

Supporting successful Industrial Hubs

VCMStudy.ir

THIS DOCUMENT IS PUBLIC

Tehran • 22nd April 2017

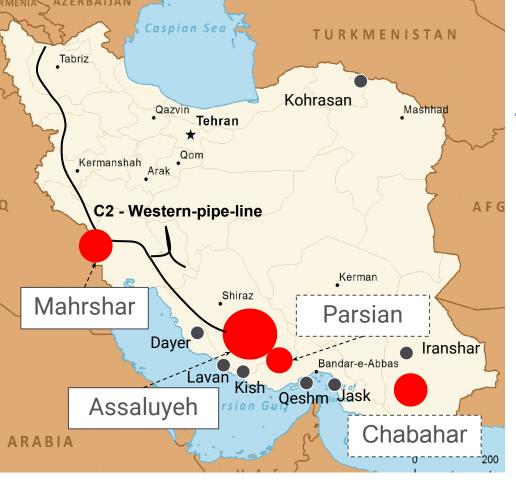
Matthieu Giard • Air Liquide

LARGE INDUSTRIES



Contents

- 1 Iran's strategic choice: developing Industrial hubs
- 2 Industrial hubs: a successful model worldwide
- 3 About Air Liquide Industrial Gases networks: key factors of success
- 4 Going forward together
- 5 Conclusion



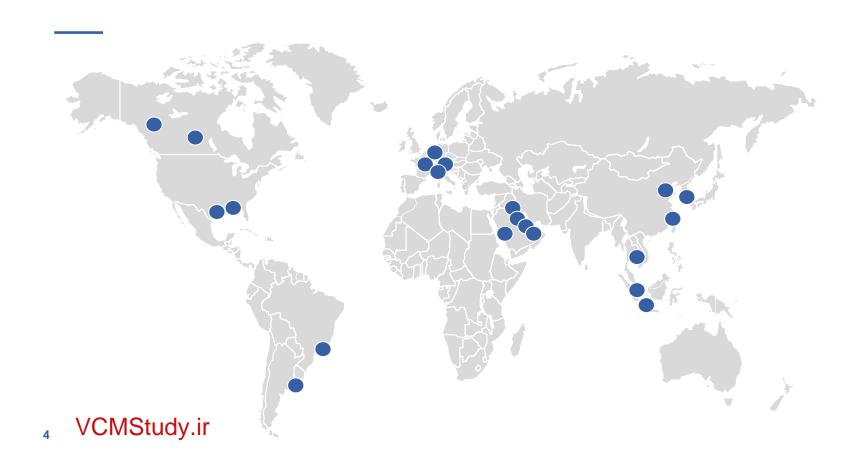
Iran's strategic choice: developing Industrial hubs

Synergies

Competitiveness

Reliability

Industrial hubs: a successful model worldwide



A model trusted and supported by Air Liquide

→ Present in all large industrial hubs as investor & operator of Industrial gases

→ Largest number of plants for IG (**450 plants** O2, N2, H2, CO, Syngas)

→ Largest pipeline network (9,300km)



THIS DOCUMENT IS •INTERNAL

I AIR LIQUIDE, THE WORLD LEADER IN GASES, TECHNOLOGIES AND SERVICES FOR INDUSTRY AND HEALT

Tehran
Matthieu Giard
Dubai Hub VP - Air Liquide

I PF
Air Liquide

AL IG Networks rely on multisources and multiclients...

U.S. Gulf Coast 3,300 km

Louisiana

Texas Westlake / Beaumont Channelview Corpus Christi **Gulf of Mexico**

Oxygen & nitrogen facility

Oxygen

Nitrogen

Argon

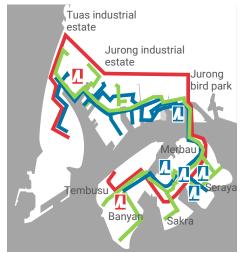
Carbon monoxide

Hydrogen

Hydrogen and/or

carbon monoxide facility

Singapore



Cogeneration facility

Synthetic gas facility

Hydrogen source

190 km

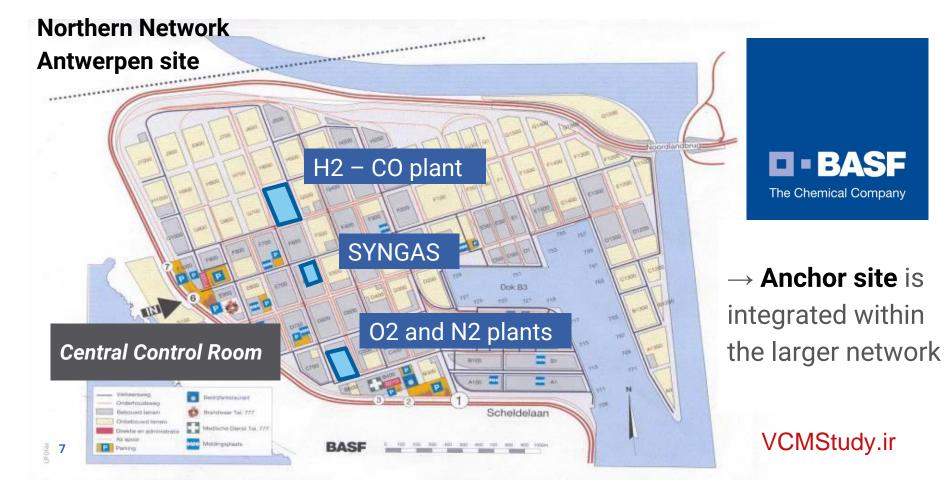
Northern Europe

2,800 km



VCMStudy.ir

... long term strategic partnerships



... and on 4 key success factors



Best in class technologies and state of the art equipment

- « too much at risk for our clients and large investors »
- « AL own technologies, own workshop & proprietary equipments »



Competitiveness

« OTF model needs to be cheaper than self built model »



Operational excellence

Safety

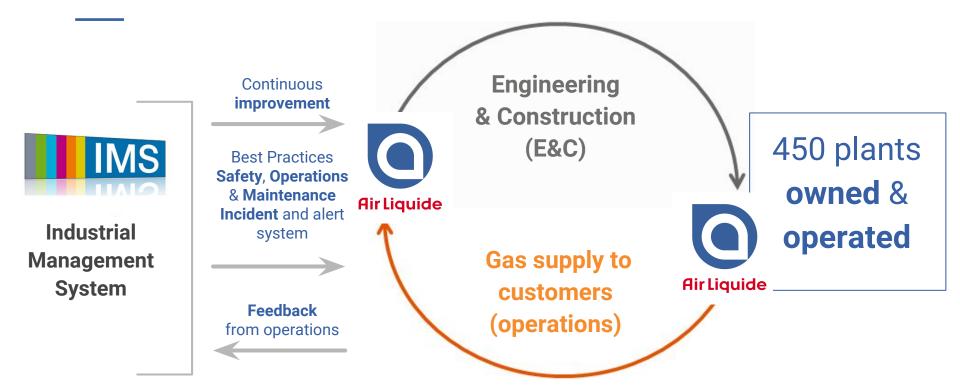
Availability: > 99.9%



Financing and business model

FDI, Partnerships

Operational excellence is supported by a virtuous cycle



A model trusted by more than 400 leading industries

















Sumitomo







PETRONAS



SOLVAY





















Now, going forward together

Farj O2/ N2



by





World largest MeOH site





VCMStudy.ir

