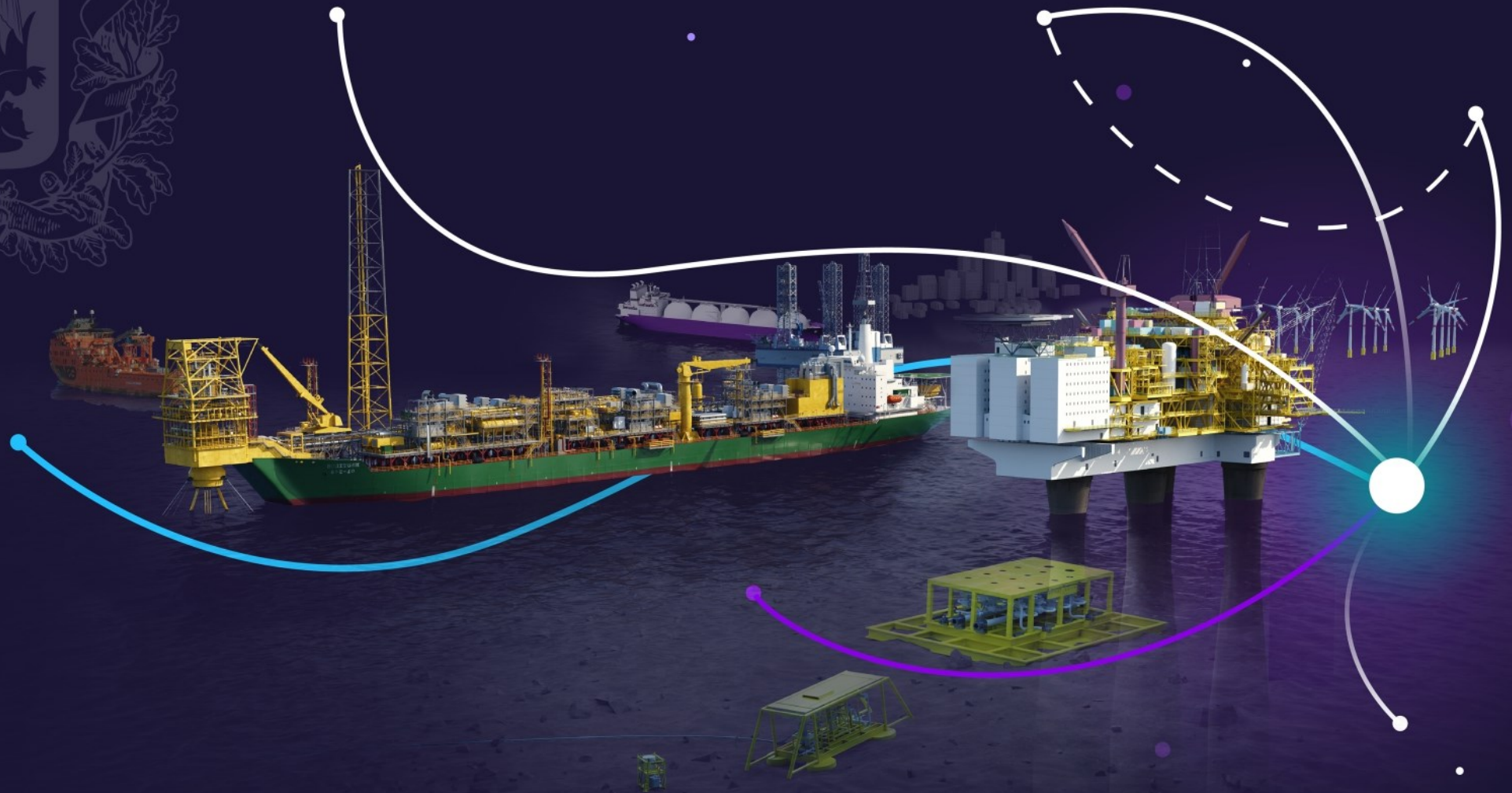




MEZEN CLUSTER «GREEN HYDROGEN»



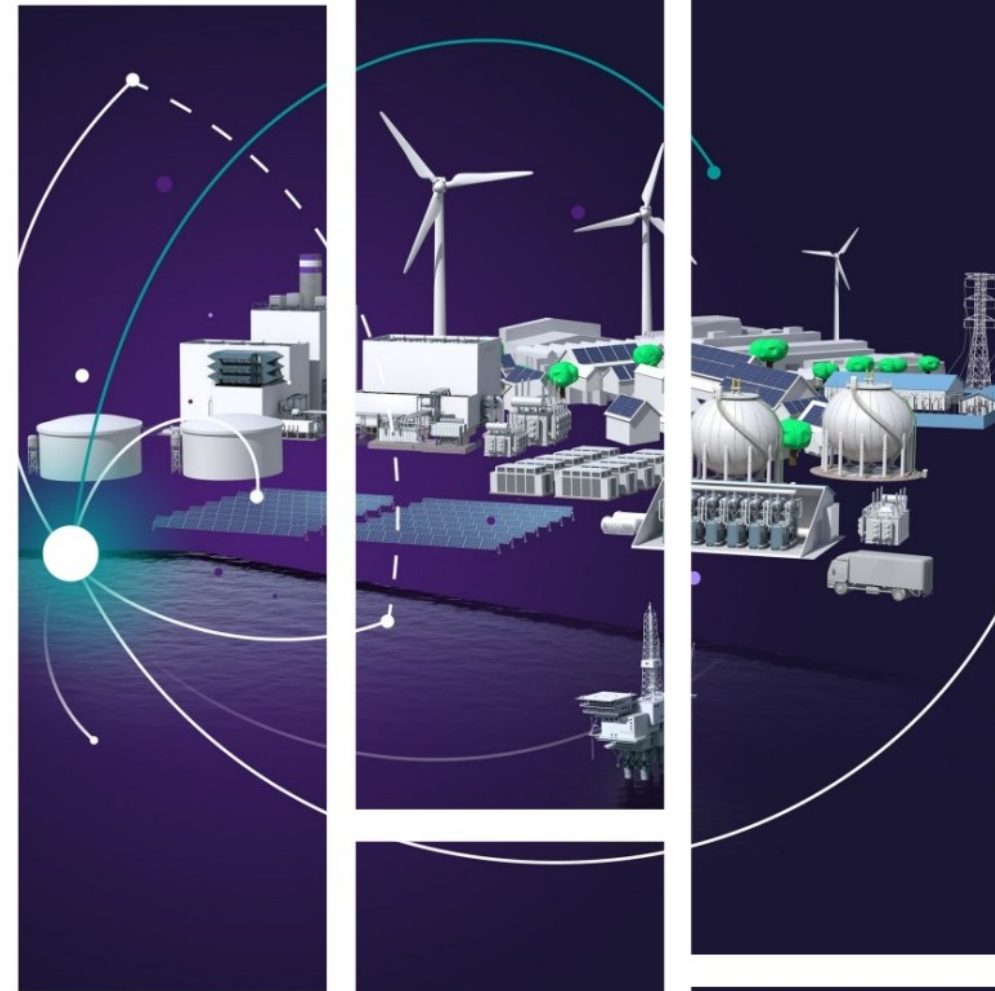
BASIS

➤ **RESOLUTION OF THE GOVERNMENT
OF THE RUSSIAN FEDERATION
OF OCTOBER 12, 2020**

«AN ADOPTION OF PLAN DEVELOPMENT
OF HYDROGEN ENERGY
IN THE RUSSIAN FEDERATION TILL 2024»

➤ **THE DRAFT CONCEPT
OF THE DEVELOPMENT
OF HYDROGEN ENERGY
IN THE RUSSIAN FEDERATION**

(CREATION OF ARCTIC CLUSTER WITH
A FOCUS ON CREATION CARBON-FREE
SYSTEMS ENERGY SUPPLY OF ARCTIC
TERRITORIES AND INFRASTRUCTURE
OF THE NORTHERN SEA ROUTE)



THE POINT OF THE PROJECT

- ✓ **ORGANIZATION OF THE COMPLEX OF INFRASTRUCTURE FACILITIES (ACCORDING TO THE CLUSTER PRINCIPLE) IN ORDER TO OBTAIN «GREEN HYDROGEN» INCLUDING**

HYDRAULIC ENGINEERING STRUCTURES (WHARF)

WITH TANKS FOR TEMPORARY STORAGE OF HYDROGEN FOR THE PURPOSE OF THE FOLLOWING TRANSPORTATION TO HYDROGEN-CARRYING VESSELS (MOORING LINE, LIFTING CRANES, OTHER PORT INFRASTRUCTURE).

HYDRAULIC ENGINEERING STRUCTURES

WITH ORTHOGONAL HYDRAULIC TURBINES IN THE MEZEN BAY (PROJECT CAPACITY 7-12 GW).

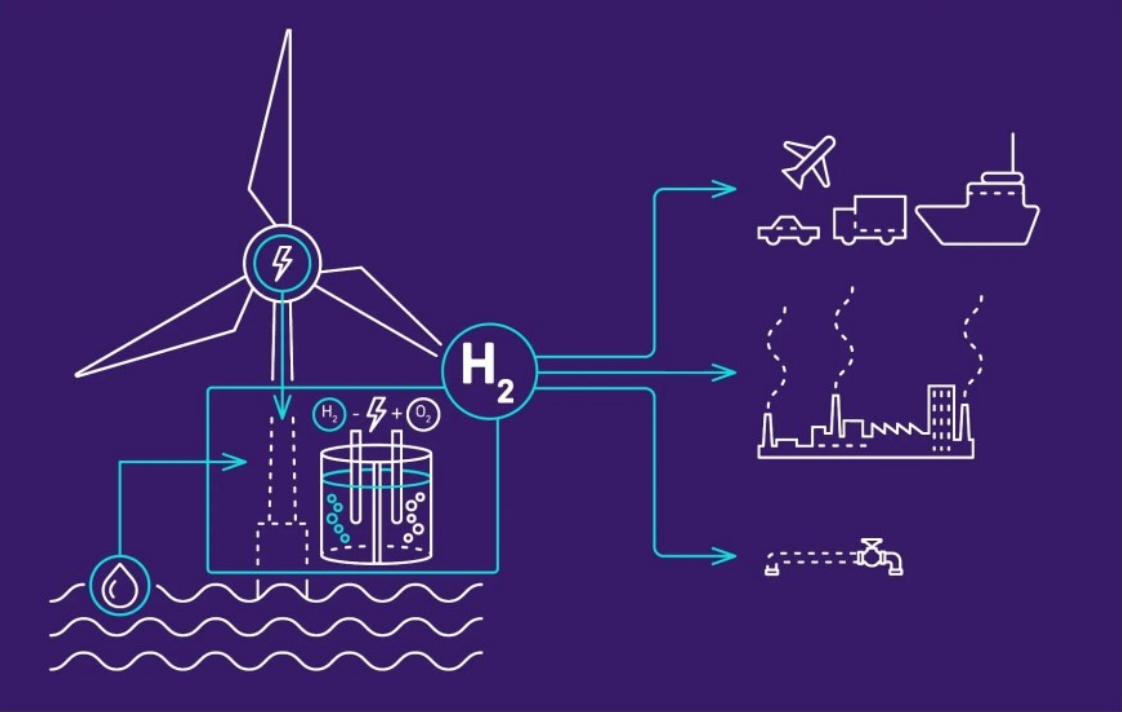
HYDROGEN ELECTROLYSIS PLANT

(PROJECT CAPACITY 1 MILLION TONS OF HYDROGEN PER YEAR).

WIND POWER PLANT

(THE PURPOSE IS TO LEVEL UP THE TIDAL POWER STATION).





CLUSTER STRUCTURE



THE HEIGHT (TIDAL RANGE) – 8-9.2 M

THE BAY VIEWS AS A SHELTER

IN WINTER THE BAY FREEZES OVER

THE BIGGEST LOCALITIES

● MEZEN

● KAMENKA

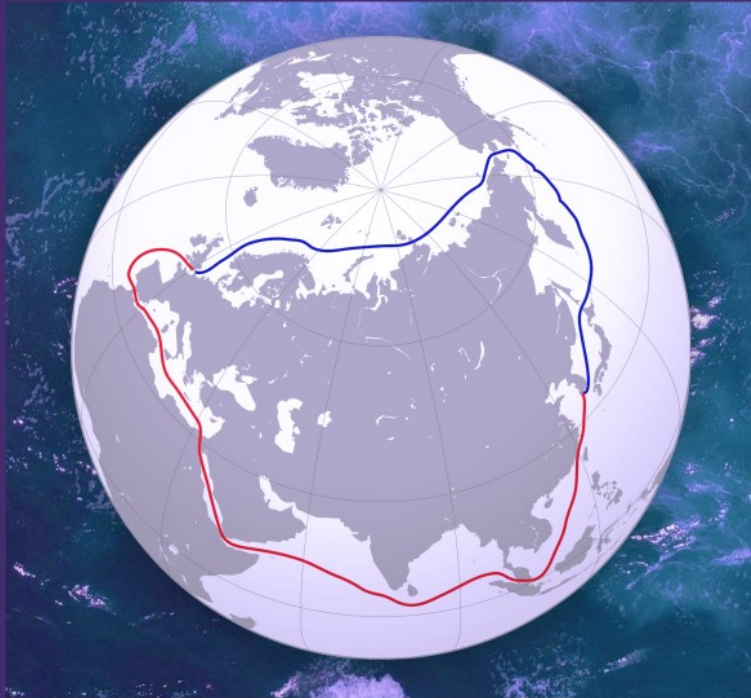
THE DISTANCE FROM ARKHANGELSK
TO MEZEN IS **386 KM**

THE ROAD IS GRAVELLED,
THERE ARE BRIDGES, FERRY CROSSINGS

THE COAL DELIVERY FROM ARKHANGELSK
TO MEZEN DURING THE SUMMER NAVIGATION

DURING 70-80-S KAMENKA SETTLEMENT
WAS A BIG SEA PORT FOR HANDLING
AND TRANSPORTATION
OF TIMBER CARGO
TO THE COUNTRIES OF EUROPEAN UNION

NORTHERN SEA ROUTE



ADVANTAGES

**THE EXISTENCE
OF A FUNNEL –
MEZEN BAY
WITH 10 METERS TOP,
THE SEA PORT, ACCESS
TO THE NORTHERN
SEA ROUTE**

**COMPETENCIES
OF NORTHERN
MACHINE-BUILDING
ENTERPRISE
IN ENGINEERING
OF ORTHOGONAL TURBINES**

GOALS AND TARGETS

**ORGANIZATION OF PRODUCTION
«GREEN» HYDROGEN
(TEMPORARY STORAGE,
SHIPMENT AND TRANSPORTATION
BY THE NORTHERN SEA
ROUTE FOR EXPORT)**

**ELECTRICITY SUPPLY
OF ARCTIC TERRITORIES
(MEZENSKY, PINEZHISKY
AND LESHUKONSKY DISTRICTS)**

**ECONOMIC
AND SOCIAL DEVELOPMENT
OF DISTANT ARCTIC TERRITORIES**



MEZEN CLUSTER

«GREEN HYDROGEN»

