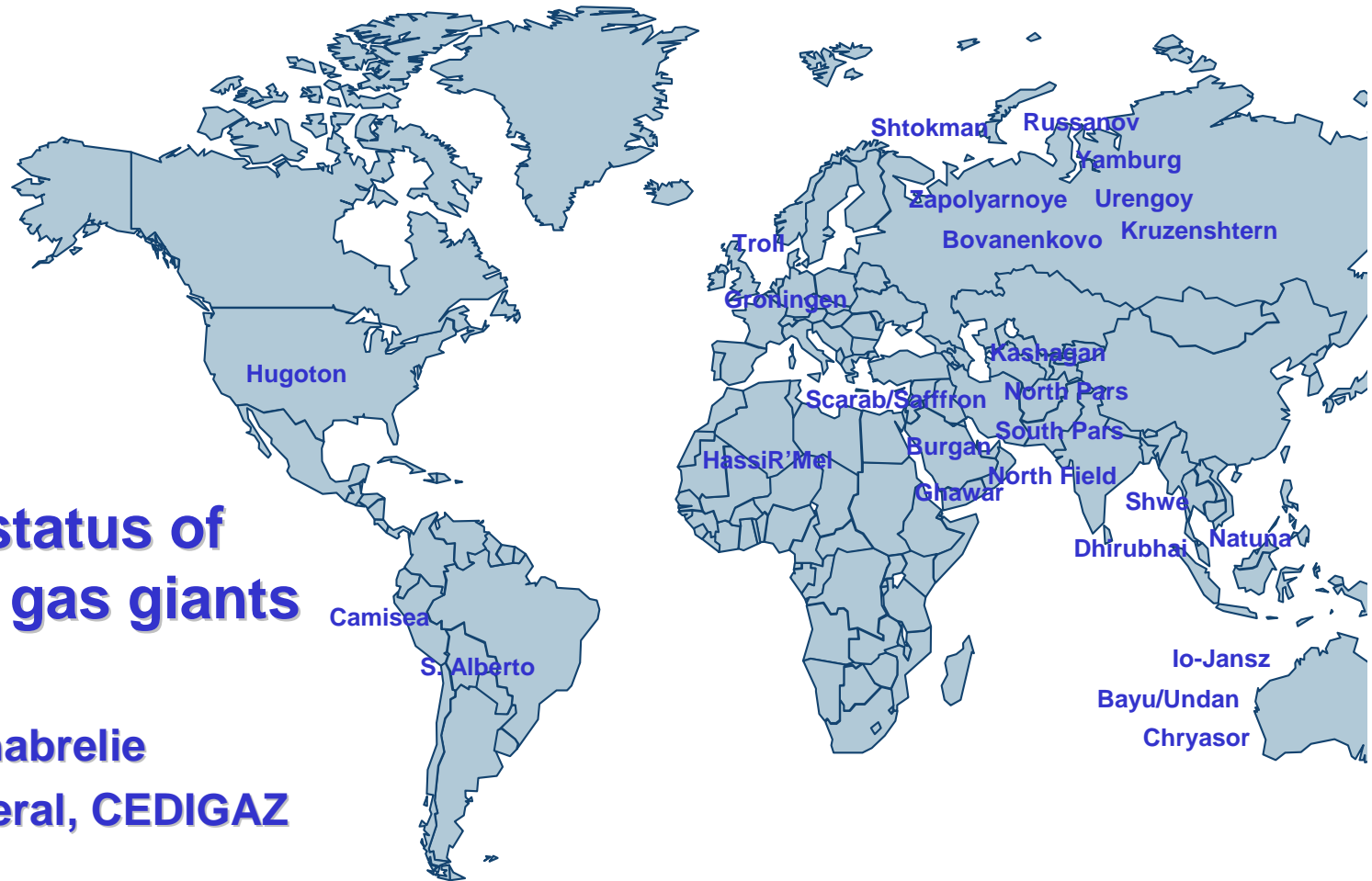


Current status of the World's gas giants

M.-F. Chabrelie
Secretary-General, CEDIGAZ



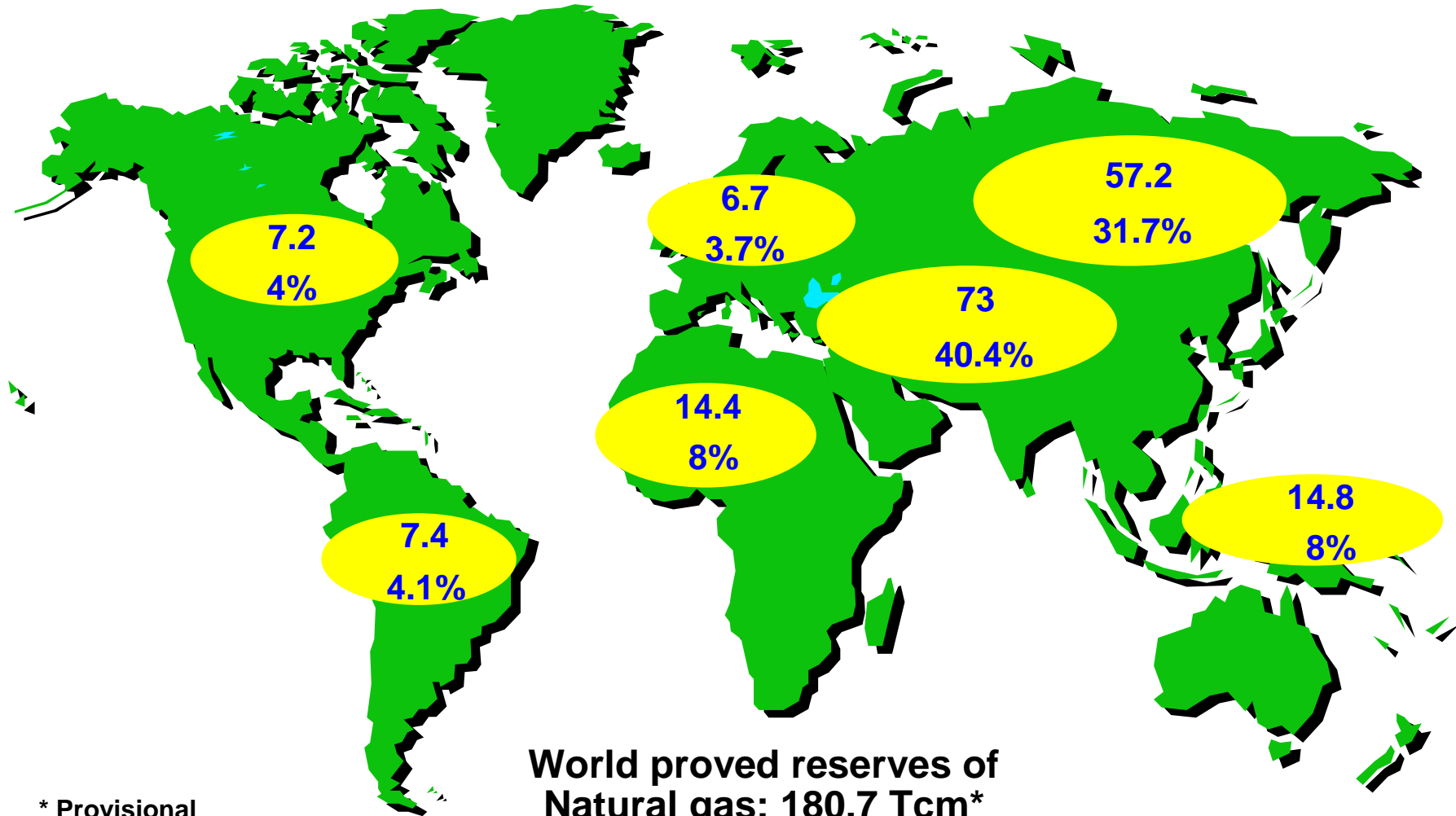
Current status of the World's gas giants

- **World natural gas reserves: Highly concentrated**
- **Overview of giant gas fields: Where are they located?**
- **Impact of gas super-giants on current production**
- **Producing potential of super-giants gas fields**



Natural gas reserves are geographically concentrated

1.1.2006 (Tcm/% of world total)



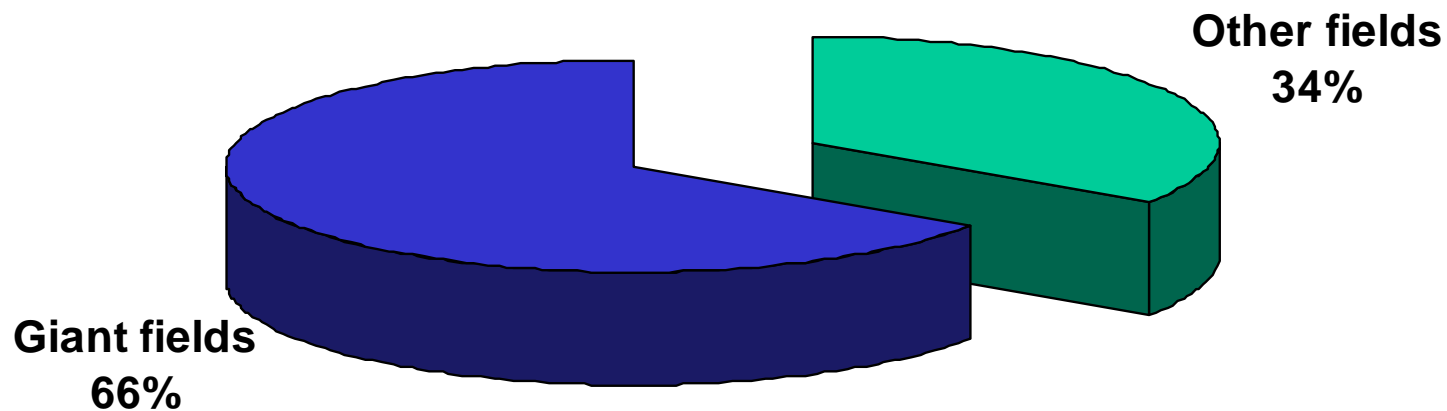
* Provisional

**World proved reserves of
Natural gas: 180.7 Tcm*
(162.6 Gtoe)**



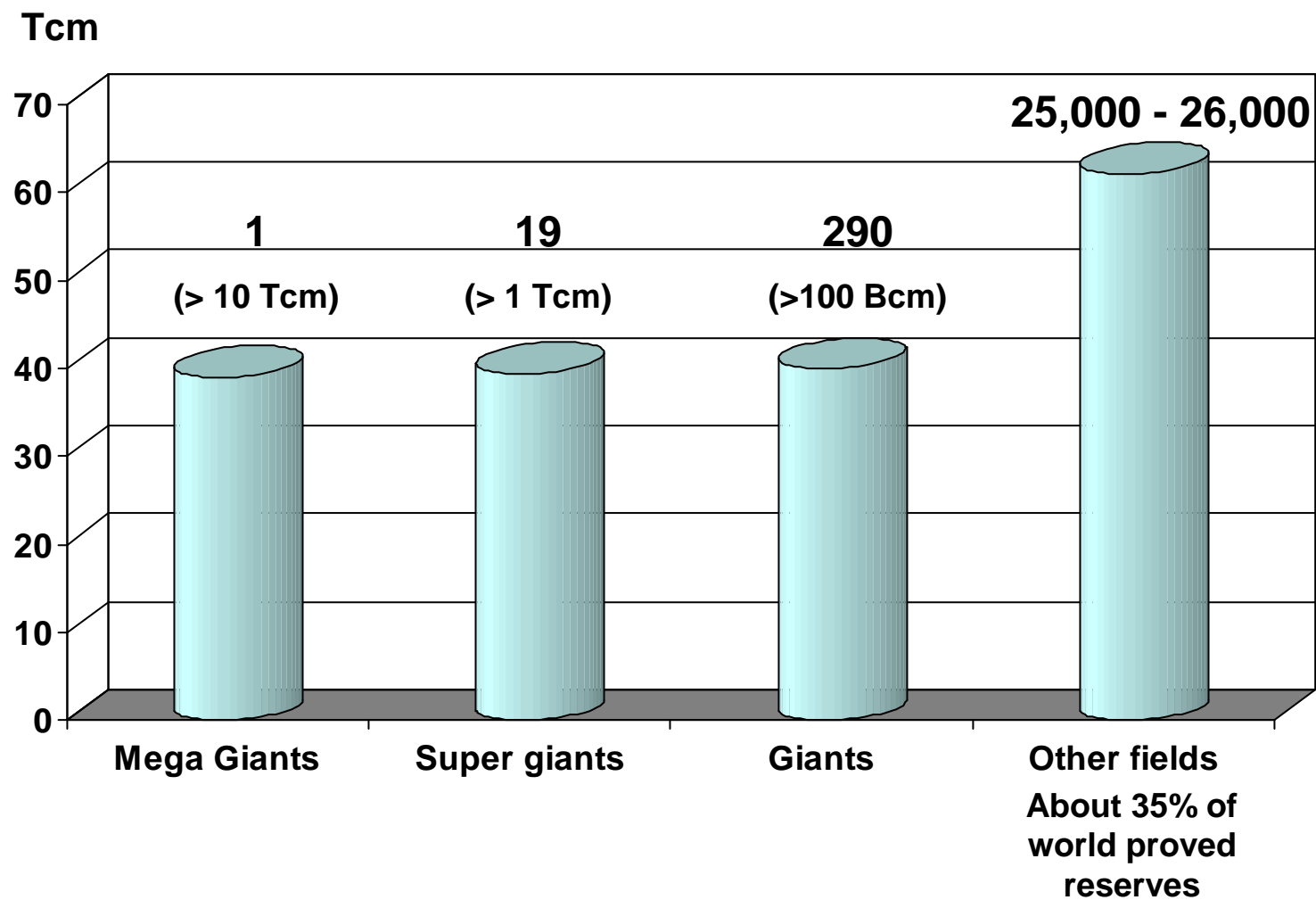
World natural gas reserves are concentrated in a rather small number of large accumulations

World proved gas reserves: 180.7 Tcm

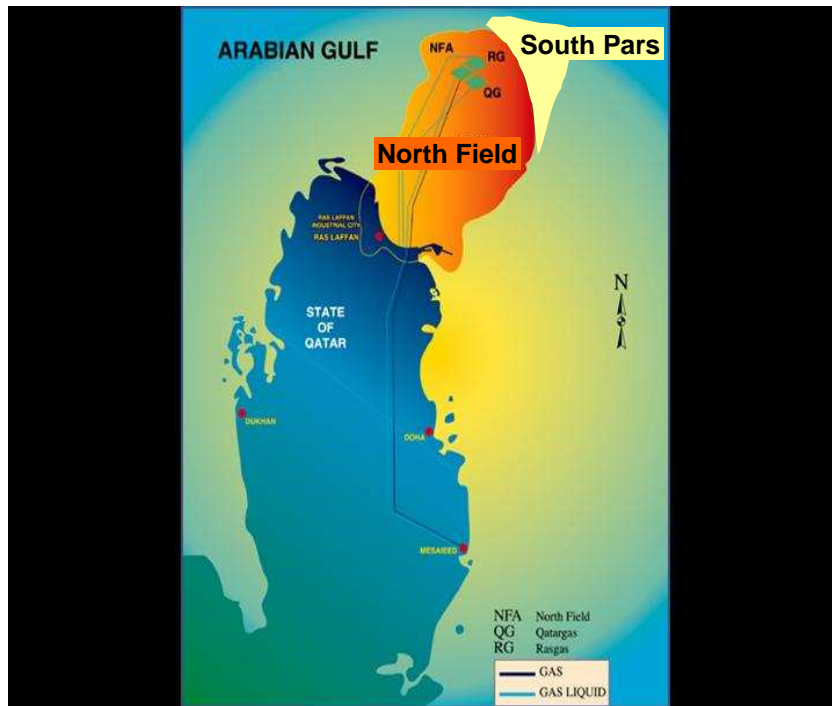


*Based on remaining reserves

310 giant gas fields hold about 65% of world gas reserves



The World's largest non-associated gas field: Shared by Qatar (North Field) and Iran (South Pars)



Qatar's North Field, discovered in 1971, covers 6,000 sq km in shallow waters, north-east of the Qatari peninsula.

Certified reserves: 25.485 Tcm

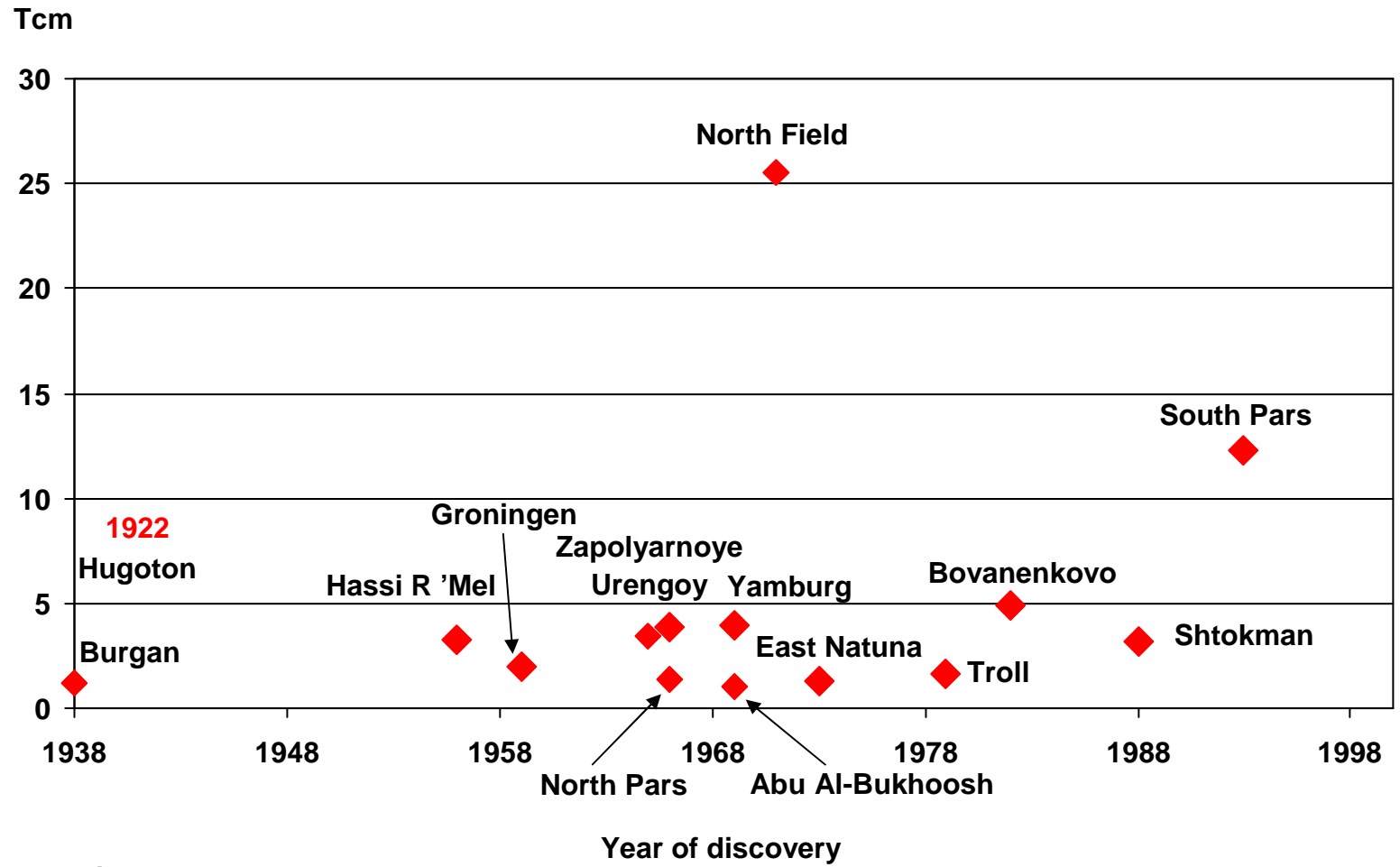
North Field feeds the rapid development of LNG facilities (Qatargas & RasGas), and local downstream facilities. It will fuel future regional and worldwide gas expansion.

Iran's South Pars, discovered in 1993, covers 3,700 sq km, approx. 100 km off the Iranian coast.

Gas reserves: 14 Tcm.

South Pars is due to be developed in some 30 phases. The gas produced from the first 10 phases will be for local use, while from phase 11 onward, gas will also provide feedstock for LNG export facilities and GTL projects.

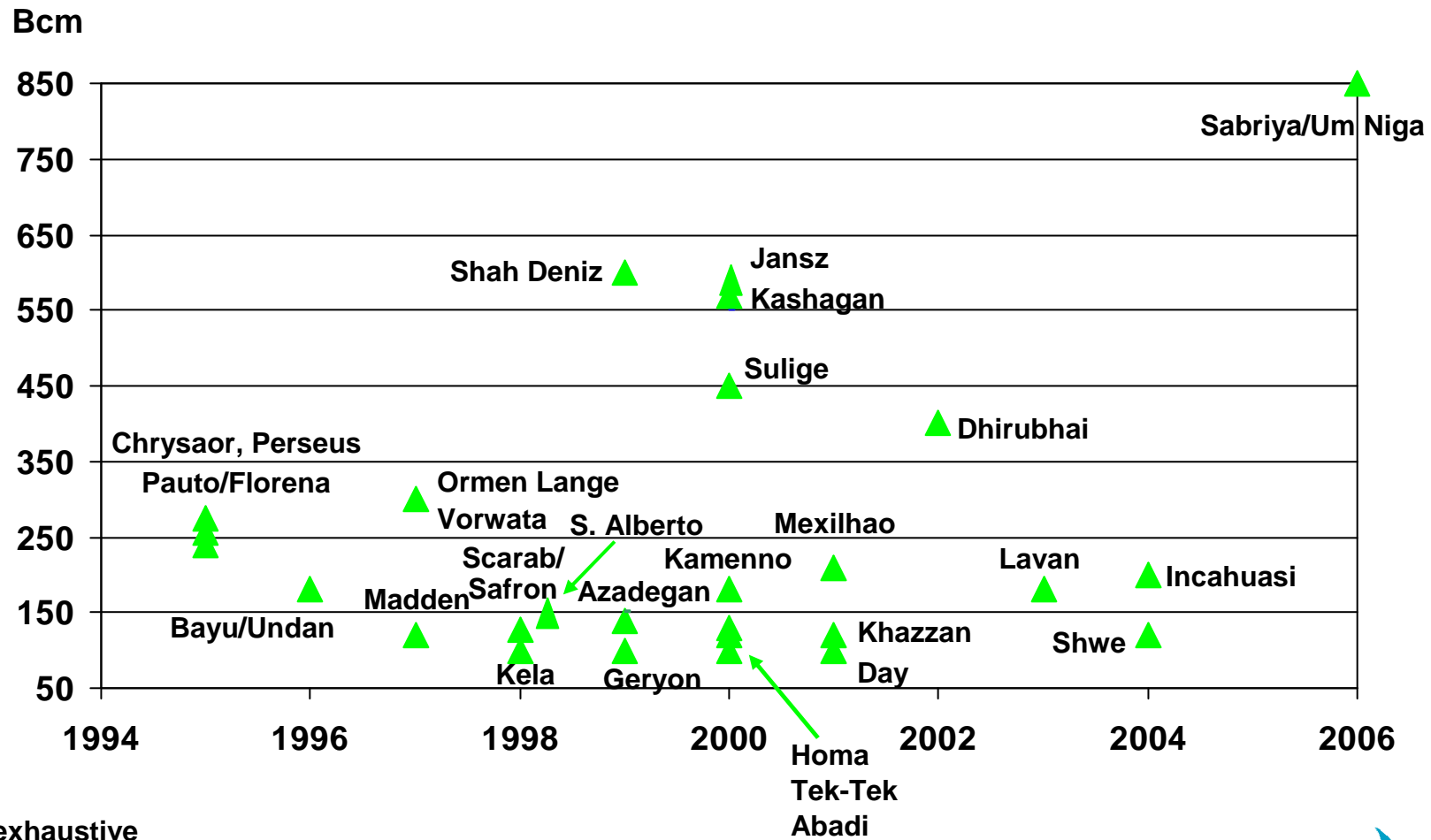
Mega & Super-giant gas discoveries: Year of discovery and original in-place reserves



Not exhaustive



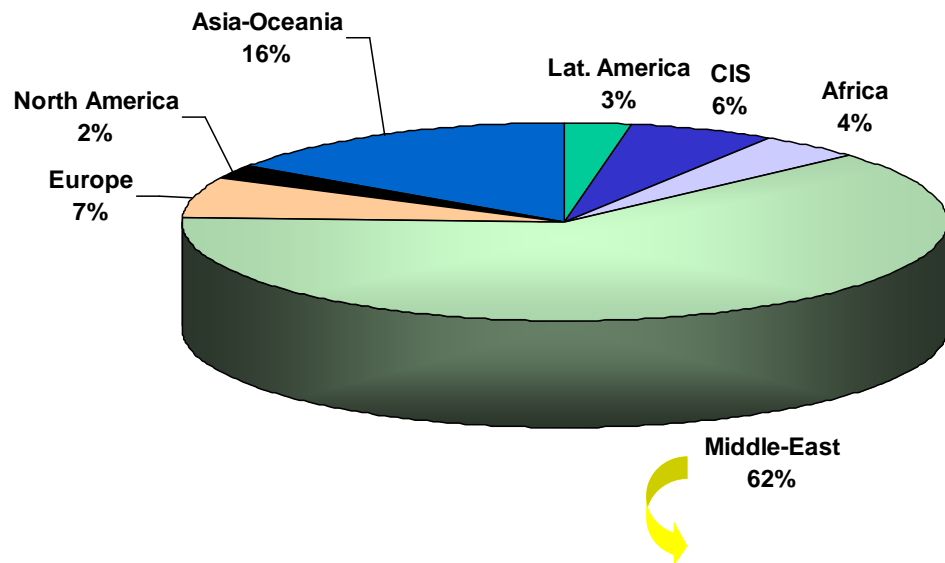
Giant gas fields: Year of discovery and original in-place reserves



Not exhaustive



Offshore proved natural gas reserves



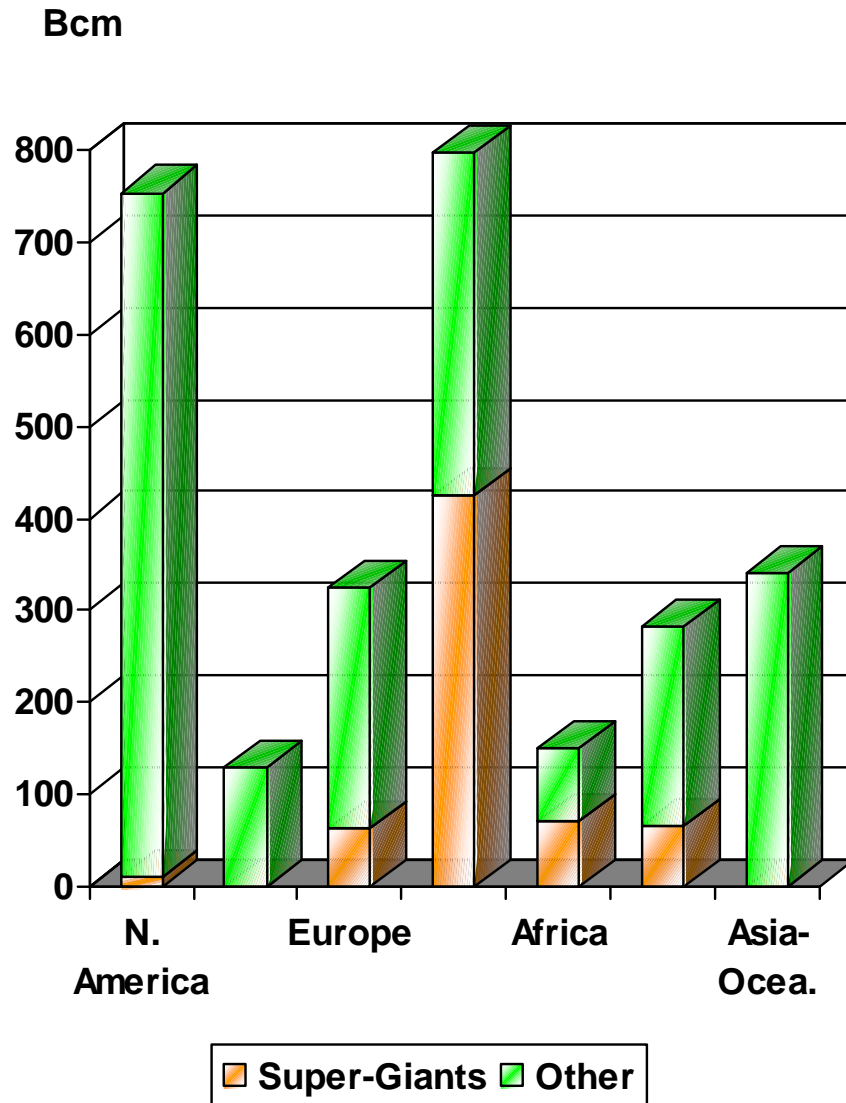
North Field(Qatar)/South Pars (Iran) :
55% of offshore reserves

Offshore reserves: 71 Tcm
39% of total proved reserves

The size of offshore gas discoveries is rising.

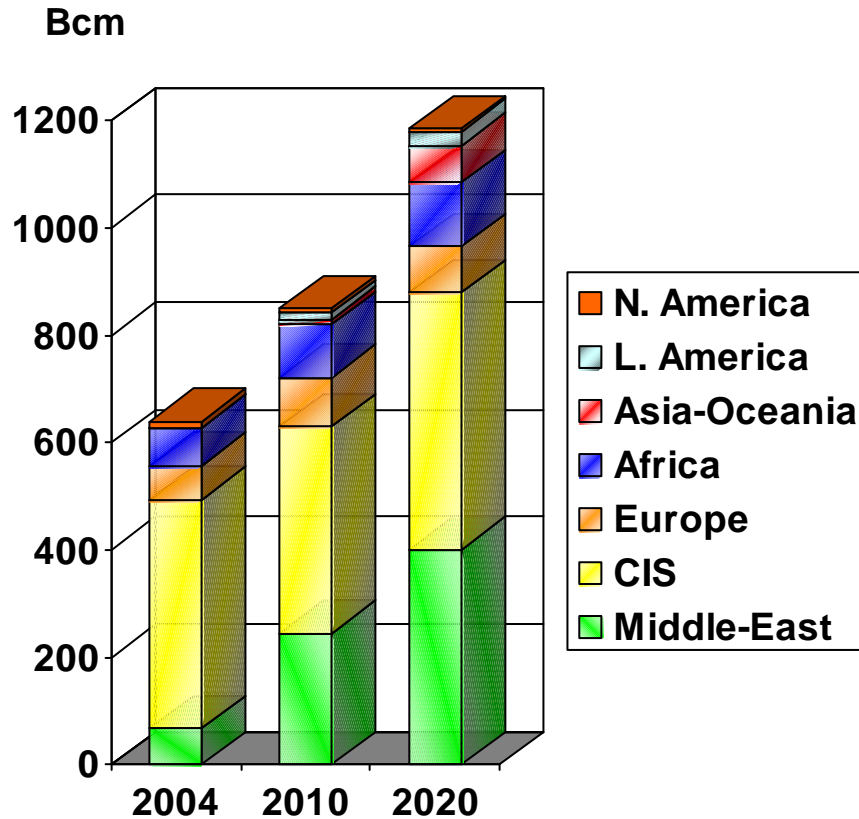
More than half of the gas giants discovered during this decade were offshore.

Gas super-giants provide about 25% of world gas production



- About a dozen of super-giants fields have been developed worldwide.
- Groningen and Hassi R'Mel started producing about 4 years after they were discovered. For most of the other fields, 10 to 15 years or even more elapsed.
- They provide about:
 - 2% of North American production
 - 21% of European output
 - 64% of Russian sales
 - 25% of Middle-East output

Impact of super-giant fields on future gas production



- Several of the producing fields have already reached peak production (Russia, Europe, Africa).
→ Modernisation and regeneration programmes will ensure access to remaining reserves.
- The potential of several of the mega & super giants is untapped.
- An increasing role can also be anticipated from the giants (>100 Bcm) which were discovered over the past decade. They offer smaller-size reserves, but can be developed over rather short periods.

Conclusion

- **Although three countries hold a major share of the current and future gas potential worldwide, giant gas fields can be found on all continents.**
- **By 2020, giant gas discoveries may provide at least a third of gas sales worldwide.**
- **While mega & untapped super-giants will sustain production in the very long-term, smaller-size giant gas fields will also play an increasing role in world gas expansion.**

