

ERPsim

Leap Year Challenge

Awareness / Practice Session – Jan 25, 2024

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ERPsim Leap Year (Logistics Sustainability) Challenge
Asynchronous | February 1-29, 2024

ERPsimLab
HEC MONTRÉAL

Serious games to learn enterprise
systems and business analytics

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

ERPsim Leap Year Challenge



ERPsim Challenge
Leap Year (Logistics Sustainability)
Student Friendly Competition

Feb 1-29, 2024 • Online • Asynchronous

[Register now!](#)

Photo by Devostock Public Domainsh

- Month-long competition
- Logistics Sustainability
- Asynchronous
- Weekly brainteasers
- SAP UA Full Members
- One team per University

Agenda

1. **Schedule, Login information**
2. **Game scenario**
 - ▶ Logistics Sustainability (Presets 2 & 3)
3. **Rules**
4. **FAQ**
5. **Practice**

Challenge Schedule (Montréal Time)

Awareness/Practice

Jan 25

- 12:00 - Welcome
 - Schedule, login Info
 - Game scenario
 - Rules explained
 - FAQ, Q&A
- 12:45 - Practice round
- 12:55 - Round 1 brainteaser
- 13:00 – Unattended practice

Challenge

Thursdays Feb 1-29

- 12:00 – Welcome
- 12:05 - Previous round results
- 12:10 - Round playing (no input)
- 12:30 - Round results (top 10)
- 12:40 – Next round brainteaser
- 12:45 – Q&A

Teams

A - Tecnológico de Monterrey
B - University of Nottingham
C - Conestoga College
D - Durham College
E - The University of Texas at Dallas
F - Neusoft Institute Guangdong
G - International School of Business (UEH-ISB)
H - Central Michigan University
I - Penn State University
J - Beijing Jiaotong University
K - JAMK - Jyväskylä University of Applied Sciences
L - St Michael Learning Academy
M - Missouri University of Science & Technology
N - SENATI
P - Purdue University
Q - Seneca Polytechnic

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

Login Information (students)

Student IDs: **A_1 to A_5 ... Z_1 to Z_5**

Student Password: **ERPSIM** (please change the password on all the 5 users accounts)

Teams A to Z

Fiori Launchpad: <https://sapvm2.hec.ca:8001/erp?sap-client=502>

OData service: <https://sapvm2.hec.ca:8001/odata/502>

Teams A2 to Z2

Fiori Launchpad: <https://sapvm2.hec.ca:8001/erp?sap-client=503>

OData service: <https://sapvm2.hec.ca:8001/odata/503>

Game Scenario

Carbon Reporting

Measure and track Carbon emissions:

- Measuring in kilograms of carbon dioxide equivalent (CO₂e)
- Following the “Greenhouse Gas Protocol” (GHG Protocol)
 - joint initiative by World Resources Institute (WRI) and World Business Council for Sustainable Development (WBCSD)
- Categorizing corporate-level emissions within 3 scopes for carbon reporting

For more information, refer to our carbon reporting guide: <https://erpsim.hec.ca/en/node/419>

Carbon Reporting: GHG Scopes

Scope ①

- contains all direct CO₂e emissions from a company's owned or controlled sources

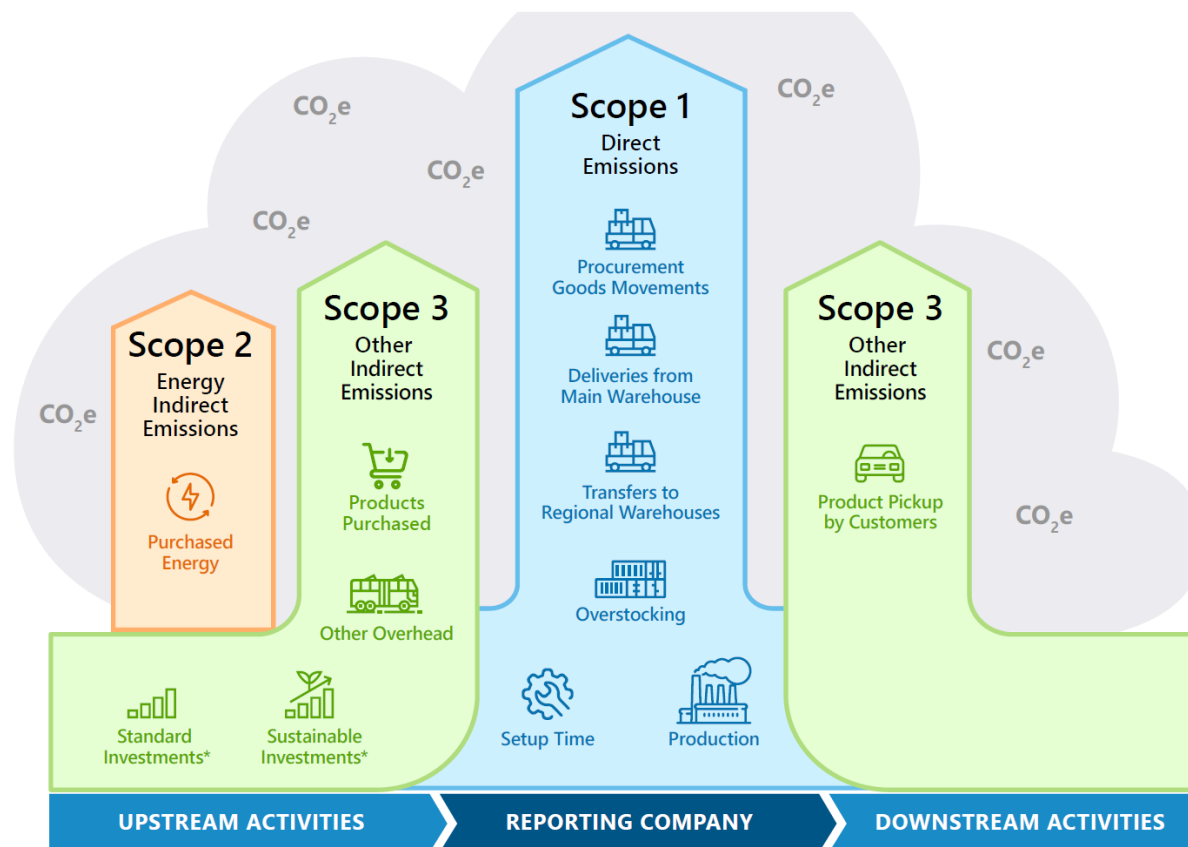
Scope ②

- groups all indirect emissions from purchased energy (e.g., electricity, heat)
- consumed by the reporting company but generated by a utility company or other uncontrolled sources

Scope ③

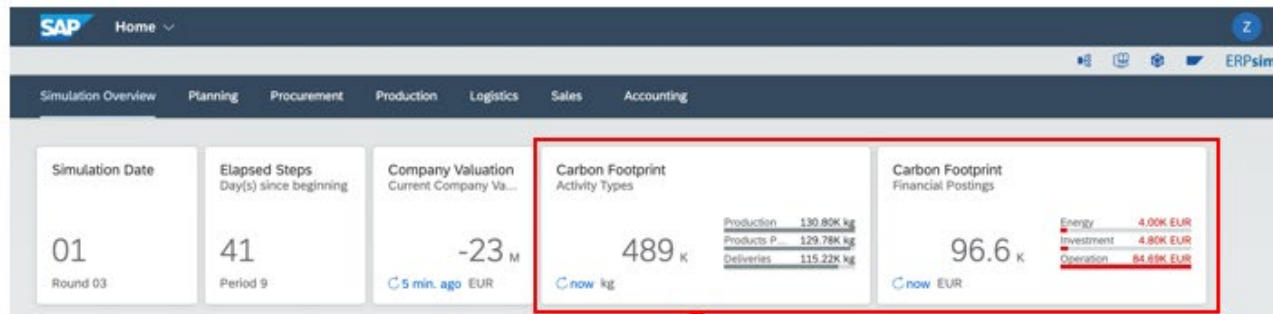
- groups all other indirect upstream and downstream emissions having an impact on your value chain
- emissions are generally owned and reported as Scope 1 by another party

ERPsim Activities: Scopes



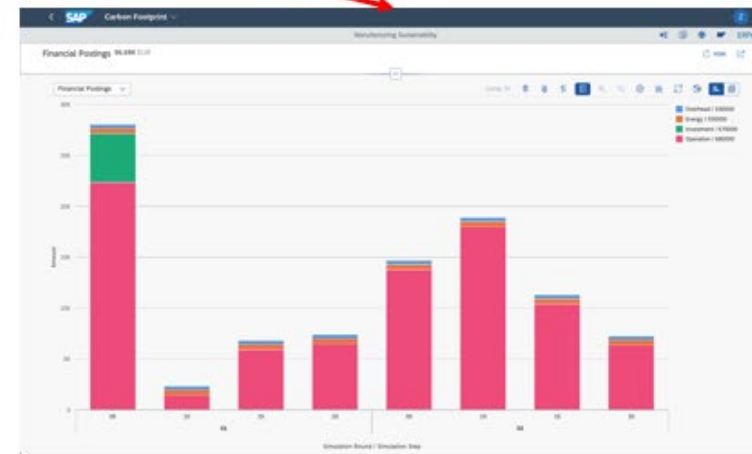
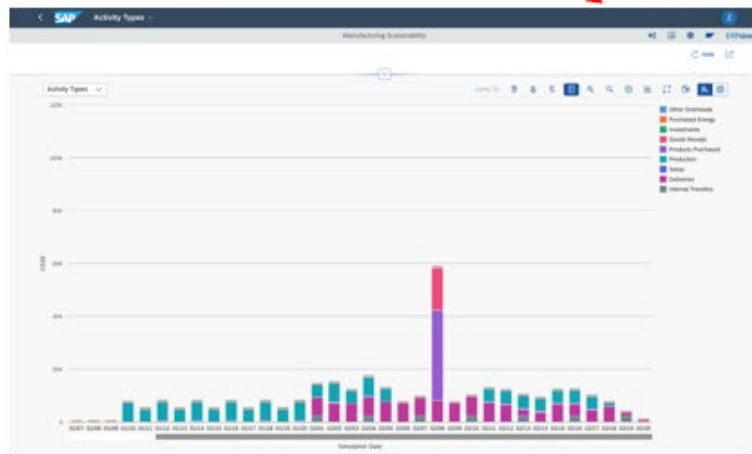
* Investments include capital goods purchases (e.g., solar panels, additional machinery or electric vehicles) and consultants business travels.

ERPsim Carbon Activities and Postings




Activity Type (kg)

Financial Postings (Euros)



Logistics Sustainability

- Comparable the other Logistics game scenarios (Intro and Extended)
- Carbon emissions generated and tracked from different sources such as transportation, warehousing, and overhead
- Carbon is taxed and deducted from the revenues
- **Students' role:** Maintain profitable operations while keeping carbon footprint low



Logistics Sustainability Game (Preset 3)

User: **\$_1 to \$_9**
Initial password: **ERPSIM**

Adapted for Fiori and for SAP GUI with Fiori Visual Theme Activated
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Last Update: July 17, 2023

| FORECAST SALES | CALCULATE REQUIREMENTS | SELECT VENDOR | ORDER MATERIALS | PLAN STOCK TRANSFER | MAINTAIN PRICES |
|---|--|--|---|---|--|
| Create Planned Indep. Req. (MD61) 1 Select Product group and enter the following information 2 Enter your forecast quantities in the 2nd date column 3 Save | MRP Run (MD01) 1 Press Enter or click Execute 2 Ignore orange warnings Press Enter two more times 3 In the pop-up window, click Continue | Procurement Sourcing (ZME12) 1 Click on Assign Source of Supply 2 For each Product, assign either vendor V04 or V08 3 Save | Create Purchase Orders (MES9N) 1 Make sure the Fixed Vendor field is empty 2 Execute 3 Purchase orders are created 4 If no open requisitions: No suitable requisitions found | Stock Transfer (ZMB1B) 1 In Planning Mode, select a Push or Pull transfer strategy 2 In Scheduling, enter your delivery frequency 3 If available, to sell from main warehouse, in Direct Sales, check Sales from Stock & specify Mix Qty 4 Enter the amount of each product you wish to send/maintain in each region 5 Save | Change Price List (VK32) 1 Open the Prices folder and double click on Price List 2 Verify Distribution Channel is 16 3 Execute 4 Modify your prices 5 Save |





Logistics Sustainability Game (Preset 3)

User: **\$_1 to \$_9**
Initial password: **ERPSIM**

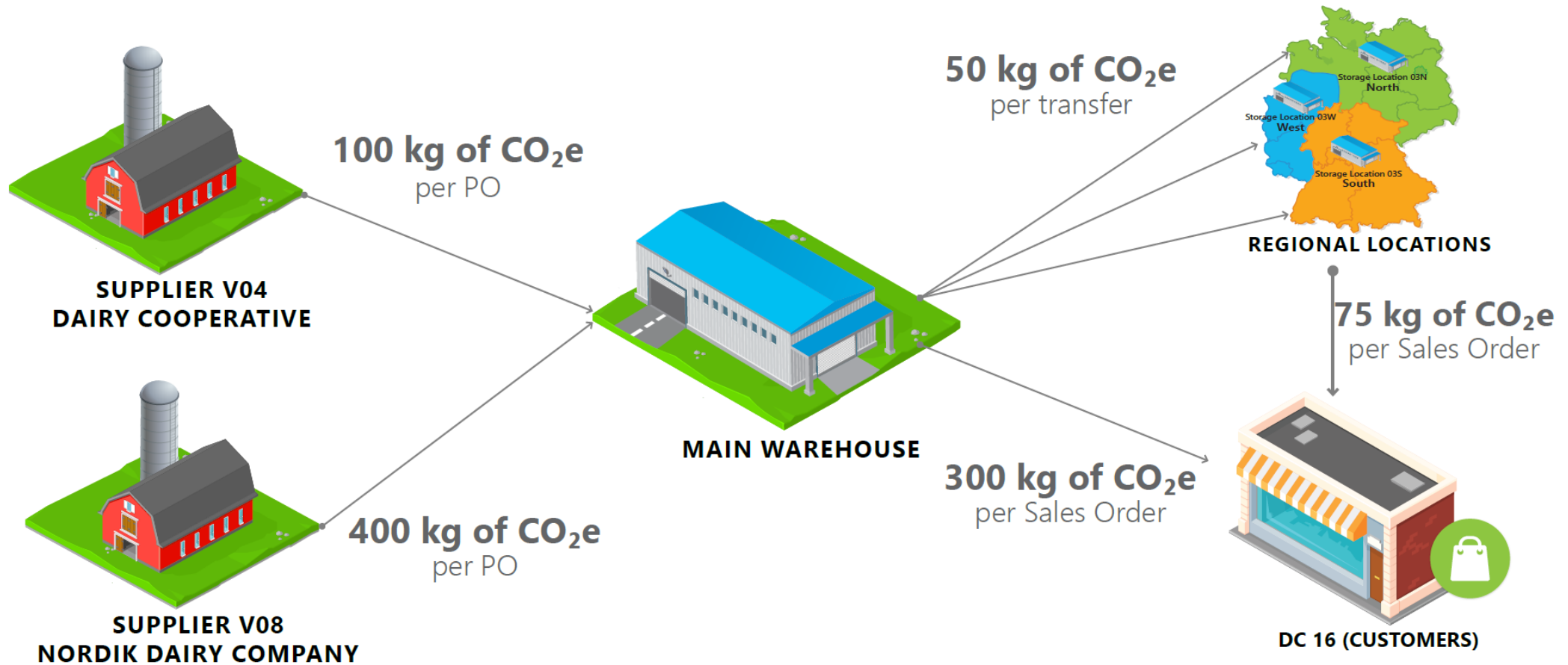
Adapted for Fiori and for SAP GUI with Fiori Visual Theme Activated
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| Milk (\$\$_T01) | Cream (\$\$_T02) | Yoghurt (\$\$_T03) | Cheese (\$\$_T04) | Butter (\$\$_T05) | Ice Cream (\$\$_T06) |
|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Initial Stock 950 units | Initial Stock 300 units | Initial Stock 700 units | Initial Stock 350 units | Initial Stock 400 units | Initial Stock 300 units |
| Unit Cost (V04) €22.95 | Unit Cost (V04) €72.07 | Unit Cost (V04) €25.85 | Unit Cost (V04) €82.68 | Unit Cost (V04) €59.88 | Unit Cost (V04) €43.15 |
| Unit Cost (V08) €24.10 | Unit Cost (V08) €75.67 | Unit Cost (V08) €27.14 | Unit Cost (V08) €86.81 | Unit Cost (V08) €62.87 | Unit Cost (V08) €45.31 |
| Initial Price €25.25 | Initial Price €79.78 | Initial Price €28.43 | Initial Price €90.95 | Initial Price €65.87 | Initial Price €47.47 |

| WAREHOUSING COSTS | | CUSTOMERS | | OVERHEAD CARBON | | |
|---|-------|-----------------------------|----------------------|--|-----------|--------|
| Current Space (Units) (maximum capacity without additional fees) | 4 000 | DC 16: Retail Stores | Payment Time | 4 days | Frequency | 5 days |
| Daily Cost per Additional 1 000 Units (€) | 300 | Approximate Market Size | €72 000 per team/day | Purchased Energy (kg of CO ₂ e) | 500 | |
| Daily Carbon per Additional 1 000 Units (kg of CO ₂ e) | 500 | | | Other Overhead (kg of CO ₂ e) | 500 | |

| TRANSPORTATION AND CARBON FEES | | | SUPPLIERS | | | VARIABLE CARBON TAX | |
|--------------------------------|-------|---------------------------|---|-----|-----|---|-------------------------|
| | (€) | (kg of CO ₂ e) | Vendor | V04 | V08 | Unit of Measure | kg of CO ₂ e |
| V04 to Main Warehouse | 1 000 | 100 | Lead time (days) | 1-2 | 1-4 | Initial Price (€/kg of CO ₂ e) | 0.10 |
| V08 to Main Warehouse | 600 | 400 | Carbon per unit ordered (kg of CO ₂ e) | 1.2 | 0.8 | | |
| Main Warehouse to Regions | 100 | 50 | Payment time (days) | 5 | 10 | | |
| Main to Customers | 350 | 300 | | | | | |
| Regions to Customers | - | 75 | | | | | |

Logistics Sustainability



Presets

Preset 1: Simple

Light introduction to sustainability concepts with only a few carbon-related parameters

Preset 2: Storyline

Build scaffolding: each round offers more layers of complexity and decision points

Preset 3: Exhaustive

Complete version offering all the parameters and decision points from the start of the game

Customized Experience

As instructors, we have **TWO** options:

1. Keep the **default presets** as explained in the games' documentation (job-aids, slides, videos)
2. **Customize** the experience:
 - Tailored experience for specific learning objectives
 - Adjust the game to time constraints
 - Build a specially made storyline
 - Make the games easier or harder

Customization via ZCONTROL

- **Carbon Impact:** Carbon tax and the impact on credit rating
- **Vendors:** additional vendors & their time of entry into the game
- **Goods Movement:** procurement, internal transfers, sales
- **Logistics:** Overstocking, Overhead, Sales from MW/Regions
- **Investments:** standard, reports, sustainable

Rules

Game Rules

- Each team has a **minimum of 3 students** and maximum of 5 students and a faculty coach.
- The **faculty coach** is the **main point of contact** for all event logistics and communications.
- Teams will play the **ERPsim Logistics Sustainability Game** (Preset 2 & 3) scenario.
- The game will be played **asynchronously** over 5-week (5-rounds) with new brainteasers revealed every week.
- **Access** to the ERPsim SAP S/4HANA Fiori system will be available **throughout the week**. Students can login at any time to input their decisions. Only the last saved changes will be considered for the next-round playing.
- **Coaches** can login, but they are not allowed to input transactions.
- The **non-transactional rounds** will be played on Thursdays at 12 p.m., Montreal Time.
- Teams must always **behave ethically** and responsibly.
- Teams are **only allowed** to perform **transactions** described on the **Job Aids**.
- Teams have **access to OData**. Teams are free to use any data visualization tool they wish to follow the evolution of their company's performance.
- Customer **buying preferences do not change** during the game.
- Teams will be **ranked** based on their **company valuation**.

FAQ

FAQ

- How can we play practice games?
- How can we access the game material?
- Are there qualifying rounds?
- How many rounds will be played?
- When are we allowed to login?
- How much time is given in between rounds?

FAQ

- Do we need to attend the weekly sessions?
- How the results will be published?
- What's the role of coaches?
- Is support provided?
- WIIFM as a student?
- WIIFM as a coach?

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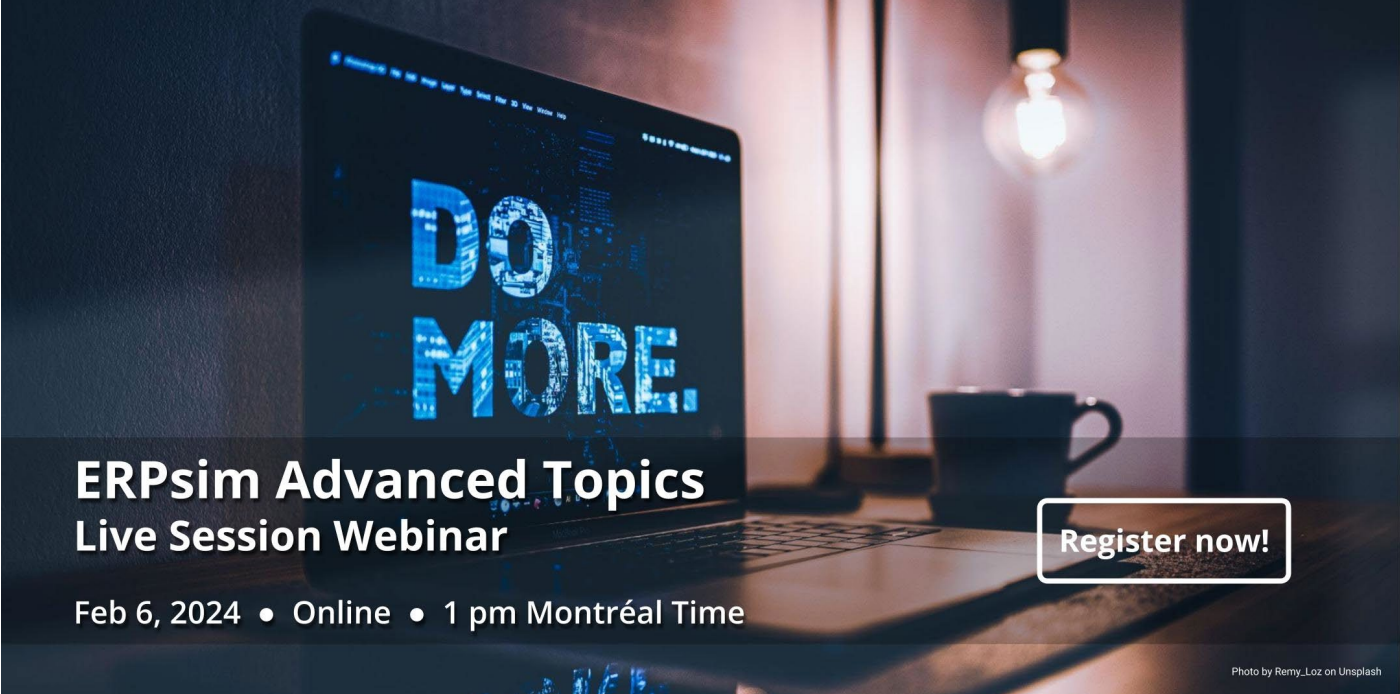
OData service: <https://sapvm2.hec.ca:8001/odata/503>

Digital Badges Awards



Advanced Topics

- Run ERPsim unattended
- Activate “Easy Login”
- Maximize Company Sets use
- Reuse market preferences
- Recover from playing mistakes
- Bring twists during gameplay
-



ERPsim Advanced Topics
Live Session Webinar

Feb 6, 2024 • Online • 1 pm Montréal Time

[Register now!](#)

Photo by Remy_Loz on Unsplash

SAP NAAC 2024 & ERPsim UGM

Save the Date

Jun 17-20, 2024

ERPsim Lab 20th Anniversary Celebration

Montréal, Canada

Round 1 - Brainteasers

- Carbon Tax Value: **0.20 €/kg** of CO₂e
- Only **one supplier** (V04)
 - CO₂e per unit for V04 at **1.50 kg**
 - CO₂e per delivery from V04 at **400 kg**
- All companies have **starting inventory**.
- **Procurement is enabled**.
- **Stock transfer is disabled**.
- Check your **pricing!!!**
- Some **reports** are available **for a fee**.
- **OData** (self) is **enabled**.
- Due to **month-end close**, you won't be able to login:
 - Between 6:00 p.m. on Jan 31st and
 - 9:00 a.m. on Feb 1st, 2024 (Montreal Time)

Let's Play!

Thank you!

Learn more about ERPsim

erpsim.hec.ca erpsim@hec.ca