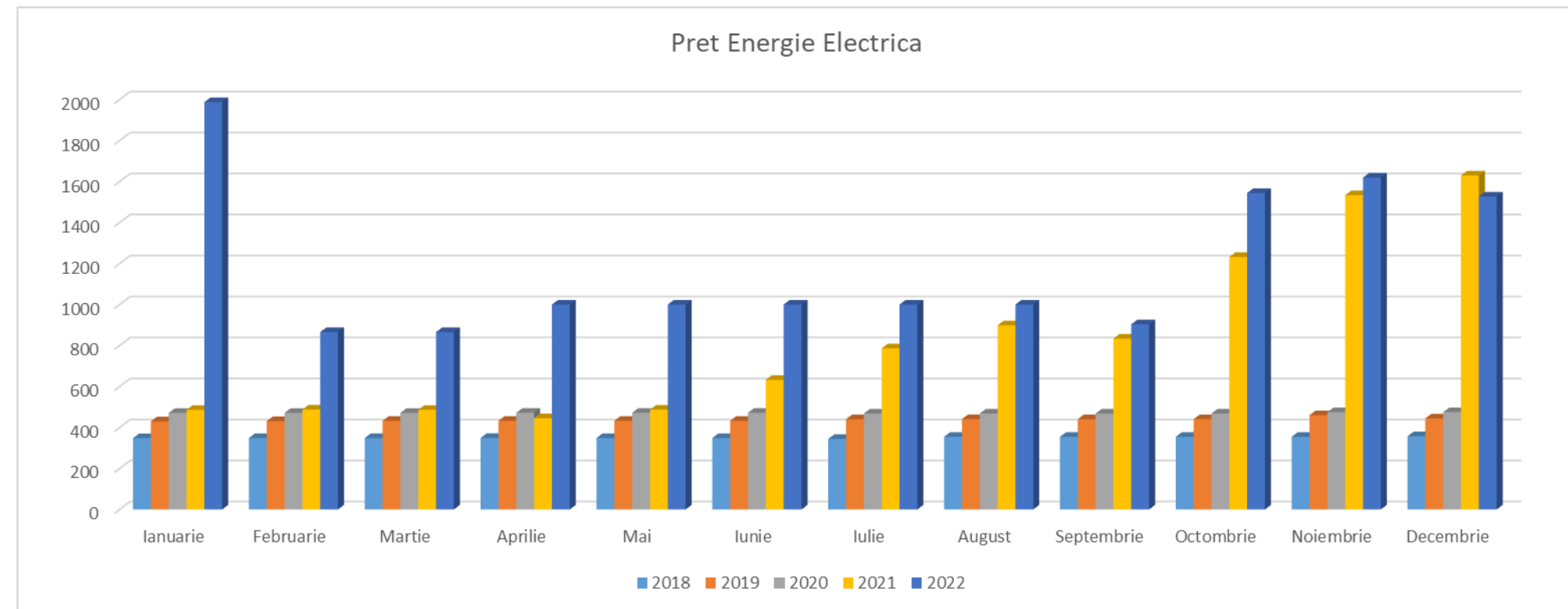
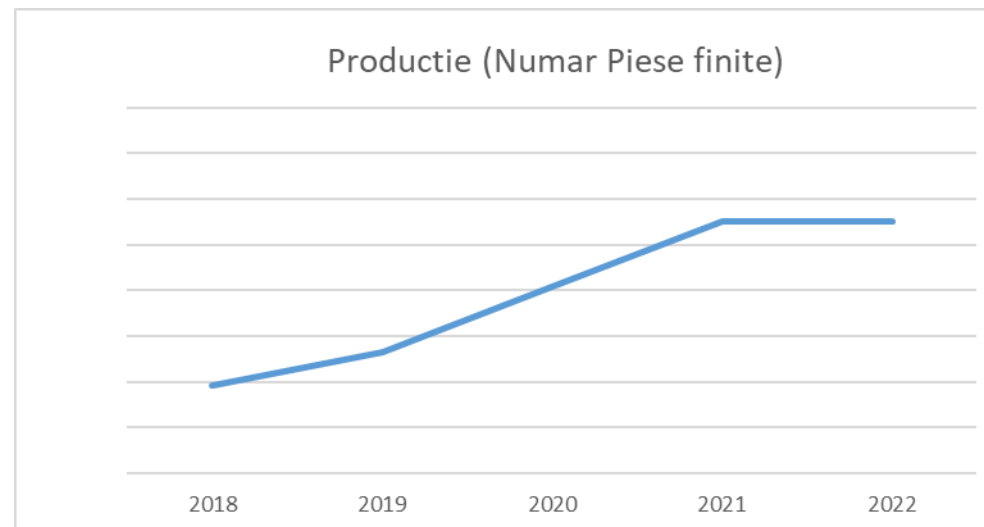
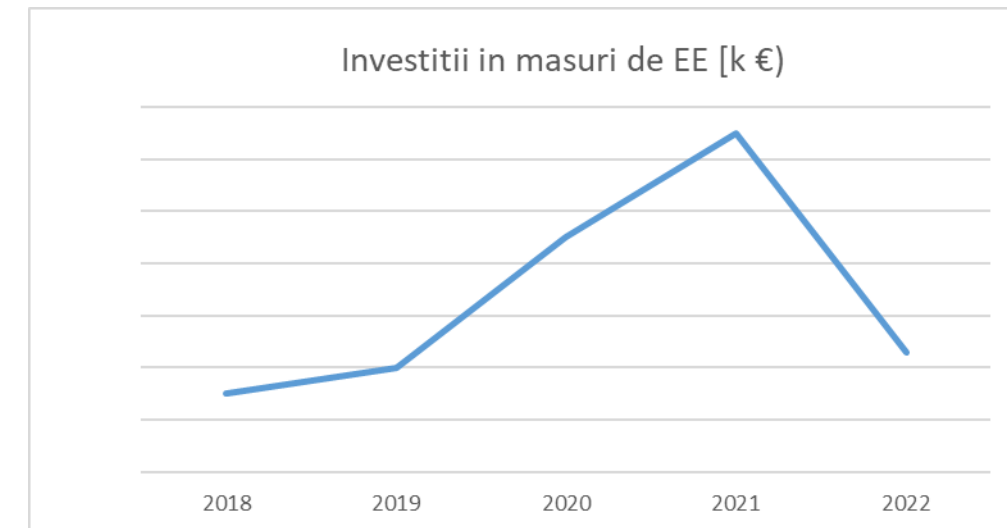
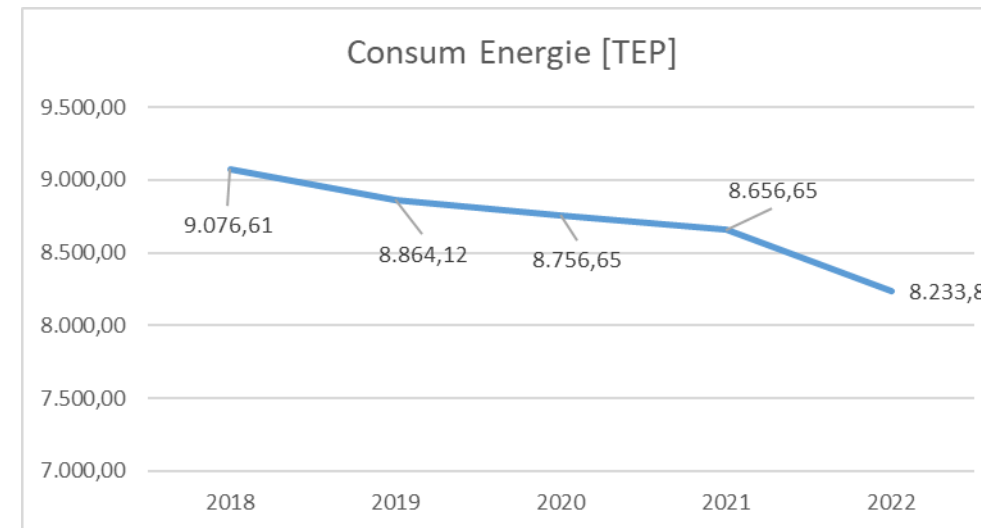
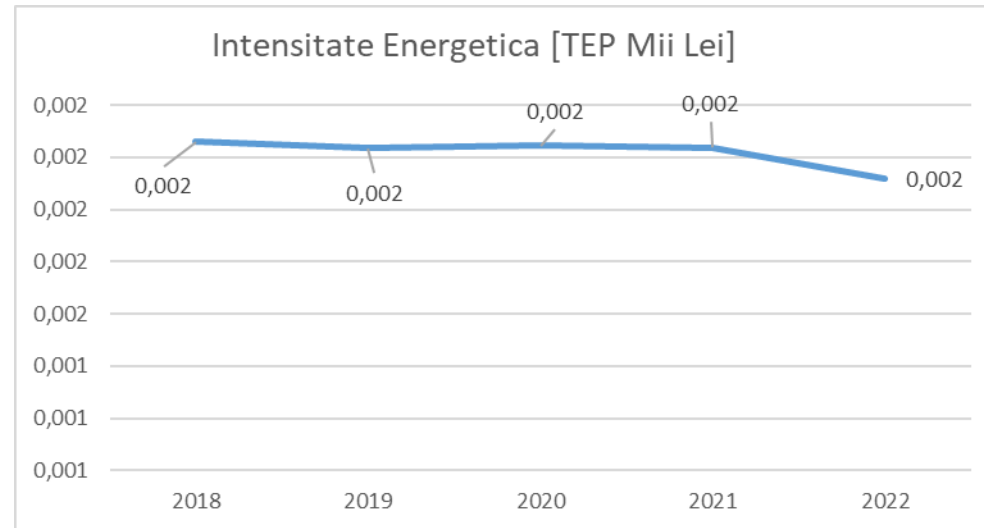




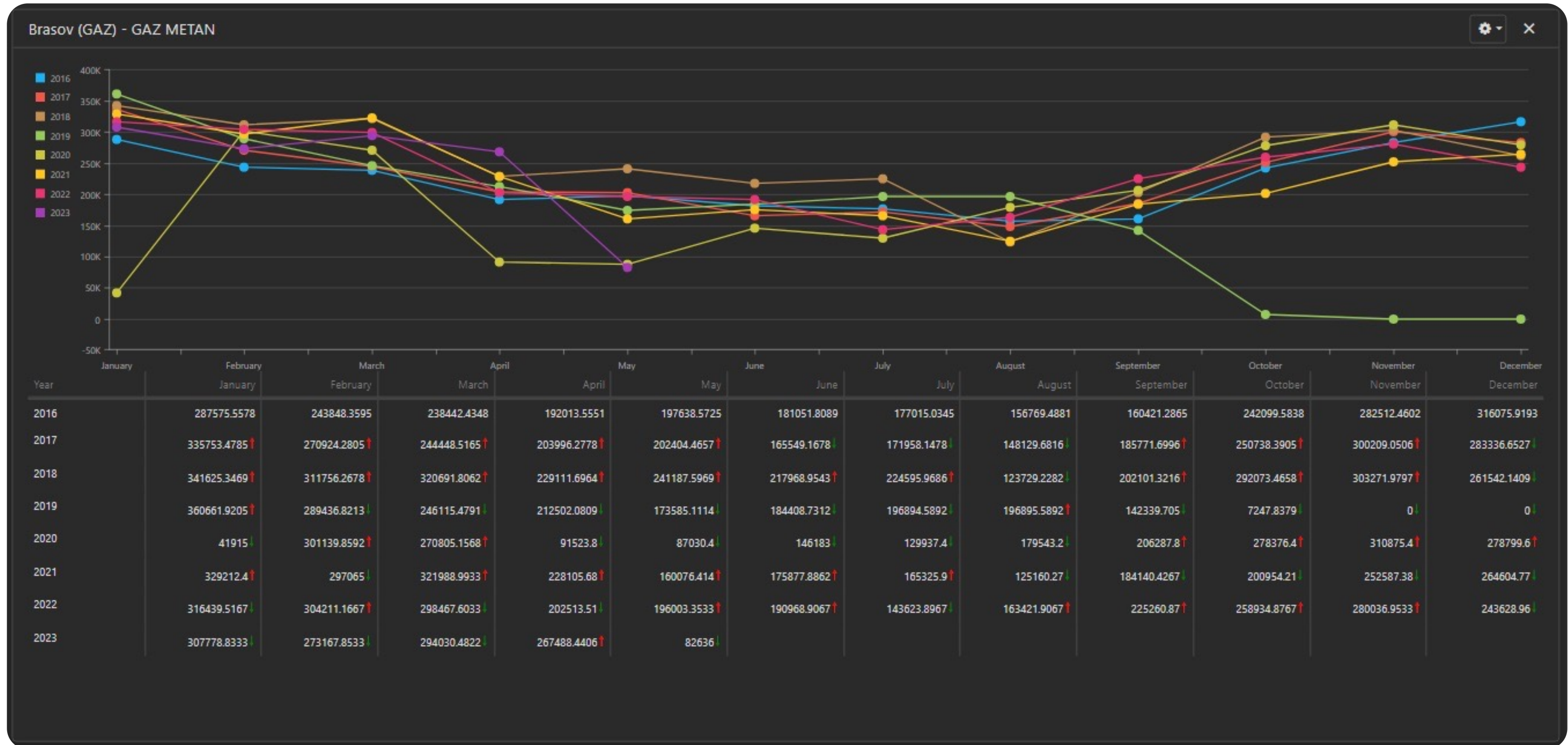
Scopul?

Studiu de Caz

Evolutia numerelor



Evolutia numerelor



Evolutia numerelor



Cum?



01. Constientizare.



02. Investitii.



03. Monitorizare



04. Actionare

01. Constientizare. Adaptarea discursului in functie de auditoriu



Financiar

- 100k economie = 200k Profit/an
- Crestere CashFlow
- Investitia de 100k = ROI de 6 luni
- Investitia de 100k = productie de 2M eur in plus
- Investind 100k economisesti salariile a 5 oameni 2 saptamani

Tehnic

- Reducere consum energetic cu 600 MWh/an
- Reducerea costurilor de mentenata cu 5%
- Reducerea downtime-ului
- Usurarea muncii si reducerea presiunii

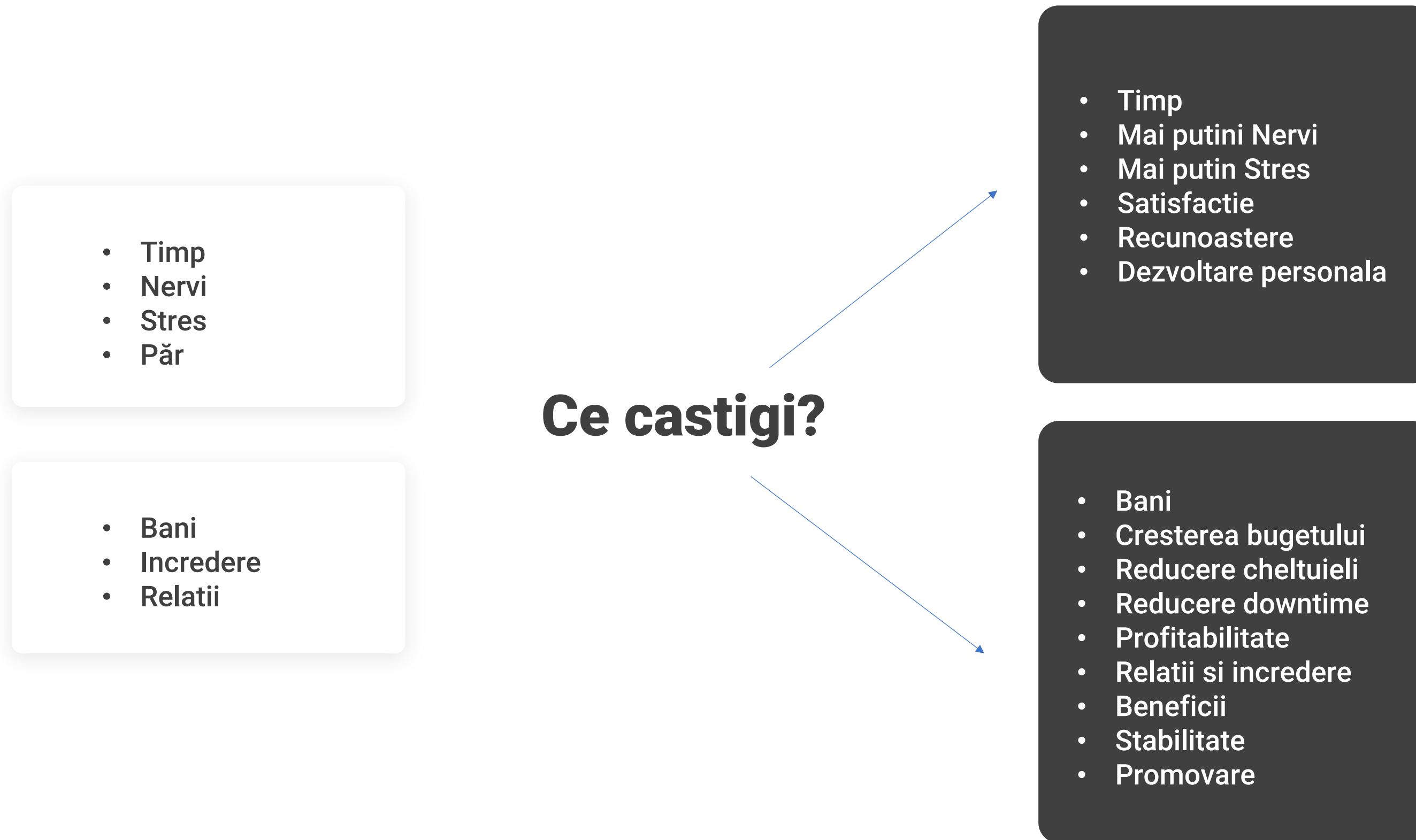
Marketing & EHS

- Reducere amprentei de CO2
- Reducerea riscului de accidente de munca
- Crestere conform operatori
- Responsabilitate sociala si sustenabilitate

Operatori

- Recunoastere
- Incredere
- Fara batai de cap
- Primeste incredere

02. Investitii.



03. Monitorizare & Actionare



1. **Ce si cat este in prezent?**
2. **Identifica oportunitate.**
3. **Actioneaza.**
4. **Urmareste si interviu.**
5. **Cuantifica.**
6. **Replica**
7. **Identifica alta oportunitate**
8. **Reinvesteste**

Exemple

1. Retrofit Iluminat

| Zona | Iluminat existent | | luminat cu LED | | Economii de energie | | | | Costuri de investitii | PSR Estimat | PSR Real |
|-------------------|-------------------------|----------------|----------------|--------------|---------------------|---------------|-----------|------------------|-----------------------|-------------|----------|
| | Nr. Corpuri de iluminat | Consum [kWh/h] | Putere | Consum | Economie | Economii [an] | | | | | |
| | | | [W] | [kWh] | [kWh] | [MWh/an] | [Lei/an] | [Euro/an] | [Euro] | [ani] | [ani] |
| Depozit | 78 | 32,90 | 205 | 15,99 | 16,91 | 64,60 | 41.987,53 | 8.534,05 | 19.500,00 | 2,285 | 2,45 |
| Productie | 341 | 29,33 | 48 | 16,37 | 12,96 | 86,82 | 56.432,09 | 11.469,94 | 22.506,00 | 1,96 | 1,56 |
| Iluminat exterior | 240 | 72,24 | 196 | 47,04 | 25,20 | 39,82 | 25.880,40 | 5.260,24 | 15.840,00 | 3,01 | 2,98 |
| | | 134,47 | | 79,40 | | 191,23 | | 25.264,23 | | | |

2. Recuperare energie din compresoare

| Compresor | Functionare | Putere | Pret Gaz | Δ | Debit | Investitie | Economii (an) | | PSR real |
|----------------|-------------|--------|----------|----------|-------|------------|---------------|----------|----------|
| Tip | h/an | kW | €/mc | | mc/h | € | Estimat € | Real € | Ani |
| Kaeser DSD238T | 8000 | 118 | 0,30 | 55 | 1,84 | 39060,00 | 32101,20 | 29185,00 | 1,34 |

Exemple

3. Monitorizare si eliminare pierderi aer comprimat

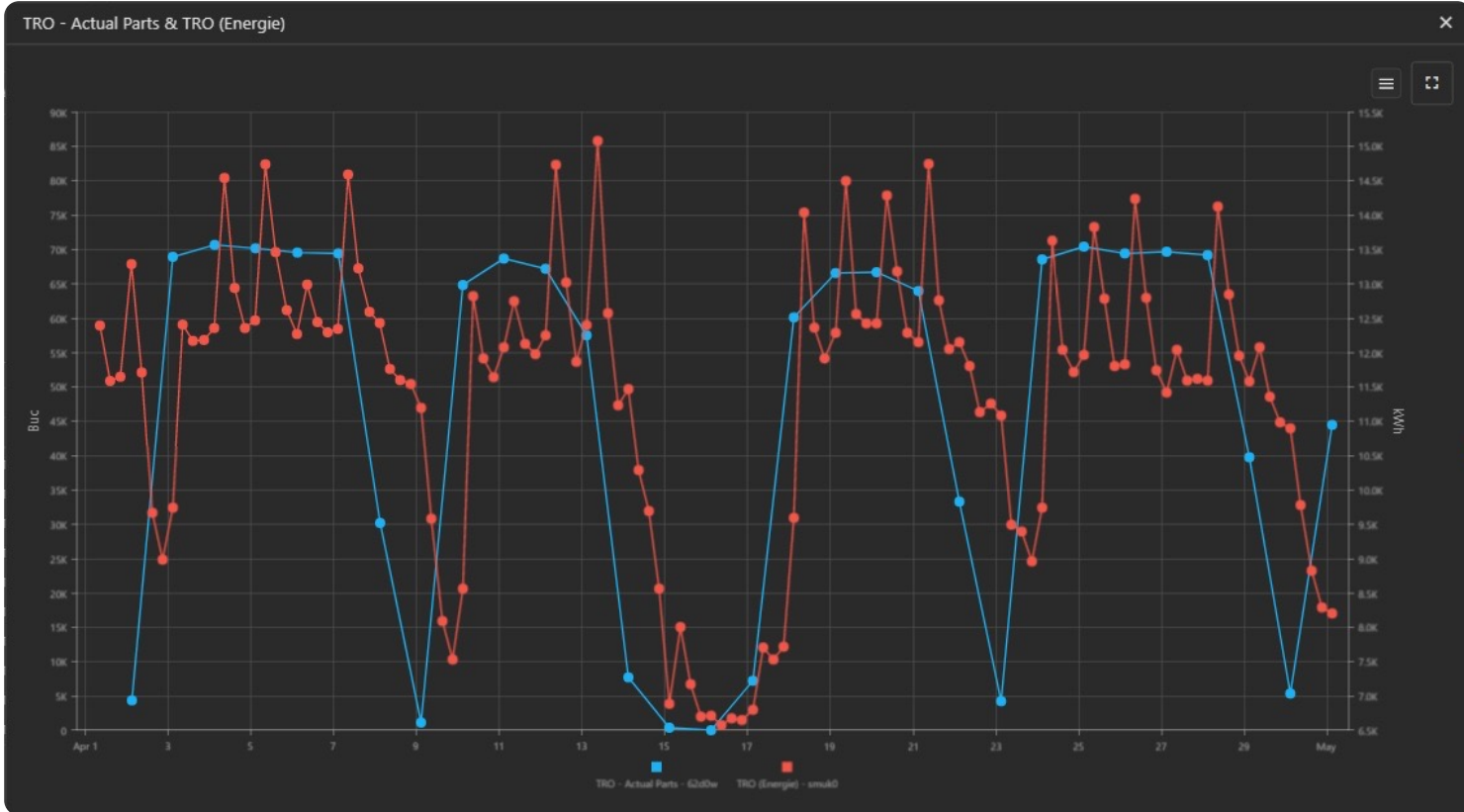
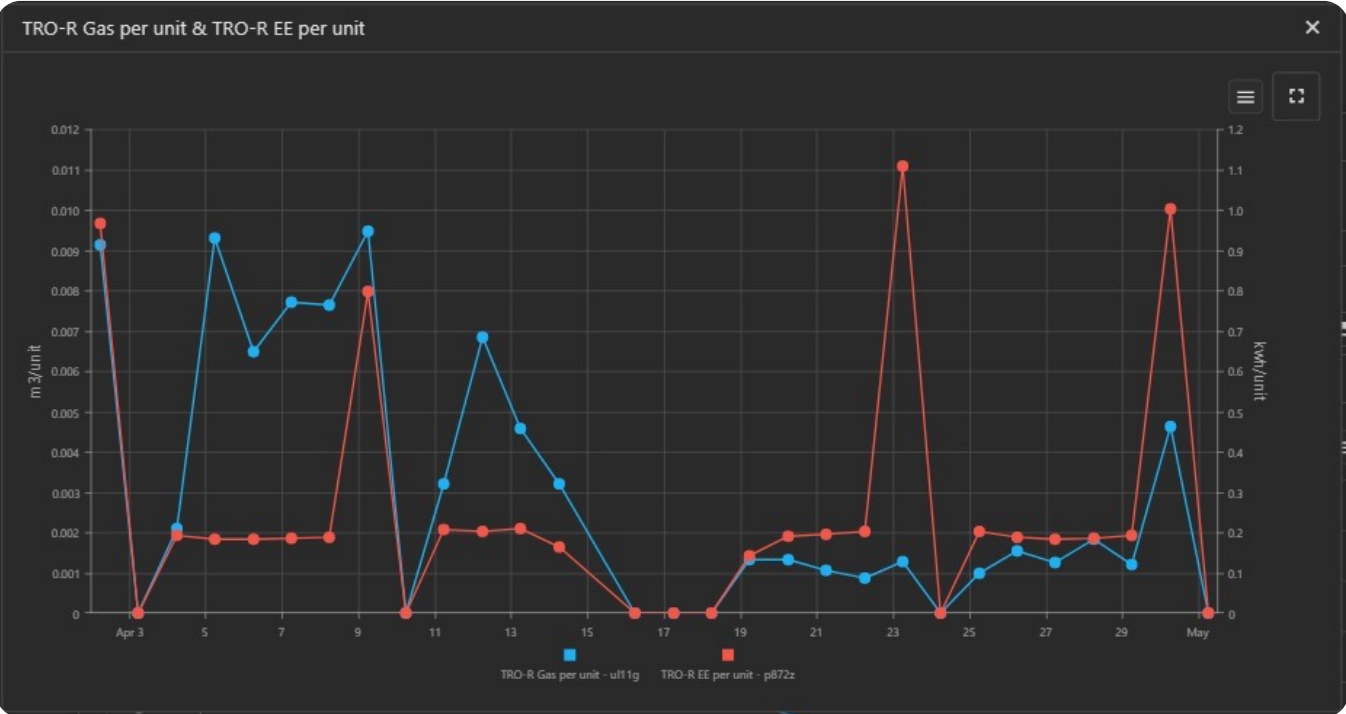
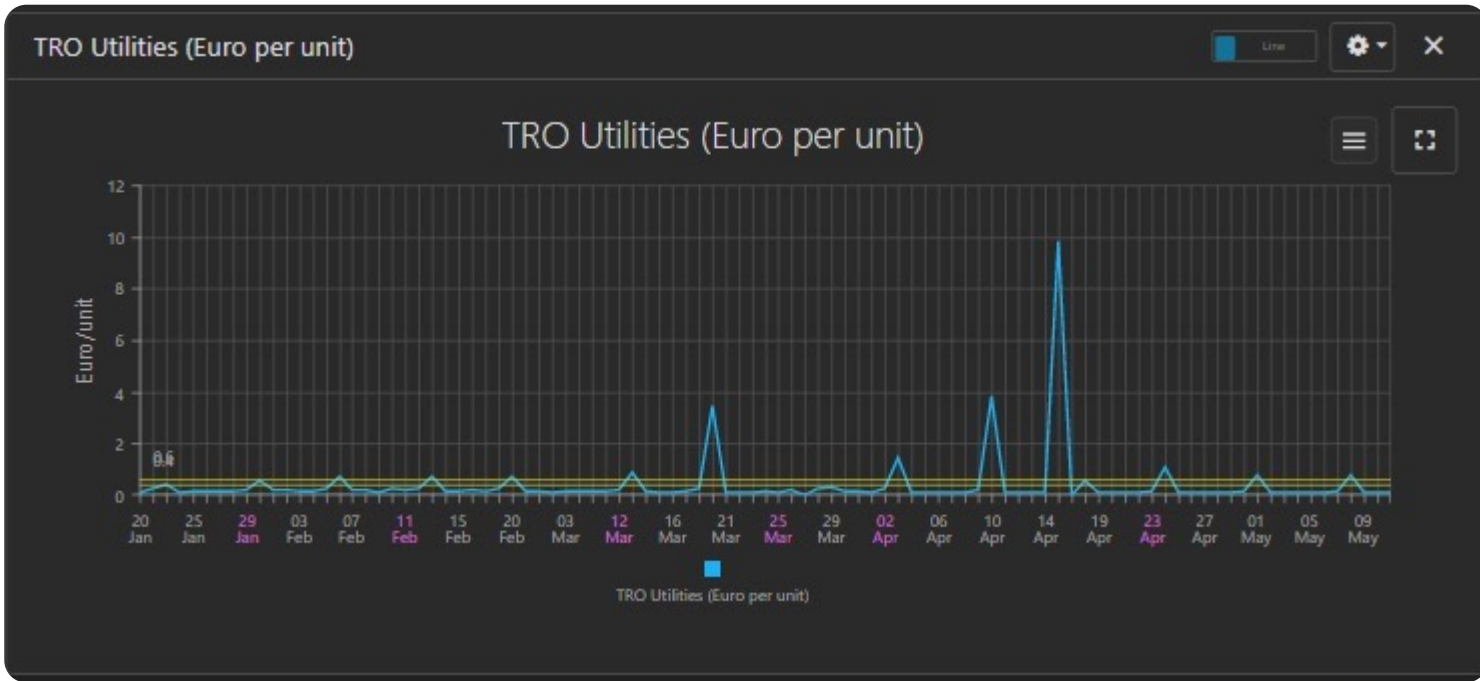
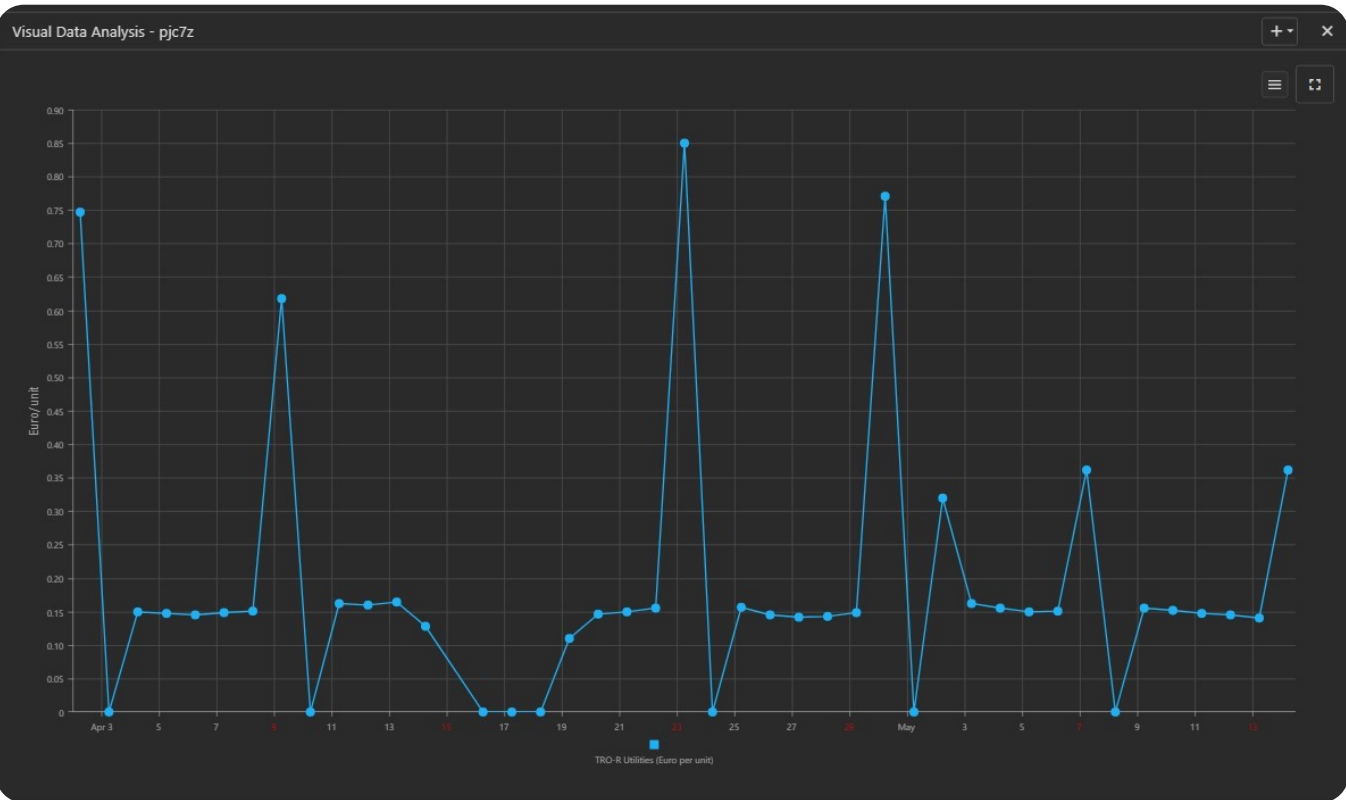
| Statie | Consum specific | Pierderi volumetrice identificate | Pret EE | Consum acoperire pierderi aer | Pierderi | Economii |
|--------------|-----------------|-----------------------------------|---------|-------------------------------|----------|------------------|
| | kWh/Nmc | Nm3/h | €/MWh | kWh | €/h | €/an |
| Statie 1 | 0,162 | 118 | 162,60 | 19,12 | 3,11 | 24.866,34 |
| Statie 2 | 0,168 | 78 | 162,60 | 13,10 | 2,13 | 17.045,85 |
| Statie 3 | 0,198 | 98 | 162,60 | 19,40 | 3,16 | 25.240,98 |
| Statie 4 | 0,155 | 46 | 162,60 | 7,13 | 1,16 | 9.274,80 |
| Total | | | | | | 76.427,97 |

4. Inlocuire compressor aer comprimat cu probleme

| Compresor | Consum Energie | Debit Aer | Consum specific | Functionare | Pret EE | Consum EE | Cost per mc aer produs | Debit necesar | Cost cu EE actual | Consum specific compresor nou | Investitie | Cost cu EE compresor nou | Economii | PSR |
|-------------|----------------|-----------|-----------------|-------------|---------|-----------|------------------------|---------------|-------------------|-------------------------------|------------|--------------------------|-----------|------|
| | kWh | Nm3/h | kWh/Nmc | h/an | €/MWh | MWh/an | €/Nm3 | Nm3/h | €/an | kWh/Nmc | € | €/an | €/an | ani |
| Compresor 2 | 81,4 | 435,2 | 0,187 | 6000 | 162,60 | 488,40 | 0,030 | 600,00 | 79.414,63 | 0,120 | 50.000,00 | 73.170,00 | 29.414,63 | 1,70 |

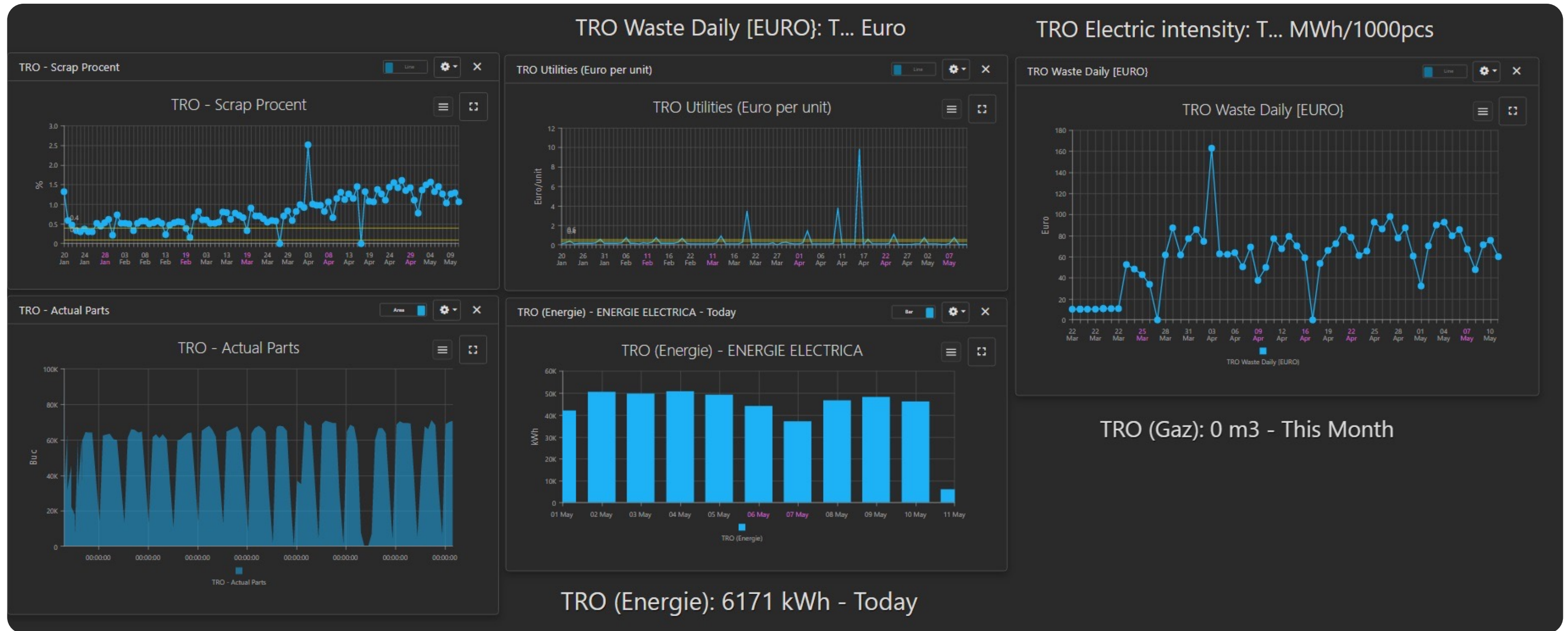
Exemple

4. Monitorizare si reducere cost specific per unitatea de produs



Exemple

5. Reducere procent scrap

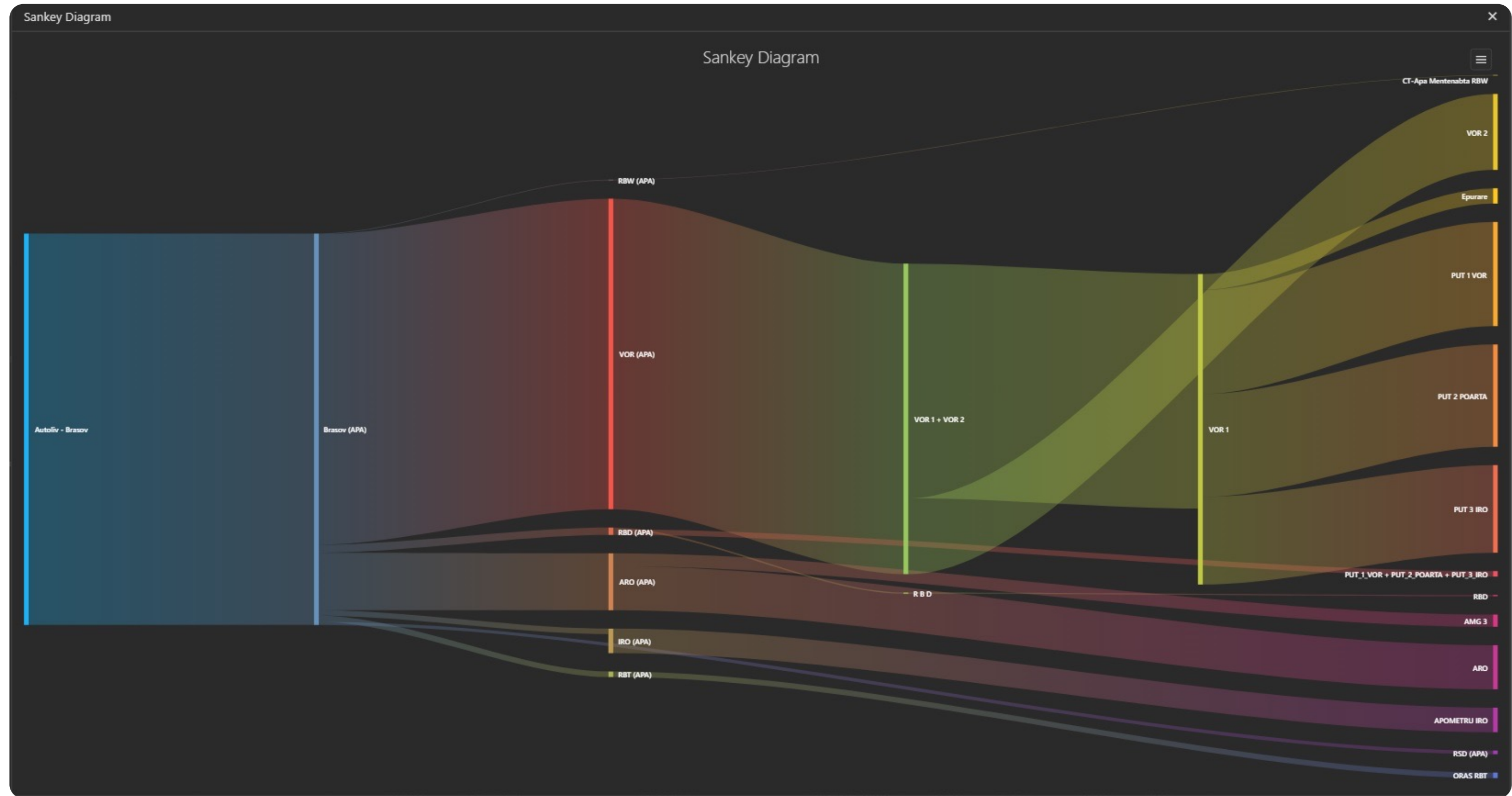


Exemple

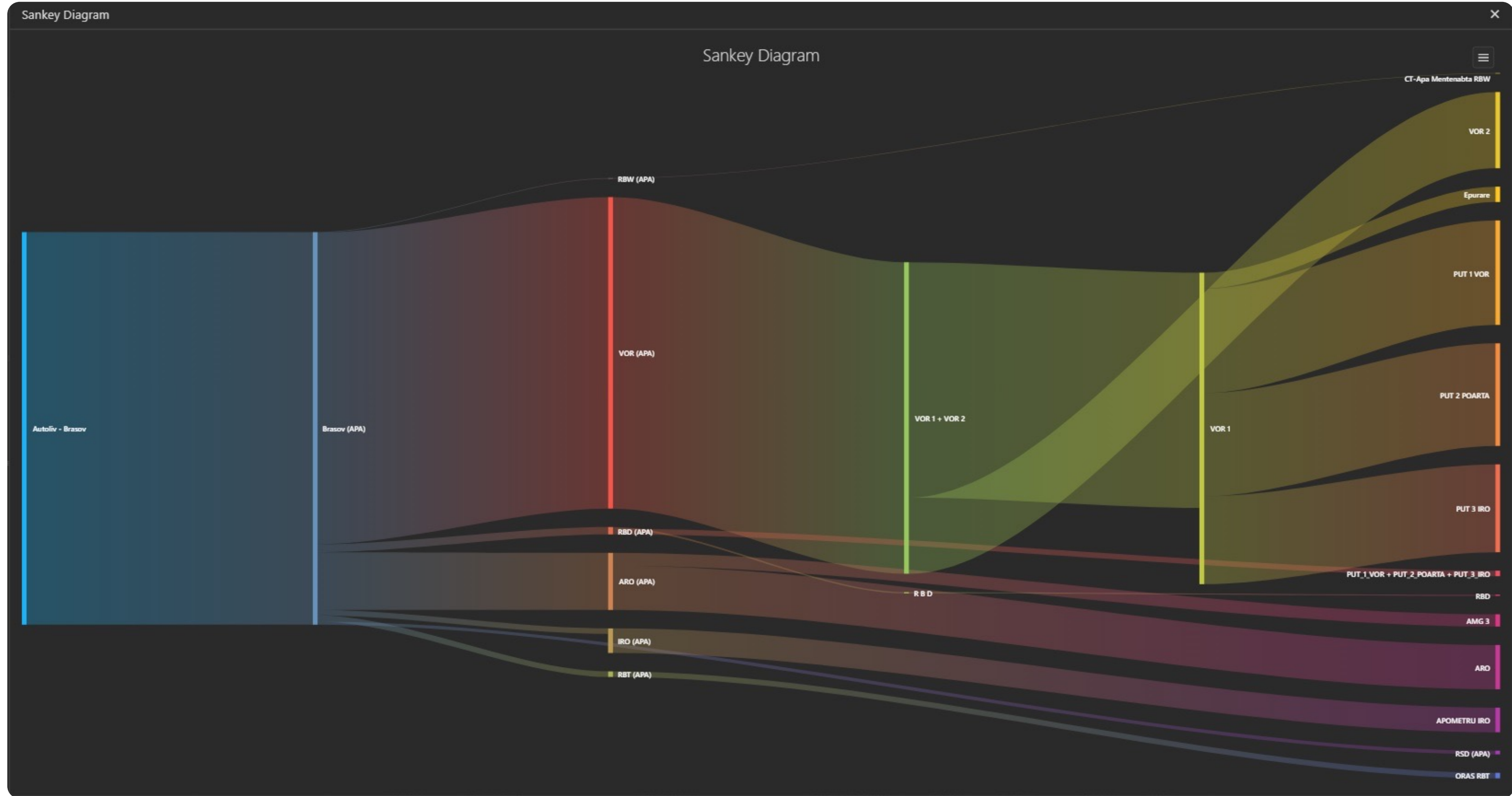
6. Identificare alte surse de economii



Exemple

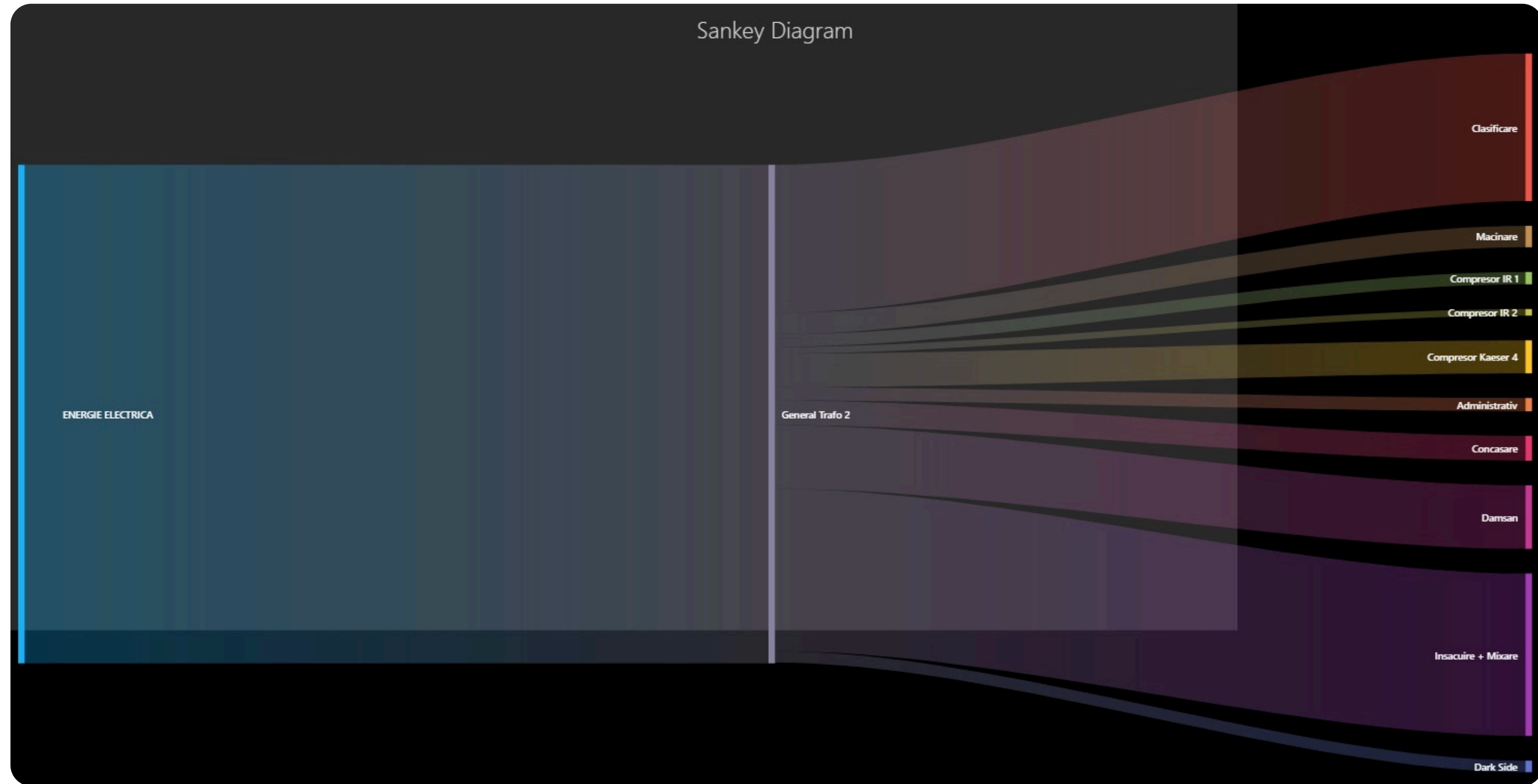


Exemple



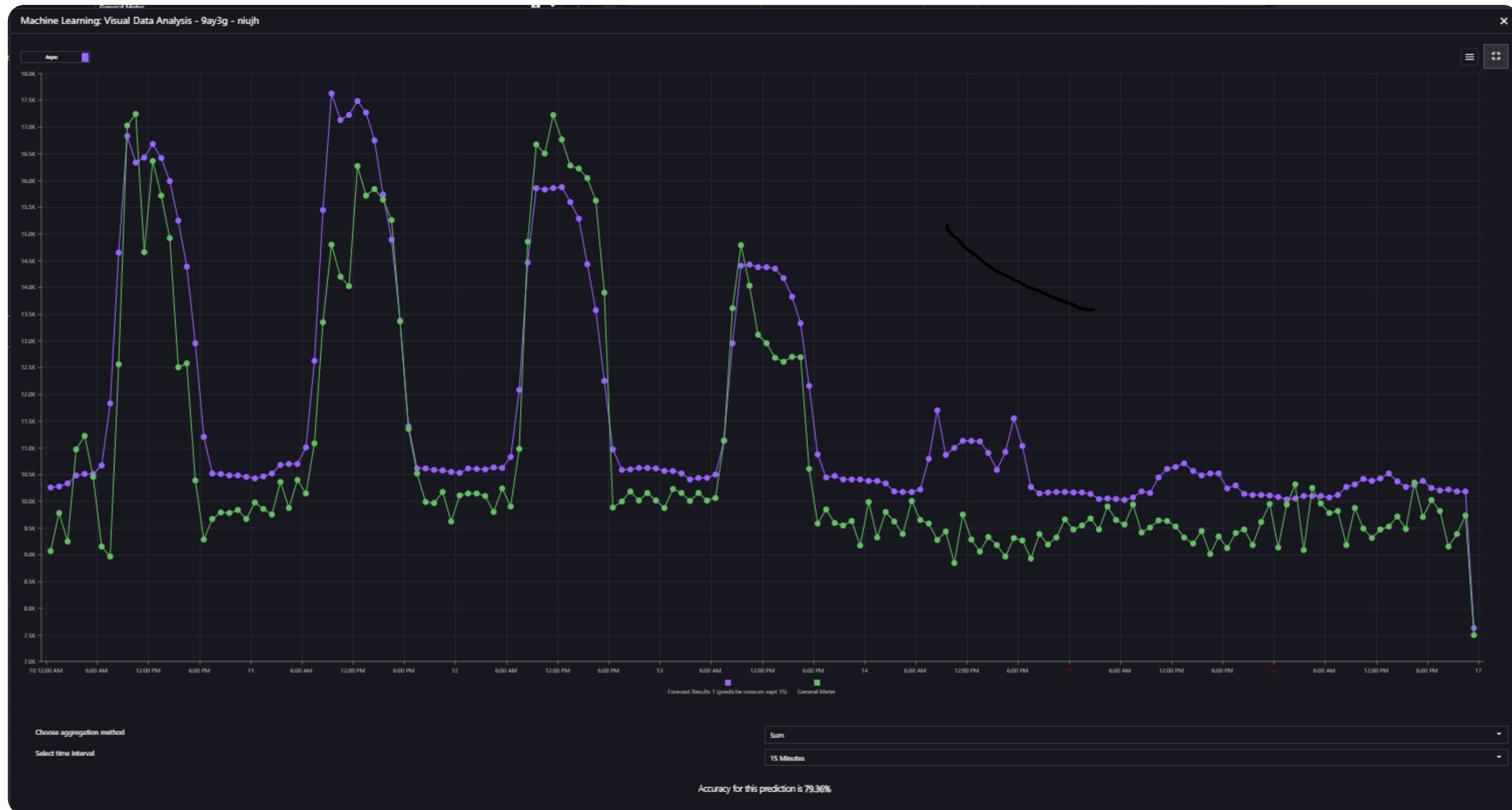
Exemple

8. Formarea obiceiului de a verifica si identifica usor abaterile



Exemple

9. Predictia consumului si negocierea preturilor





Q&A