

Introduction to the Group/Individual Work topics

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Topic Distribution

	Topic	Student1	Student2	Student3
Individual work	Carbon price	Songyan Ma	Francisco Javier Garcia Cemeli	
	Soy import ban	Julian Nal		
	Removal of VCS payments	Gustavo Larrea		
Group work	Weight loss drug and their impact on agriculture and the environment	Yingying Yang	Shiyi Xia	Jiayi Chen

Carbon Price

- 100 €/t CO₂eq tax on all agricultural emissions in the EU
- Endogenous mitigation technologies
- Songyan Ma
 - Market and production effects
- Francisco Javier Garcia Cemeli
 - Environmental effects including leakage
 - Mitigation technology adoption and their cost efficiency

Table 1. GHG emission sources accounted for by CAPRI.

Emissions	Sources modeled in CAPRI
CH ₄	<ul style="list-style-type: none">■ Enteric fermentation■ Manure management■ Rice cultivation
N ₂ O	<ul style="list-style-type: none">■ Synthetic fertilizer■ Manure management (application)■ Excretion on pasture■ Crop residues■ Histosols■ Deposition of ammonia■ Emissions due to leaching of nitrogen
CO ₂	<ul style="list-style-type: none">■ Liming

Source: Pérez Domínguez et al. (2020).

CAPRI worksteps

- Installation
- Build database
- Generate baseline
- Run scenario
- Disaggregate Results
- Tests and Reporting

CAPRI tasks

- Define scenario
- Run scenario with market model
- Run scenario without market model
- Test alternative market model
- Run scenario only with market model
- Disagg_Scenario

Result exploitation

Scenario 1 Scenario 2 Scenario 3 Scenario 4 Scenario 5 Scenario 6 Scenario 7 Scenario 8 Scenario 9 Scenario 10 Scenario 11 Scenario 12 Scenario 13 Scenario 14 Scenario 15 Scenario 16 Scenario 17 Scenario 18

Regional Aggregation

EU BL DK DE
 EL ES FR IR
 IT NL AT PT
 SE FI UK CZ
 HU PL SI SK
 EE LT LV CY
 MT BG RO NO
 TR TURAL MK
 CS MO HR BA
 KO

Country selection

Regional level Base year selection

Simulation year selection

00 01 02 03 04 05 06 07 08
 09 10 11 12 13 14 15 16 17
 18 19 20 21 22 23 24 25 26
 27 28 29 30 31 32 33 34 35
 36 37 38 39 40 41 42 43 44
 45 46 47 48 49 50 51 52 53
 54 55 56 57 58 59 60 61 62
 63 64 65 66 67 68 69 70 71
 72 73 74 75 76 77 78 79 80
 81 82 83 84 85

EU Soy Import Ban

- EU bans the import of all soy products
 - Soya seed, soya oil and soya cake
- Julian Nal
 - Market balances
 - Feed distribution
 - Market balances of feed

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Scenario 1

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Scenario 10

Scenario 11

Scenario 12

Scenario 13

Scenario 14

Scenario 15

Scenario 16

Scenario 17

Regional Aggregation
MajorPorkProd
defaultA

Country selection

EU	BL	DK	DE
EL	ES	FR	IR
IT	NL	AT	PT
SE	FI	UK	CZ
HU	PL	SI	SK
EE	LT	LV	CY
MT	BG	RO	NO
TR	TURAL	MK	
CS	MO	HR	BA
KO			

Regional level

Base year selection

Simulation year selection

00	01	02	03	04	05	06	07	08
09	10	11	12	13	14	15	16	17
18	19	20	21	22	23	24	25	26
27	28	29	30	31	32	33	34	35
36	37	38	39	40	41	42	43	44
45	46	47	48	49	50	51	52	53
54	55	56	57	58	59	60	61	62
63	64	65	66	67	68	69	70	71
72	73	74	75	76	77	78	79	80

Removal of Voluntary Coupled Support Payments

- EU removes all VCS payments without directing these payments for another purpose
- Gustavo Larrea
 - Status quo – use the reference scenario and literature research to find out which activities get these payments at the regional level
 - Environmental effects
 - Emission leakage, which are the main products responsible for the leakage
 - Regional effects
 - What would happen if you ran it only with the supply model

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KO			

Regional level 029

Base year selection 0408101217

Simulation year selection

00	01	02	03	04	05	06	07	08
09	10	11	12	13	14	15	16	17
18	19	20	21	22	23	24	25	26
27	28	29	30	31	32	33	34	35
36	37	38	39	40	41	42	43	44
45	46	47	48	49	50	51	52	53
54	55	56	57	58	59	60	61	62
63	64	65	66	67	68	69	70	71
72	73	74	75	76	77	78	79	80
81	82	83	84	85				

Scenario 1 res_2_1735userScens_refdefaulta

Scenario 2 res_2_1735userScens_noVCS_scenario_EUdefaulta

Scenario 3

Scenario 4

Scenario 5

Scenario 6

Scenario 7

Scenario 8

Scenario 9

Scenario 10

Scenario 11

Scenario 12

Scenario 13

Scenario 14

Scenario 15

Scenario 16

Scenario 17

Scenario 18

Scenario 19

Scenario 20

Select scenarios

Weight loss drug and their impact on agriculture and the environment

- Supervisor – Ferike Thom
- Yingying Yang
- Shiyi Xia
- Jiayi Chen
- Details to be discussed bilaterally