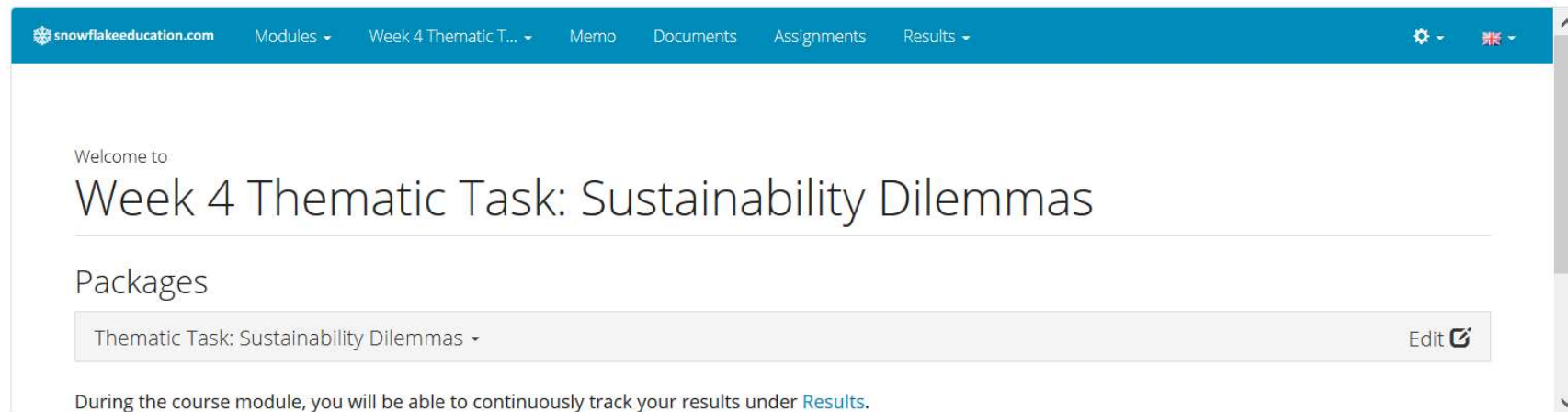
Afternoon: Introduction to Values and perspectives of sustainability and instructions for the Thematic Task (Snowflake platform)

THU: Individual work with the preparatory assignments of the Thematic Task

FRI: Board Game seminar & follow-up assignments of the Thematic Task

Snowflake platform

Thematic Task: Dilemma Board Game



The screenshot shows a web interface for a course module. At the top, there is a blue navigation bar with the URL 'snowflakeeducation.com' and several menu items: 'Modules', 'Week 4 Thematic T...', 'Memo', 'Documents', 'Assignments', and 'Results'. On the right side of the navigation bar, there are icons for settings (a gear) and a red 'X' mark. Below the navigation bar, the main content area has a white background. It starts with a 'Welcome to' message followed by the title 'Week 4 Thematic Task: Sustainability Dilemmas'. Underneath the title is a section labeled 'Packages' containing a single package entry: 'Thematic Task: Sustainability Dilemmas'. To the right of this entry is an 'Edit' button with a pencil icon. At the bottom of the main content area, there is a note: 'During the course module, you will be able to continuously track your results under [Results](#).'

◀ Weekly exercise: Environmentally extended input-output (EE IO) analysis (hidden)

Jump to...

Thematic task: User research and pitch (hidden) ▶

Group discussion 😊

What does environmental management mean?

What kind of premises or prerequisites you can come up with for environmental management? What does it require?

→ Discuss in your groups for ~5 minutes

→ Write down key points to be shared jointly

Group discussion whiteboard

how we interact with the environment and the assessment of our impact

A structured method of analysing how an environment is performing

(eco)systems thinking

Changing behavior

altering and maintaining nature

ISO 14001 ems

environmental policies

multi-disciplinarity

Multidisciplinary skills required, such as economy, sociology, biology, engineering

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