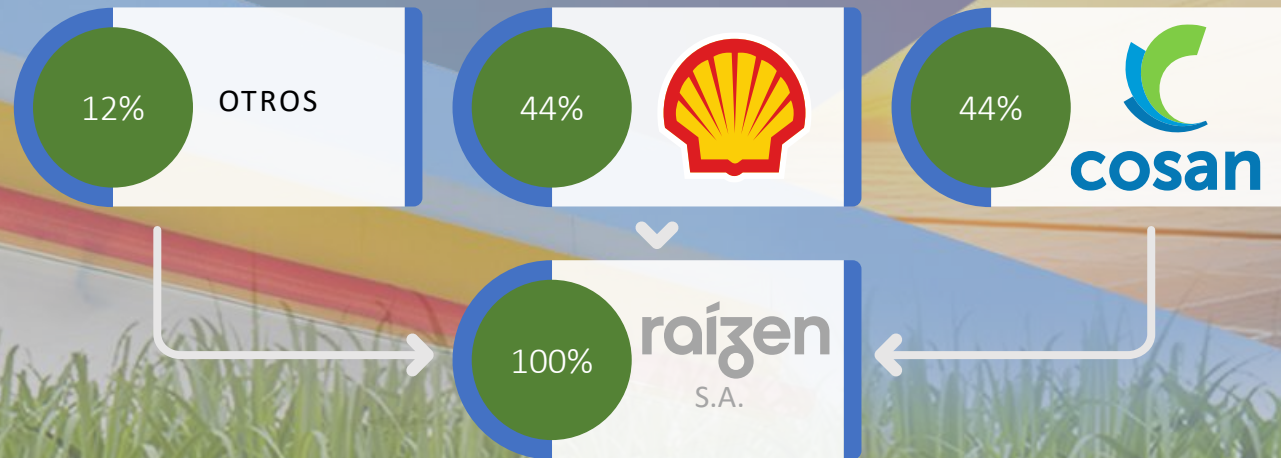




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Una empresa **integrada de energía**




35 Parques de Bioenergía

#2 Distribuidora de Combustibles  

105 Capacidad Procesamiento Biomasa
MM TON

#1 Distribuidora de Combustibles 

1.5 Capacidad Generación Eléctrica
GW

#1 Distribuidora de Etanol en 

+8000 Estaciones de Servicio

+1.5 Shell Select Stores
MIL

+50 millones de clientes atendidos en el año [B2B2C]

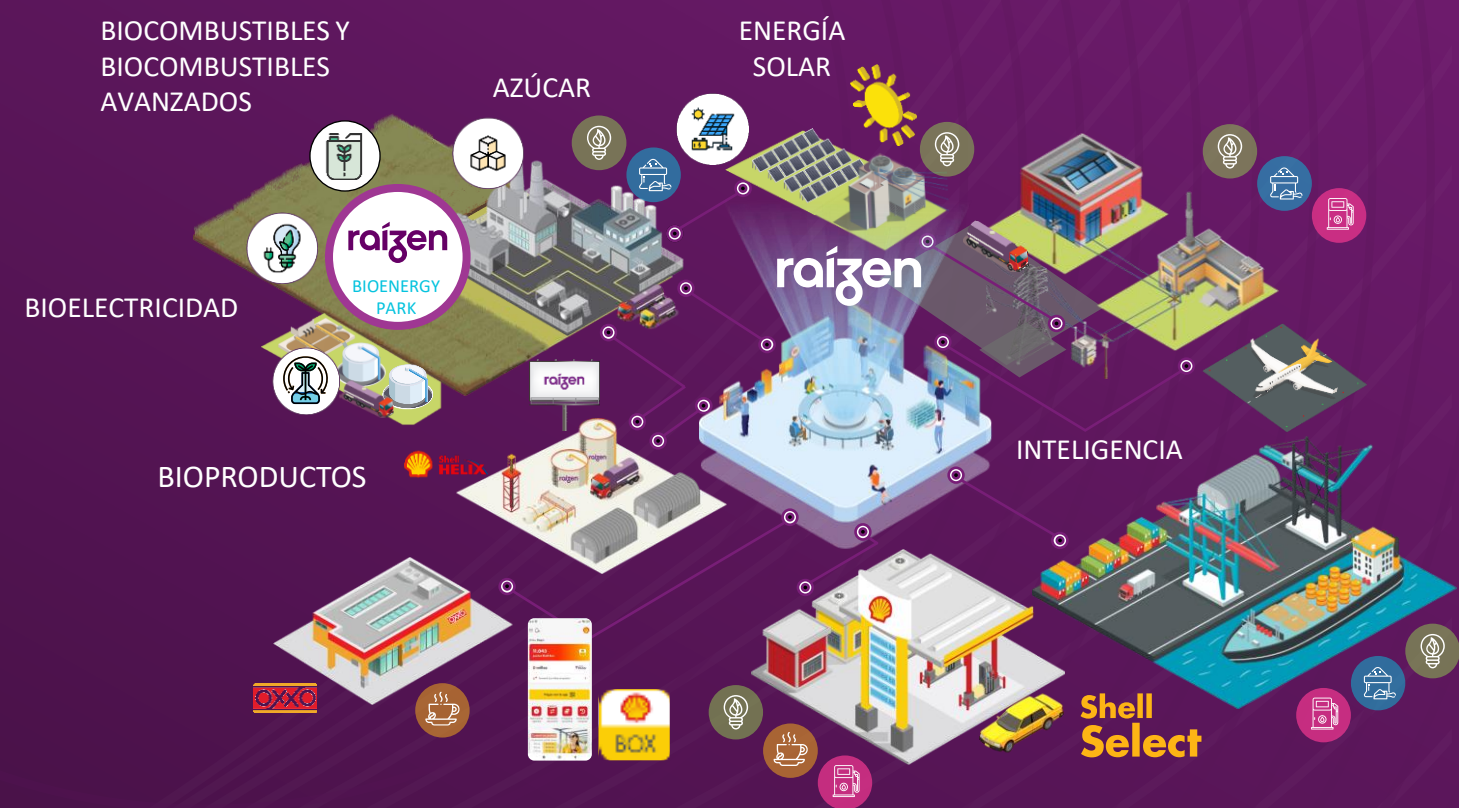
+5K Clientes B2B a nivel Mundial



+ 46.000 colaboradores

SEGMENTOS DE NEGOCIOS

 Azúcar & Renovables
  **Movilidad**
 Power (Electricidad)
  Trading



Challenges of co-processing in Diesel Hydrotreater



ROADMAP

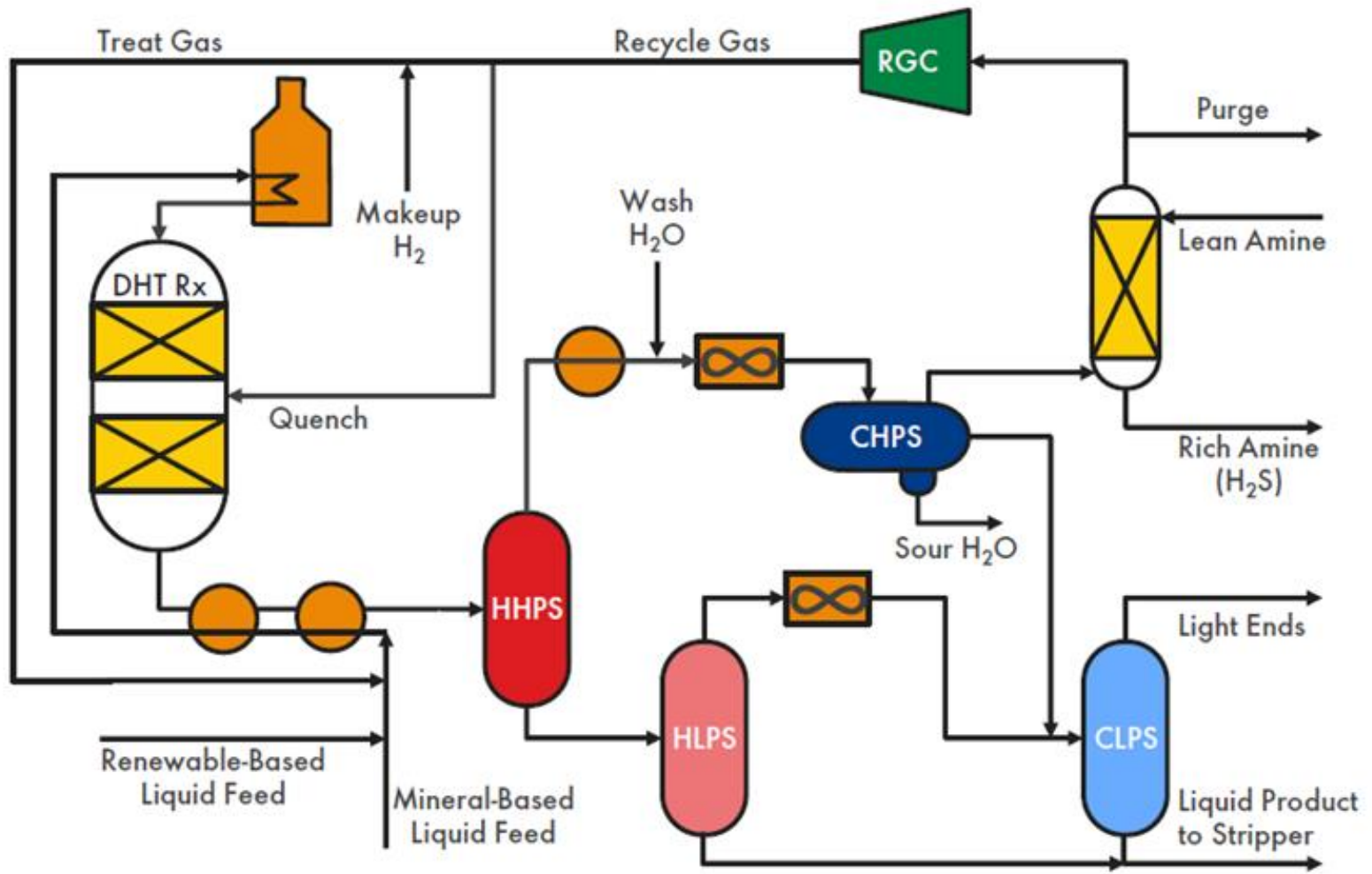




RISK ASSESSMENT

- Reactor**
- Reactions
 - Yield/H₂
 - Propane
 - Catalyst

- Feed**
- Storage
 - FFA
 - Fouling



- Gas Loop**
- Light Ends
 - ppH₂
 - RGC

- General**
- Corrosion
 - H₂O Dew Pt
 - Amine Scrub.
 - S Recovery

- Product**
- Cold flow properties



> TEST RUN - RESULTS



ACHIEVEMENTS

- > Co-processing 2- 6% @ high S mode & ULSD
- > Diesel product quality.
- > Renewable feed supply and logistics

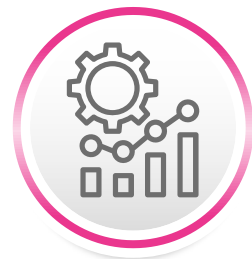


LEARNINGS

- > More sample points
- > Corrosion risk: mitigation
- > Feed rate & cracked material



NEXT STEPS



01

CURRENT
SITUATION



- Learning
- Test runs

02

MONITORING
& EVALUATION



- Risk assesment
- Product quality check

03

PROJECT
PROPOSAL



- Facilities
- Logistics
- Unit revamp

04

BUSINESS
IMPACT



- Certification
- New markets



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