





















WHO WE ARE



Novandi is a 100% family owned company, 3rd generation













MULTIMODAL SERVICES

Transport & handling of containers









General services



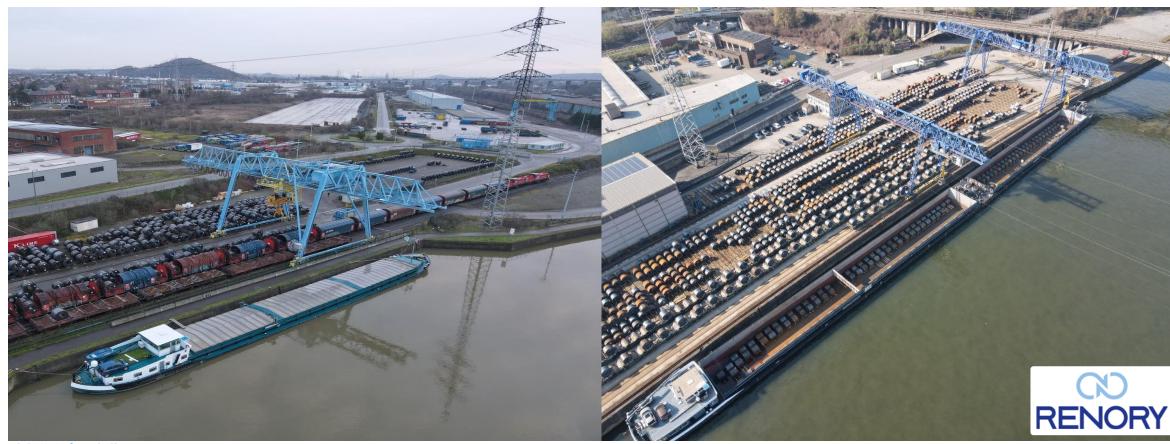


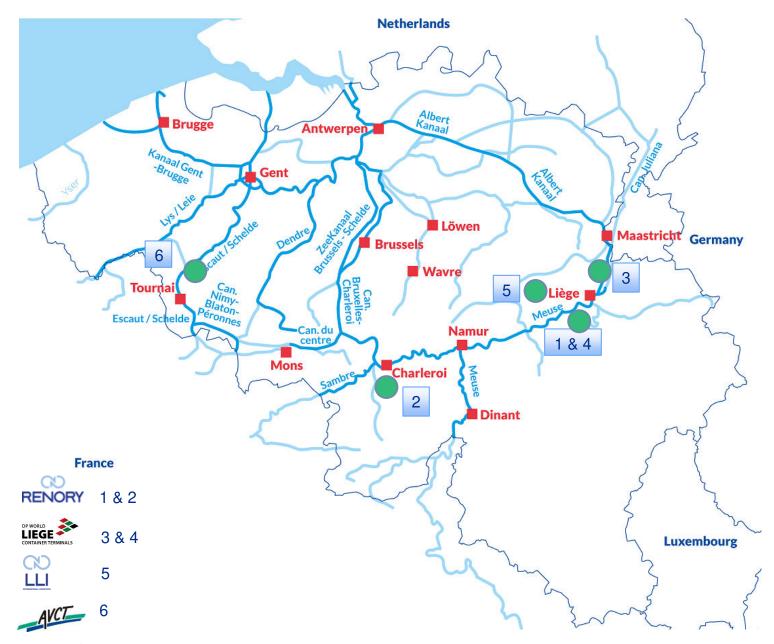
LOGISTICS SERVICES
Handling & storage; water, rail & road transport,

On-site industrial services



Breakbulk Terminals





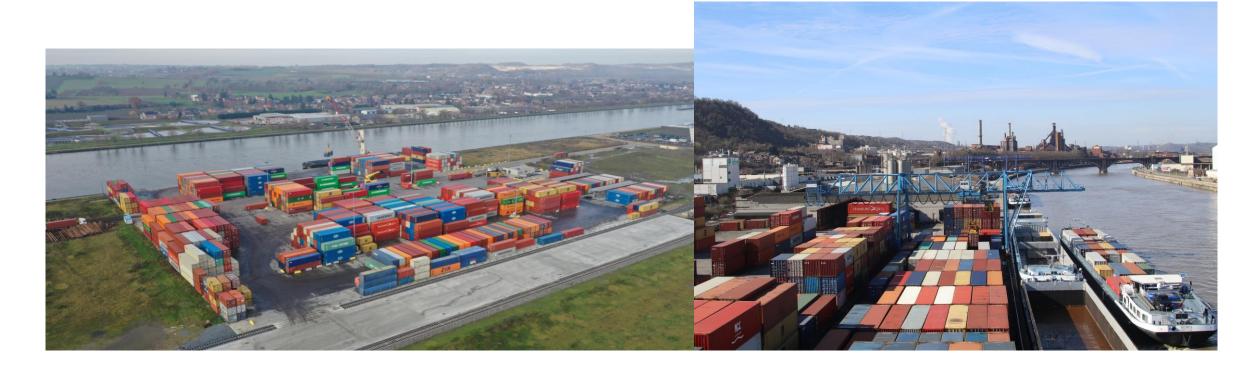
OUR BUSINESS
RIVER TRANSPORT
BETWEEN ANTWERP
OR ROTTERDAM AND
OUR TERMINALS IN
BELGIUM



CCNR Présentation



CONTAINER TERMINALS



OUR INLAND VESSELS

- ▶ 110M X 11,40M
- ► MANAGED WITHIN GROUP
- OWN STAFF
- BOTH BREAKBULK AND CONTAINER TRANSPORT
- ► REGISTERED IN BELGIUM





HOW WE CALCULATE RATES — MOST IMPORTANT FACTOR = CHARTER COST

- ► CHARTER COSTS: WE PAY CHARTERS A FIXED RATE, 24/7 OR 18/6 OR ANY OTHER AGREEMENT AS NEEDED/DESIRED
 - OWN VESSELS ARE IN SEPARATE COMPANY, WE CHARTER IN-HOUSE
 - CHARTER COSTS BASED ON DEPRECIATION, MAINTENANCE, STAFFING, OPERATIONAL COSTS, GENERAL SUCH AS FINANCING COSTS, INSURANCE AND MANAGEMENT COSTS
- ► ADD-ON COST: FUEL/LUBRICANTS
- COST FOR LOCKS, NAVIGATION RIGHTS, ETC

Sales rates for container transport

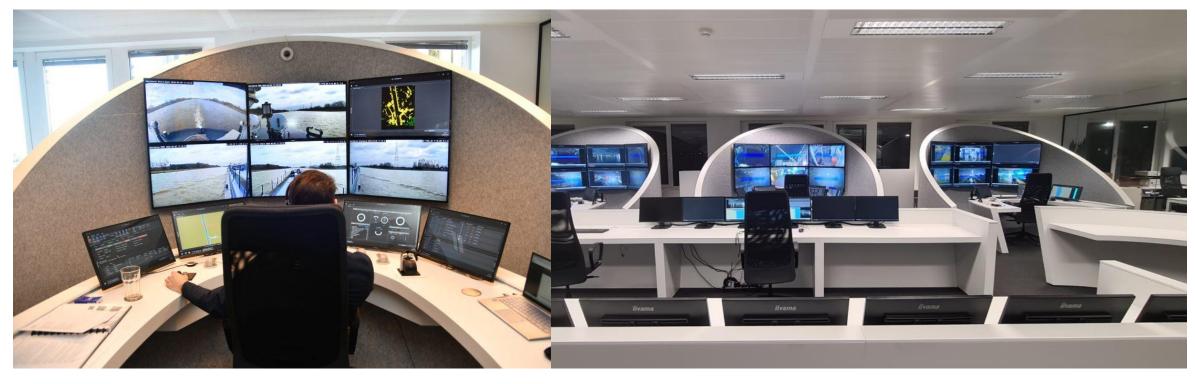
- OUR SALES RATES WITHOUT FUEL COSTS ARE BASED ON:
 - EXPECTED FILL RATES ON REGULAR COMMERCIAL RELATIONS, MOST COMMON IS
 ANTWERP LIEGE OR ROTTERDAM
 - ► IMPORT CONTAINERS ARE MOSTLY LIGHT WEIGHT AND 40' HC, SO AIR DRAFT IS THE LIMITING FACTOR FOR SHIP LOADING
 - EXPORT CARGO AVERAGE WEIGHT IS SUBJECT TO STRONG VARIATIONS: LIMITING FACTOR CAN BE WATER DRAFT
 - ► STEEL EXPORT IN 20' HT
 - ► WOOD LOGS IN 40' DV
 - NO ISSUES REGARDING WATER LEVEL ON CANAL/RIVERS ON OUR REGULAR ROUTES

How to reduce costs?

- ► FUEL: TRAINING OF STAFF
- ► GOOD PREVENTIVE MAINTENANCE
- CREWING:
 - ► REMOTE CONTROL
 - ► NO MASTER
 - ▶ 24/7 OPERATION
- CONVOY IF POSSIBLE



REMOTE CONTROL OF OUR VESSELS



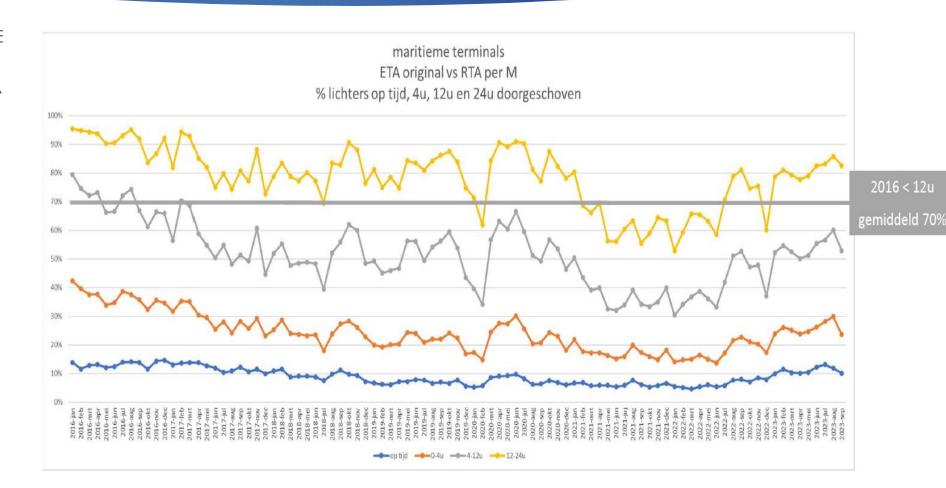
OUR EXPERINCE SINCE 2020

- OWN VESSELS FULLY REMOTE CONTROLLED
- BETWEEN LOCKS SHIPS NAVIGATE AUTONOMOUS
- ONE MASTER CONTROLS MULTIPLE SHIPS
- ► CAMERA CONTROLLED, 5G + SATELLITE BACK-UP
- SAFE MODE IF COMMUNICATION IS LOST
- FULLY APPROVED IN BELGIUM
- ► IMPACT:
 - COST SAVINGS
 - CHANGED HIERARCHY ON BOARD
 - FAMILY LIFE, LESS WORKING DAYS LOST



TRENDS IN CONTAINER BARGING - CONGESTION

- CONGESTION AT MARITIME TERMINALS LEADS TO LONG STAYS IN PORT AREA
- MIMIMUM CALL SIZES MAY FURTHER INPACT TOTAL COSTS
- CONGESTION ALSO LEADS TO NEGATIVE IMPACT ON SOCIAL LIFE OF CREW/FAMILY
- PROFESSION LESS ATTRACTIVE, DIFFICULT TO FIND STAFF



CCNR Présentation

COMPETITION FROM OTHER MODES

- New weights and dimensions directive for road transport to be approved soon. The long and heavy road trucks may become "normal" in EU, +4T?
- THE NEW CTD FOR INTERMODAL RAIL TRANSPORT IS ALSO TO COME NOT CLEAR WHAT WILL BE IN IT PUBLICATION EXPECTED SOON
- ENVIRONMENTAL ADVANTAGES OF INLAND WATERWAYS WILL REDUCE COMPARED TO TRUCK AS THE ROAD SECTOR IS PROGRESSING RAPIDLY WE FACE CHALLENGES:
 - ROAD INVESTMENT IS FOR 3 TO 5 YEARS LIFESPAN
 - ▶ VESSELS IS LONG TERM INVESTMENT, SO TECHNOLOGY MAY BE RELATIVELY "OLD"
 - PROFITABLE, IWW IS MAINLY PRIVATE INVESTMENT, NO OR NEARLY NO SUBSIDIES AND NO SAFETY NET (DB AND SNCF SUFFER HEAVY LOSSES IN FREIGHT SECTOR)

NEXT STEPS



A 5 MW ELECTROLYSER IS TO BE BUILT IN THE PORT OF LIÈGE, ON THE RENORY SITE. THE PRODUCTION UNIT WILL MEET THE DECARBONISATION NEEDS OF THE AREA'S LOGISTICS ACTIVITIES.



THE HYDROGEN PRODUCED LOCALLY WILL POWER OUR VESSELS WHICH PROVIDE A LINK BETWEEN THE PORT OF LIÈGE AND THE PORT OF ANTWERP. THE PROJECT INVOLVES MODIFYING THE MOTORISATION OF THE VESSELS, AS WELL AS THE NECESSARY ADAPTATION OF THE FUEL STORAGE.

ADAPT/REPLACE THE MOTOR OF OUR VESSELS TO RUN ON H²

ROAD
HAULAGE
WILL BE ON
H² AS WELL



A REFUELLING STATION FOR ROAD MOBILITY APPLICATIONS WILL ALSO BE BUILT ON THE RENORY SITE. THE STATION HAS BEEN DESIGNED TO SUPPLY HEAVY MOBILITY APPLICATIONS (350 BAR).



Thank you!

