



# Combined effect Explanations on the exceptional situation of 2022

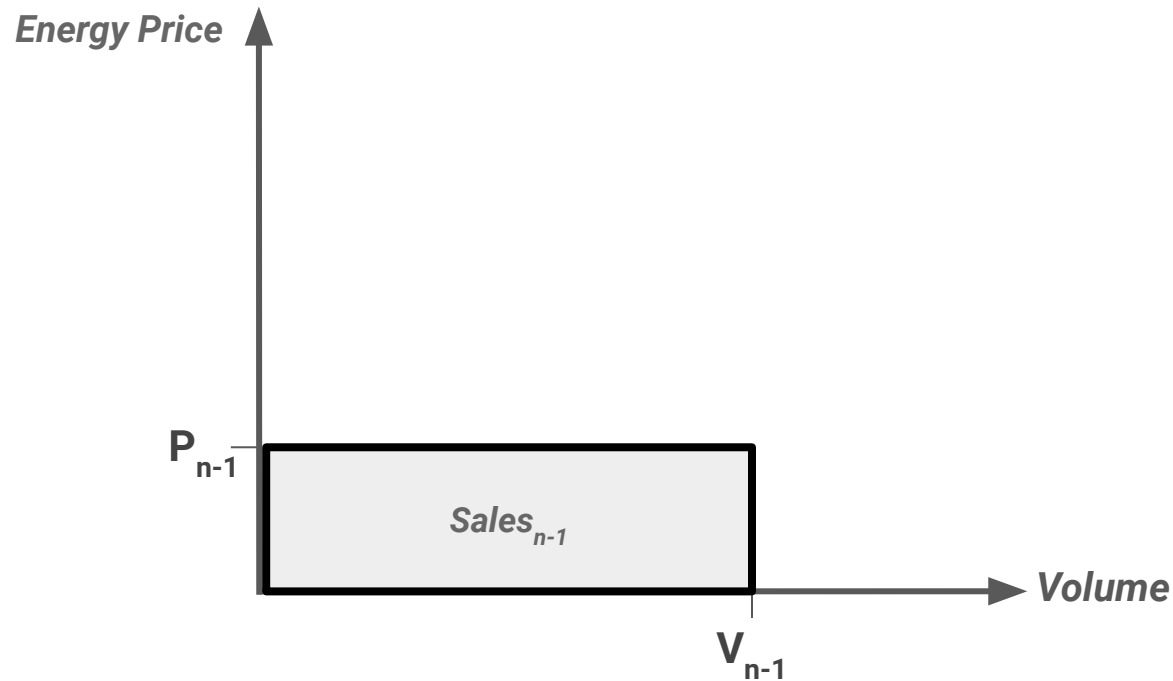
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# Sales Year N-1

## 2021

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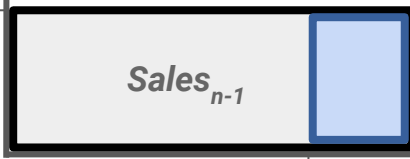
Sales Year N-1

# Year N, limited volume drop 2022

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Energy Price

$P_{n-1}$



$Sales_{n-1}$

-6% volume impact

$V_n$

$V_{n-1}$

$$\text{Volume impact} = (V_n - V_{n-1}) * P_{n-1}$$

Volume

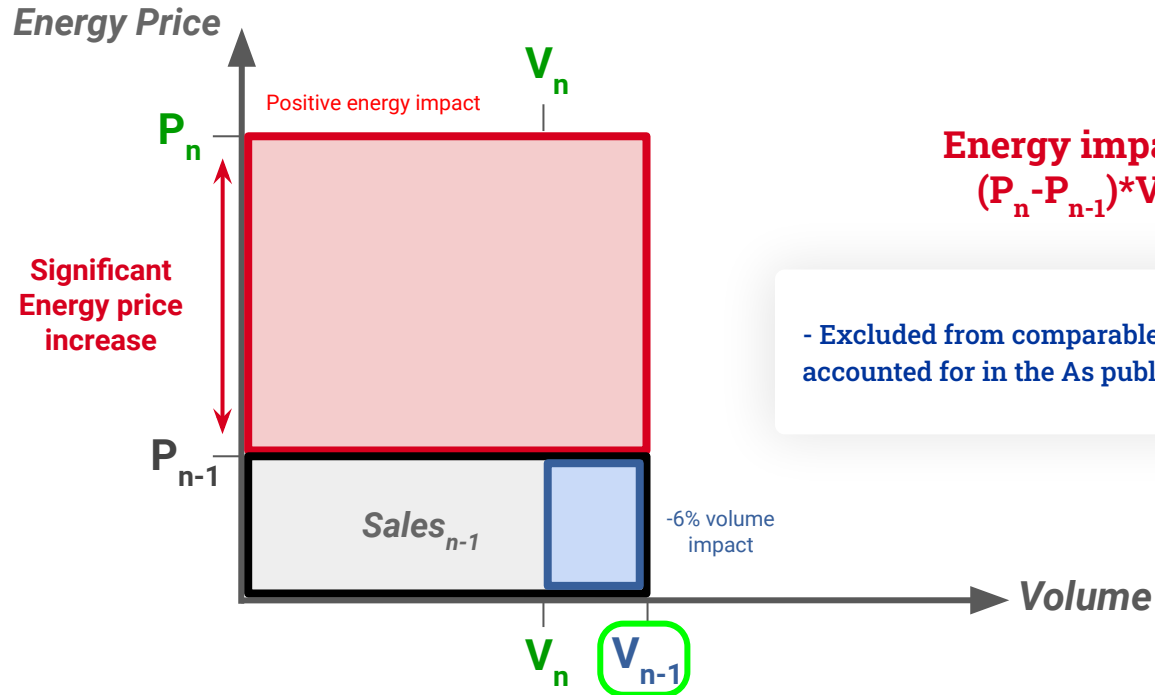
 Volume impact

 Sales Year N-1

# Significant Energy Passthrough Impact in 2022




## x10 Energy price vs. 2021

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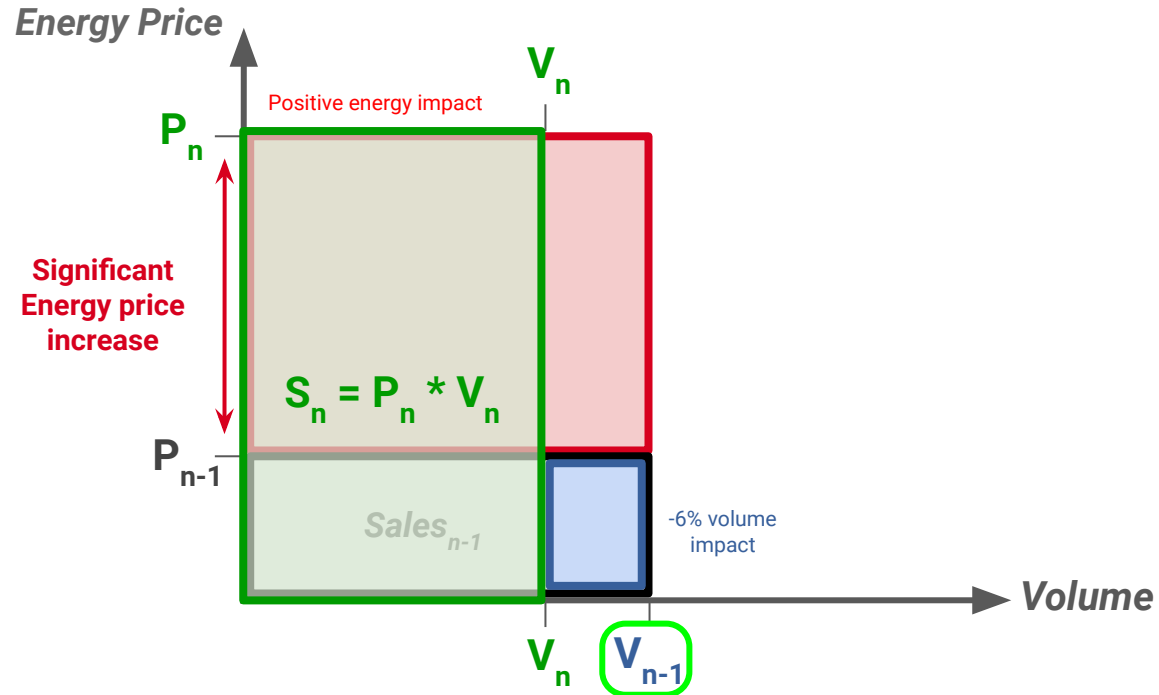
$$\text{Energy impact} = (P_n - P_{n-1}) * V_{n-1}$$

- Excluded from comparable growth, accounted for in the As published growth

-  Energy impact
-  Volume impact
-  Sales Year N-1

# Sales year N 2022

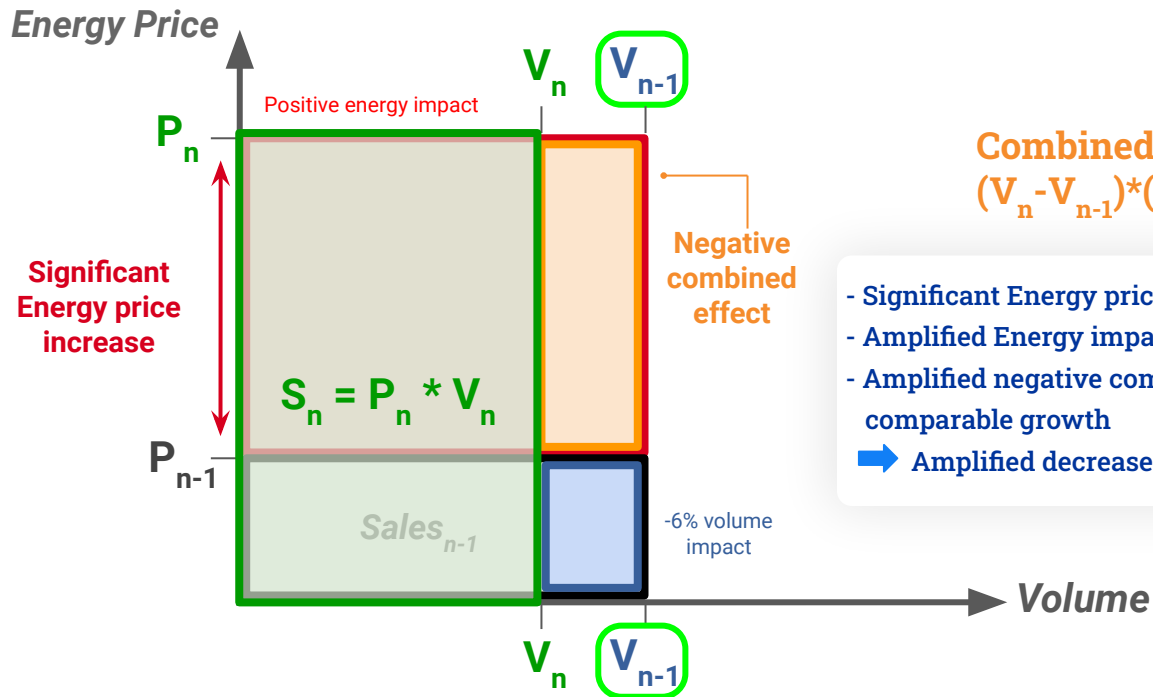
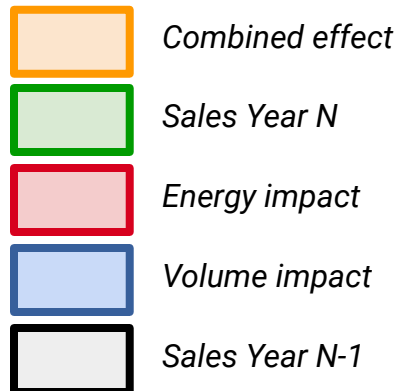
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- Sales Year N
- Energy impact
- Volume impact
- Sales Year N-1

# Significant Combined Effect In 2022

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Combined effect =  $(V_n - V_{n-1}) * (P_n - P_{n-1})$

- Significant Energy price surge
- Amplified Energy impact in as published sales
- Amplified negative combined effect in comparable growth
- ➔ Amplified decrease of LI comparable sales

# Combined Effect

$S_n$  = Sales for year N

$V_n$  = Volumes for year N

$P_n$  = Price for year N

$$\text{Energy Price Impact}^{(1)} = (P_n - P_{n-1}) * V_{n-1}$$

$$S_n = V_n * P_n = (V_{n-1} + V_n - V_{n-1}) * (P_{n-1} + P_n - P_{n-1})$$

$$S_n = V_{n-1} * P_{n-1} + V_{n-1} * P_n - V_{n-1} * P_{n-1} + V_n * P_{n-1} + V_n * P_n - V_n * P_{n-1} - V_{n-1} * P_{n-1} - V_{n-1} * P_n + V_{n-1} * P_{n-1}$$

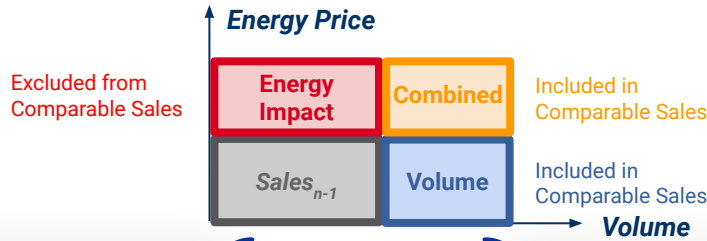
$$S_n = (P_n - P_{n-1}) * V_{n-1} + (V_n - V_{n-1}) * P_{n-1} + (V_n - V_{n-1}) * (P_n - P_{n-1}) + V_{n-1} * P_{n-1}$$

$$S_n = \text{Energy Price impact} + \text{Volume effect} + \text{Combined effect} + \text{Last Year Sales}$$

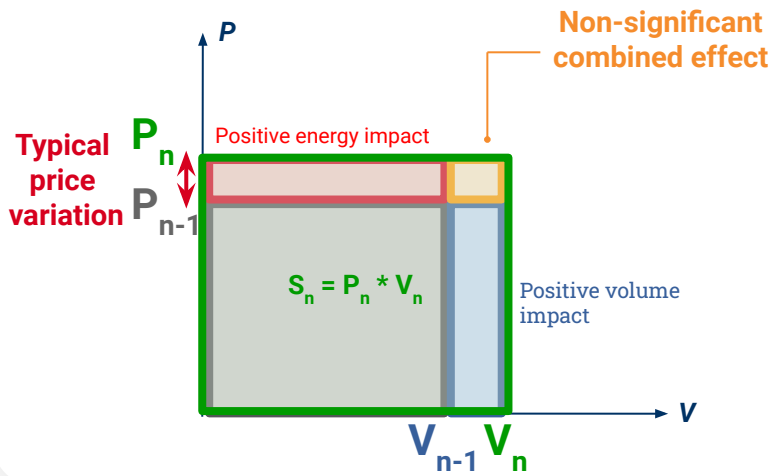
(1) Called "Energy (passthrough) impact"

# Combined Effect

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### “Normal” case



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### Exceptional Q3 2022 case

