

Suriname Offshore to IRO



21 May 2021

Presentation content

- I. Introduction to Staatsolie**
- II. Offshore Developments**
- III. Shorebase**
- IV. Local Content**

I. Introduction to Staatsolie

I. Staatsolie's Role

Founded on 13 December 1980. Shareholder: Republic of Suriname

Dual Role

Commercial: Vertically integrated energy company

Institutional: Staatsolie Hydrocarbon Institute N.V. (SHI)

- 100% subsidiary of Staatsolie
- State agent acting on behalf of the Government on hydrocarbon potential
- Contracting & supervision of Production Sharing Contracts (PSCs)
- At FID, will place Supervisory Board comprising CEO Staatsolie, Min. Fin. Min NR, 2 other selected members



I. Staatsolie - Integrated Energy Company

- 40 years
- First oil 1983
- 1130 staff (32% ♀)
- www.staatsolie.com



Hydropower 180MW
Thermal 96 MW

- Crude Oil Reserves 89 MMbbls
- Production 16000 bpd, 6 MMbbls pa
- Annual sales 5582 Kbbbls
 - ULSD
 - Gasoline
 - HFO
 - Bitumen

I. Upstream

- **Exploration**

Exploration strategy for the onshore, nearshore and shallow offshore acreage. Continue to seek JV partners to accelerate exploration activities and share expertise and risk.

- **Crude Production**

Three oilfields in Saramacca: Tambaredjo, Calcutta and Tambaredjo-Northwest.



I. Downstream - Refinery

- Since 1997, expanded refinery inaugurated on 13 December 2014
- Products: High quality diesel and gasoline, fuel oil, bitumen
- Bunkering services local and international – high quality marine fuels
- Retail: GOw2 (100% subsidiary)



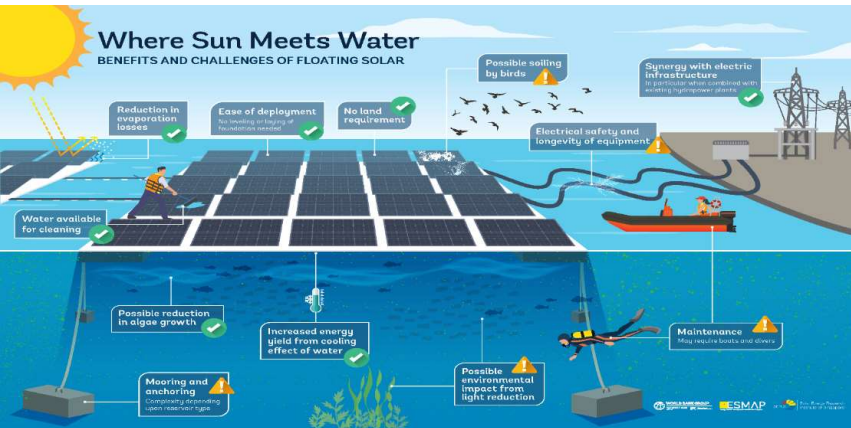
I. Power - Staatsolie Power Company Suriname

- Thermal since 2006. Installed thermal capacity of 96 MW. PPA with Government/Supply to the grid and refinery.
- Hydropower (Afobaka) since 1 January 2020. Installed capacity: 180MW
- Staatsolie's share in national energy supply: 75%
- Develop renewable energy projects



I. Sustainable Energy Activities

- Establish Carbon Footprint base line of Staatsolie, monitor and initiate GHG emissions reductions; optimizing energy efficiency and prevent methane leakage/venting.
- Increase electrical power output Afobakka (Priority I)
 - Modernisation of Afobakka powerplant, e.g. improve turbine efficiency
 - Adapt lake management regime (rule curve), increase lake level with 1-4 ft??
 - Cloud seeding to increase rainfall in lake area
 - Floating Solar



I. Sustainable Energy Activities

- Renewable energy sources (Priority II)
 - Power from Wind, Solar on land,
 - Power from Biomass & Municipal Waste
 - Run of the river hydro power



5.4 MW Run of the river French Guyana



5.1 MW Biomass plant French Guyana (2021)

I. Gold Partnerships

- Nov 2014 - 25% participation in Merian Gold project (Newmont Suriname)
- Apr 2020 - 30% participation in Pikin Saramacca project (IAMGOLD Rosebel Gold Mines)



II. Offshore Developments

II. Offshore blocks and finds



TOTAL

Block 58

2020: Maka Central-1 (January). Sapakara West-1 (April), Kwaskwasi-1 (July)
2021: Keskesi East-1 (January)



Block 52

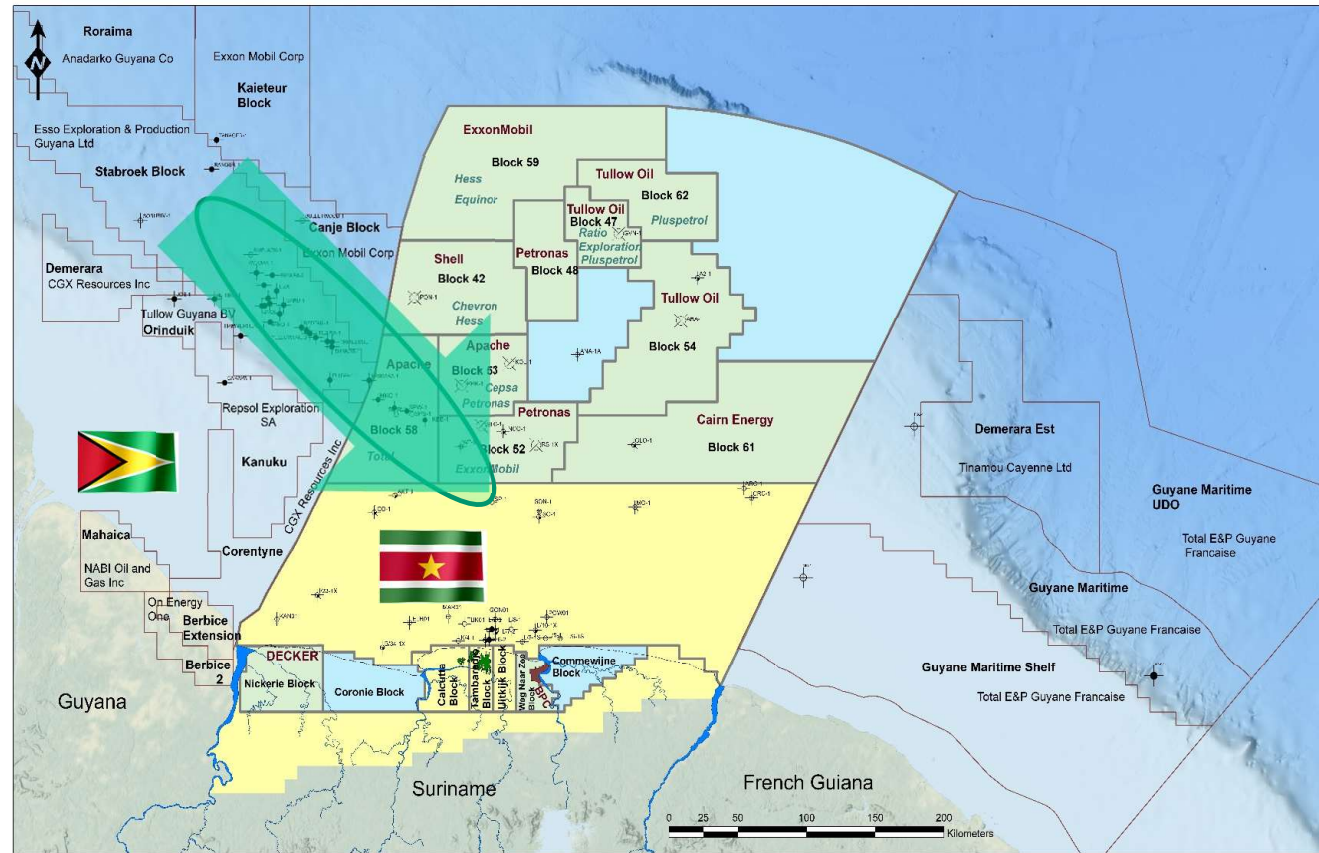
2020: Sloanea-1 (December)



Block 47

2021: Spudded Goliathberg-Voltzberg North-1 (February)

Guina Basin USGS 2001 estimate: ~15 bln barrels.
Reassement started in 2020.



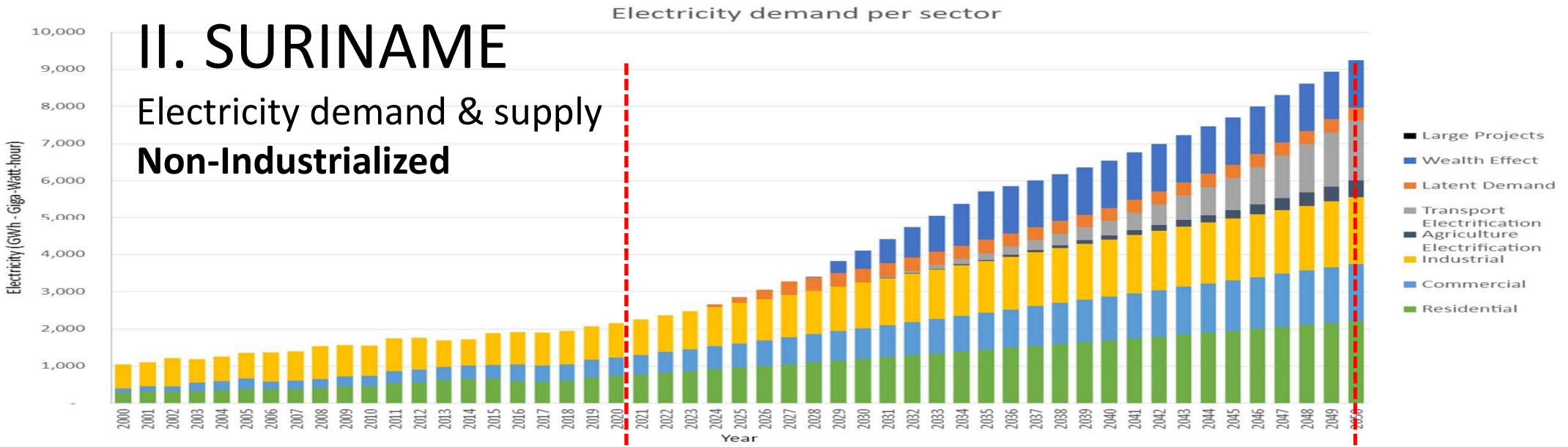
Modified After IHS April 2021



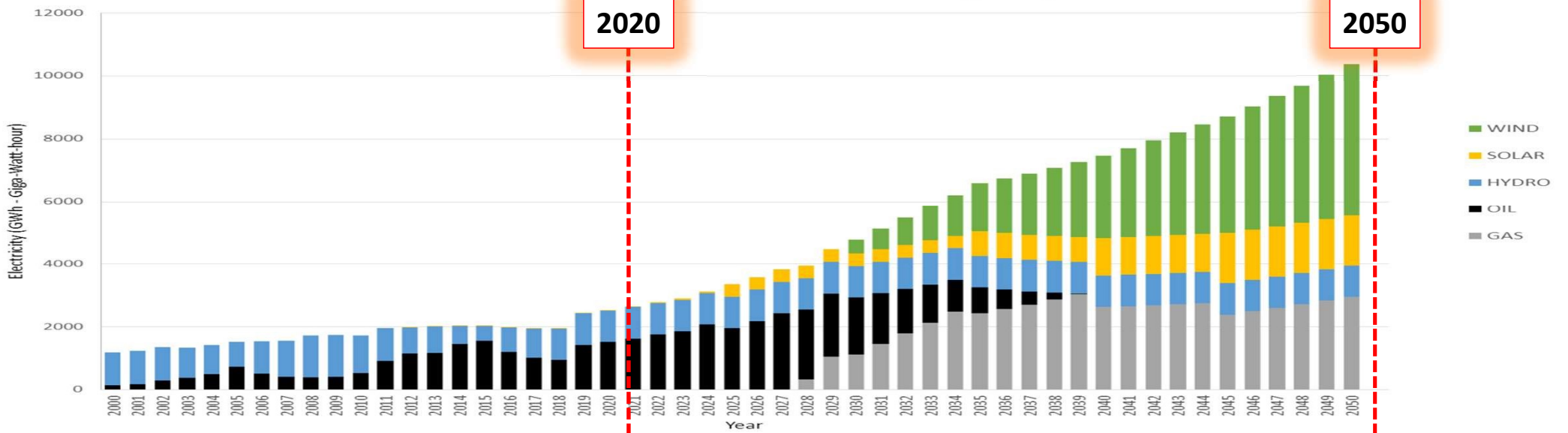
Vertrouwen in eigen kunnen

II. SURINAME

Electricity demand & supply Non-Industrialized

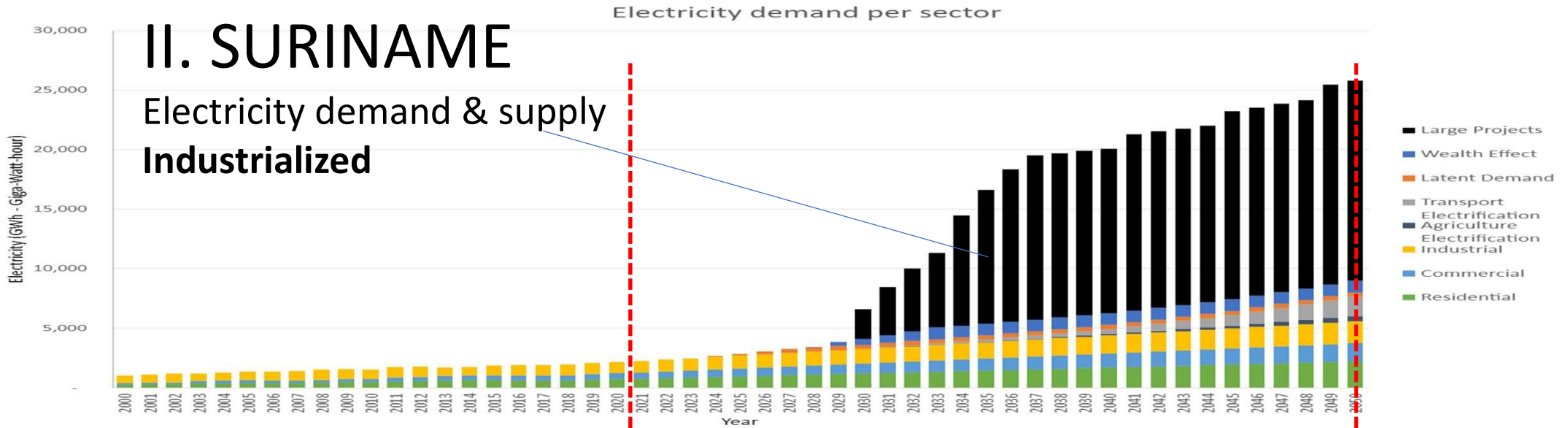


Electricity Production connected to grid by source

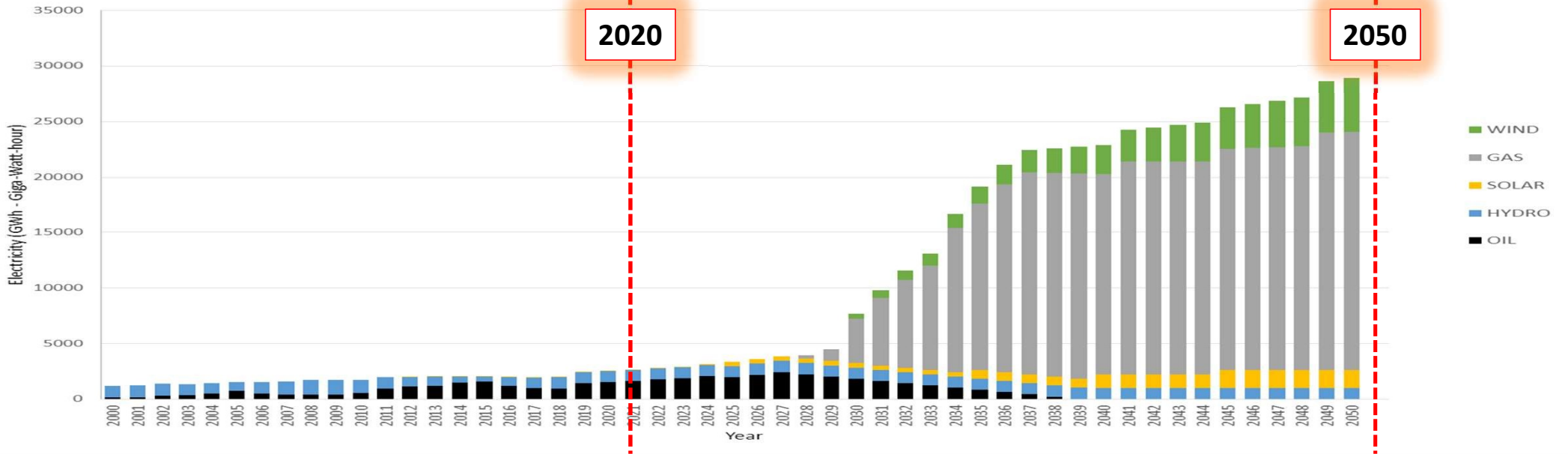


II. SURINAME

Electricity demand & supply
Industrialized



Electricity Production connected to grid by source



Scenarios for Natural Gas Monetization

1. Only Local Power Generation

- 300 MW electricity, switching from FO to Natural Gas

50 MMSCFD Gas

2. Large Industrial Development

Options for 500 MMSCFD each::

- Aluminium Smelter W-Suriname
- LNG on shore
- Methanol
- Ammonia + Urea
- Gas to Liquids (naphtha, diesel & lubes)
- Electrical Power ArcoNorte

500 MMSCFD*

Typical plant sizes:

800 kT/y (1.5 MM T/y Alumina)

3.5 MM T/y

3 x 5 kT/d

3 x 5.5 kT/d

45k BPSD (1/3 of Pearl Shell plant in Qatar)

3700 MW

3. Innovative Developments available in about 10y

- Blue or Green Hydrogen production, to produce green Methanol, Ammonia, Urea

* 5.5 TCF NG reserves required for 30y
(T&T 2020: 10.5 TCF NG reserves)

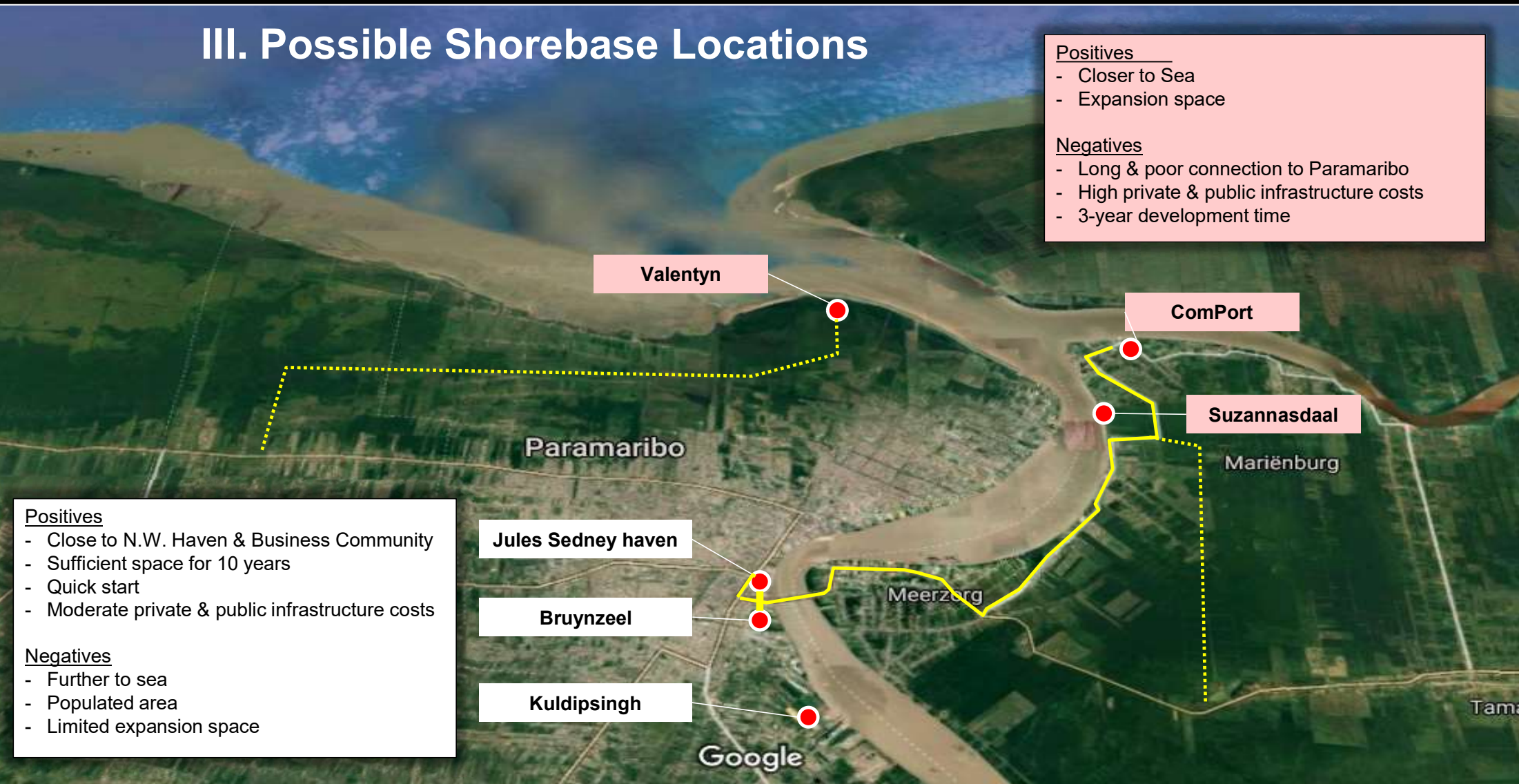
III. Shorebase

III. Key decision driving facts inventory

#	Fact	Effect
1	To make a quick start need to be in vicinity of labor, services, goods and logistics	Paramaribo and surroundings preferable (left side of Suriname river)
2	Experts indicate current draft a significant enabler for local content	Suriname river is a feasible option
3	Total has no visibility beyond 1-2 FPSO	Don't go big yet, plenty of examples of white elephants in the world. Existing ports with add on. Wait with greenfield projects

III. Possible Shorebase Locations

- Positives
- Closer to Sea
 - Expansion space
- Negatives
- Long & poor connection to Paramaribo
 - High private & public infrastructure costs
 - 3-year development time



- Positives
- Close to N.W. Haven & Business Community
 - Sufficient space for 10 years
 - Quick start
 - Moderate private & public infrastructure costs
- Negatives
- Further to sea
 - Populated area
 - Limited expansion space

III. Concept design of one option



IV. Local content

Legal Framework Local Content



Petroleum Law



Production Sharing Contracts

1. **employment of foreign personnel is strictly limited** to functions for which there are no experienced and qualified Surinamese nationals available,
2. utilize all possibilities so **that Surinamese nationals can gain expertise in and acquire responsible positions** in the activities within the framework of the petroleum agreement.
3. give **preference to goods and services** produced and/or available in Suriname.

Obligations Contractor and its Sub-Contractors:

- Preference to **employ nationals**
- **Preference to local firms** in Suriname (including companies incorporated in Suriname) to carry out any **works, supply materials, or provide services**
- Ensure that locals gets access to all **tender invitations** and include weighting on local value added in the tender evaluation.
- Implement a program of **training** for nationals (including technical, administrative, executive and management Positions).

Impact of local content on your business

- **Local –Foreign partnerships and joint ventures**
 - Enhancement for the pre-qualification process of the IOC's
 - Expansion of business to this region
 - Local partners cultivates acceptance in local community
 - Local partners can provide guidance in local business practices (e.g. getting permits)
- **Capacity Building**
 - Opening a local branch
 - Enhancement for the pre-qualification process of the IOC's
 - Expansion of business to this region
 - Employment and training of local resources
 - Enhancement for the pre-qualification process of the IOC's
 - Local business knowledge within your company
 - Cultivates acceptance in local community

Supplier Registration Portal

☰ **STAATSOLIE** Suriname Supplier Portal v1.0 beta Login ⋮

STAATSOLIE
Suriname Supplier Registration Portal

New Supplier Registration
from DAI SRP financiersregistratiesysteem Suriname

Registreer
Leverancier
id present your ID as a service o

02:13

LOGIN REGISTER

HOW TO REGISTER

- Show your interest and make your company profile noticeable
- Stay updated on events and off-shore activities/developments
- Access via: <https://www.staatsolie.com/nl/suriname-srp/>

Suriname Energy, Oil and Gas Summit 2021



SEOGS
Suriname Energy, Oil and Gas Summit
Part of the energy advance network >>>

Hosted by
STAATSOLIE

Suriname -
Open for Business

www.suriname-energy.com

1- 3 June 2021 | VIRTUAL EDITION

<https://www.staatsolie.com/en/seogs-2021/>

Thank You

Q&A

Tom Ketele
Dennis Pello

tketele@staatsolie.com
dpello@staatsolie.com