ERPsim

Leap Year Challenge

Round 2 → Round 3

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ERPsim Leap Year (Logistics Sustainability) Challenge
Asynchronous | February 8, 2024

ERPsimLab | HEC MONTRÉAL
Serious games to learn enterprise systems and business analytics

Welcome
欢迎
velkommen
välkommen
בָּרוּךְ הַבָּא
chào mừng
hoşgeldiniz
merħba
خوش آمدید
ようこそ
willkommen
benvenuto
환영
witamy
selamat datang
أهلا بك
bienvenu
fáilte
welkom
bine ati venit
bienvenido
vítejte
добро пожаловать
स्वागत
خوش آمدی
bem-vindo
tervetuloa
wamukelekile
καλώς ήρθες
wëllkomm

Schedule (Montréal Time)

Thursday, Feb 8, 2024

- 12:00 – Welcome
- 12:05 - Round 2 Review
- 12:10 - Round 2 Run
- 12:20 - Round 2 Results
- 12:25 – Round 3 Information
- 12:30 – Q&A

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Teams

AA - Tecnológico de Monterrey
BB - University of Nottingham
~~**CC** - Conestoga College~~
DD - Durham College
EE - The University of Texas at Dallas
FF - Neusoft Institute Guangdong
GG - International School of Business (UEH-ISB)
HH - Central Michigan University*
II - Penn State University
JJ - Beijing Jiaotong University
KK - JAMK - Jyväskylä University of Applied Sciences
LL - St Michael Learning Academy
MM - Missouri University of Science & Technology
NN - SENATI
PP - Purdue University
QQ - Seneca Polytechnic
RR - Metro State University

A2 - The University of Melbourne
B2 - University of the Cordilleras
C2 - Doon Business School, India
D2 - Duy Tan University
E2 - Excelsior Community College
F2 - Universidad Catolica Andres Bello
G2 - Purdue University Global
H2 - Hebei University of Science and Technology
I2 - Laval University
J2 - Xi'an Jiaotong-Liverpool University
K2 - East Carolina University
~~**L2** - UCLL~~
M2 - Morgan State University
N2 - Niagara College
P2 - Université de Sherbrooke
Q2 - SIIT Thammasat University*
R2 - California State University, Chico

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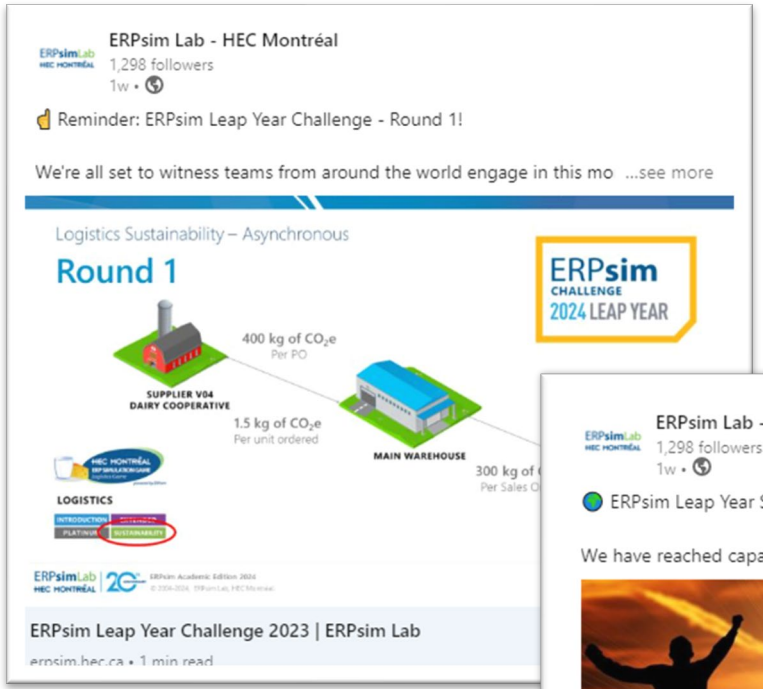

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Round 2 Review

Round 2 – Facts and Brainteasers

- Carbon Tax Value: **0.25 €/kg** of CO_2e
- **Two suppliers** (V04 & V08)
  - **V04: 1.50 kg** CO_2e per unit
  - **V04: 400 kg** CO_2e per delivery
  - **V04: € 1 000** per delivery
  - **V08: 0.80 kg** CO_2e per unit
  - **V08: 150 kg** CO_2e per delivery
  - **V08: € 600** per delivery
- **Procurement** is **enabled**.
- **Stock transfer** is **disabled**.
- Choose your **supplier**!
- Check your **pricing**!
- Check your **inventory**!
- Some **reports** are available **for a fee**.
- **OData** (self) is **enabled**.

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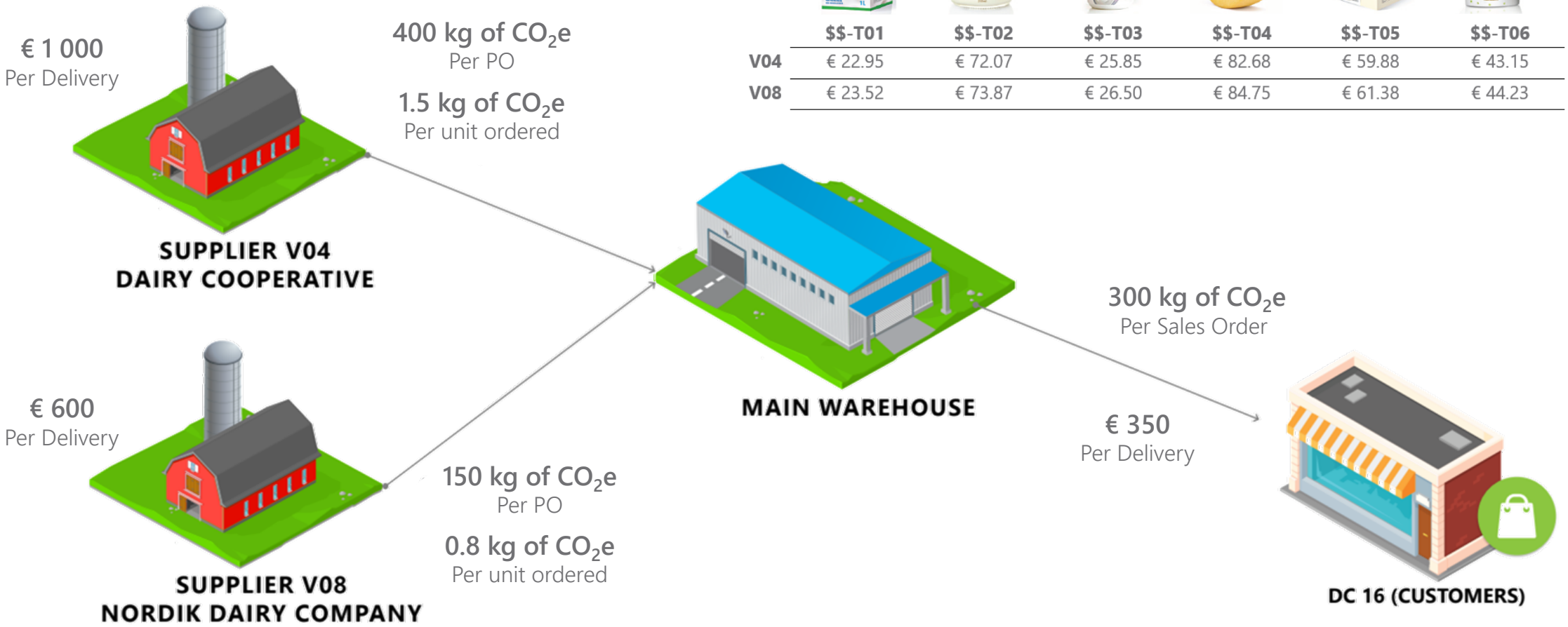
Round 2 - Scenario

	$$-T01	$$-T02	$$-T03	$$-T04	$$-T05	$$-T06
V04	€ 22.95	€ 72.07	€ 25.85	€ 82.68	€ 59.88	€ 43.15
V08	€ 23.52	€ 73.87	€ 26.50	€ 84.75	€ 61.38	€ 44.23



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Round 2 - To Ponder

- Are our prices too high, too low, OK?
- What can we do to try and reduce our carbon footprint? How is our bottom line affected?
- What and how much to order? From which supplier?
- Shall we invest in the reports? What are the alternatives?

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Round 2
Run

Round 2 Results

Round 2 – Results Top 10

		Financial Metrics							Sustainability Metrics		
Rank	Company Code	Company Valuation (EUR)	Credit Rating	Cumulative Net Income (EUR)	Round Net Income (EUR)	Total Sales (EUR)	Gross Margin	Net Margin	Total CO2e	CO2e per Unit Sold (kg/unit)	CO2e per Sales (kg/euro)
1	P2	**618,441.82**	AA	17,007.15	3,590.02	260,043.68	14.981%	6.540%	32,876.00	6.25	0.13
2	K2	**522,500.73**	AA	12,118.77	9,516.41	269,047.98	15.144%	4.504%	38,106.00	6.72	0.14
3	QQ	**511,354.40**	AAA+	12,783.86	3,386.71	365,012.36	12.297%	3.502%	48,840.00	5.46	0.13
4	BB	**500,817.82**	AA	11,822.49	5,081.65	201,709.04	15.752%	5.861%	29,560.00	6.75	0.15
5	AA	**427,132.09**	AA-	12,013.09	3,176.80	230,160.67	13.735%	5.219%	32,163.60	7.39	0.14
6	Q2	**381,265.78**	AA-	9,223.10	5,495.88	161,812.66	17.874%	5.700%	27,345.60	7.35	0.17
7	MM	**272,283.38**	AA-	7,657.97	3,208.24	181,884.05	15.289%	4.210%	30,270.00	7.10	0.17
8	DD	**269,751.81**	AA+	7,249.58	-506.68	392,779.66	11.049%	1.846%	57,770.60	5.84	0.15
9	GG	**235,037.82**	AA	5,713.54	3,668.36	240,925.80	10.019%	2.371%	31,800.00	6.12	0.13
10	PP	**154,943.63**	AA+	2,439.11	4,031.60	285,741.00	9.200%	0.854%	33,584.50	5.59	0.12

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Round 3 Information

Round 3 - Facts and Brainteasers

- Carbon Tax Value: **€ 0.30/kg** of CO_2e
- **Two suppliers** (V04 & V08)
- **Procurement** is **enabled**.
- **Stock transfer** is **enabled**
  - Establish a plan to sell from regions
  - Check to continue selling from central

- **Sell** from **central, regions or both**!
- Choose your **supplier**!
- Check your **pricing**!
- Replenish your **inventory**!
- Some **reports** are available **for a fee**.
- **OData** (all) is **enabled**.

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Round 3 - Scenario

Carbon Tax: € 0.30
per kg of CO_2e

	$$-T01	$$-T02	$$-T03	$$-T04	$$-T05	$$-T06
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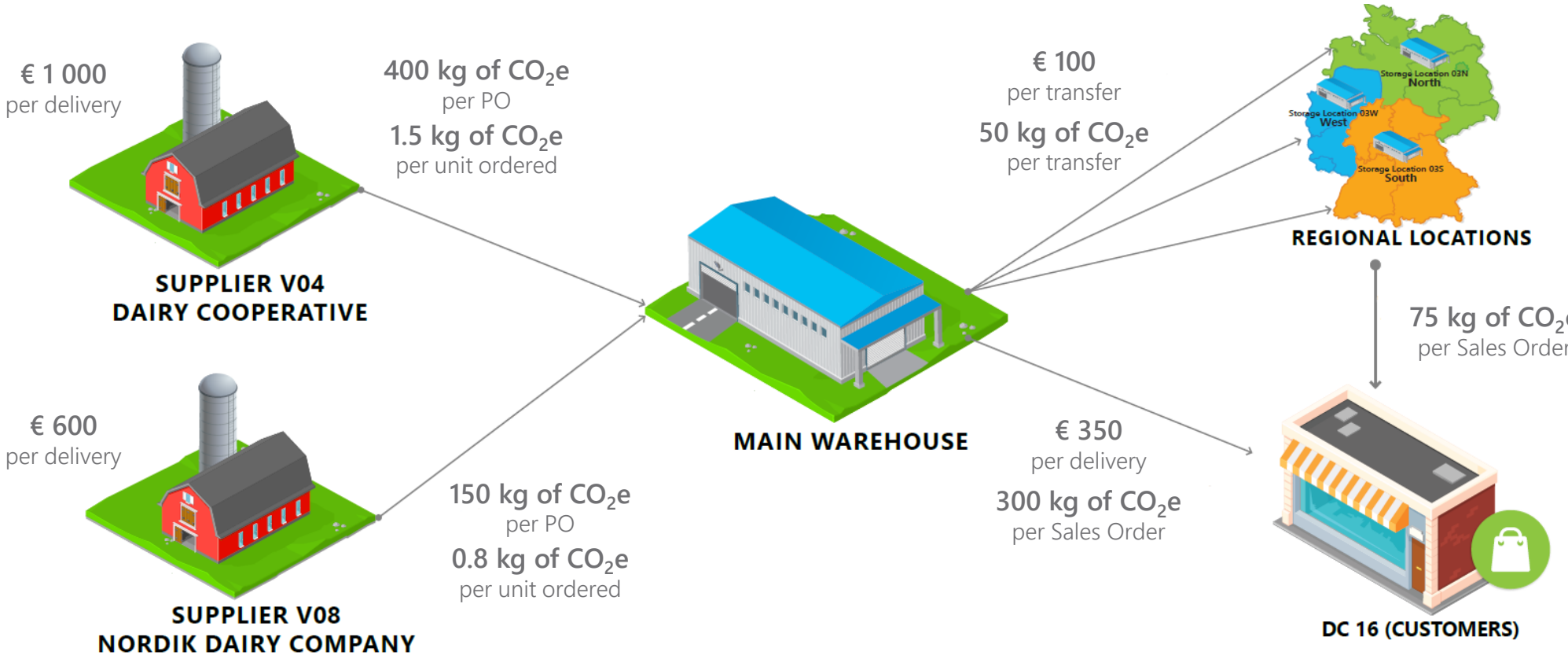

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Round 3 - Think About It

- Should we sell from regions? Push or Pull? How often? Just continue selling from central? Perhaps both?
- Are our prices too high, too low, OK?
- What can we do to try and reduce our carbon footprint?
- What and how much to order to replenish? From which supplier?
- Shall we invest in the reports? What are the alternatives?
- What are my competitors doing?

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Thank you!

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