Les nouvelles usines de liquéfaction au Qatar et en Australie Conséquences sur le marché du GNL

AFG - congrès du Gaz - 14 Septembre 2011

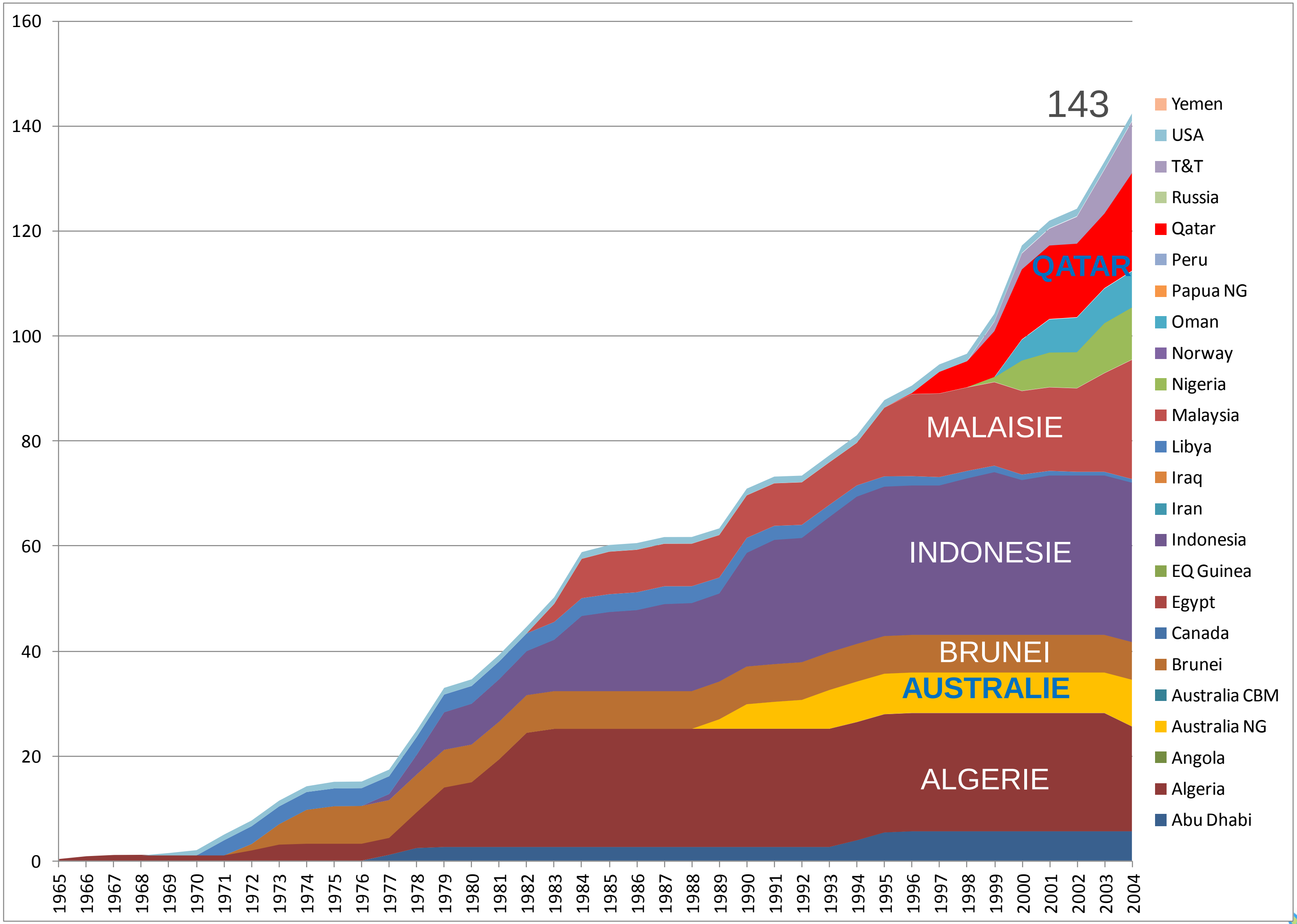
Sommaire

- Evolution des capacités de production de GNL
- Qatar
- Australie
- Impacts marché

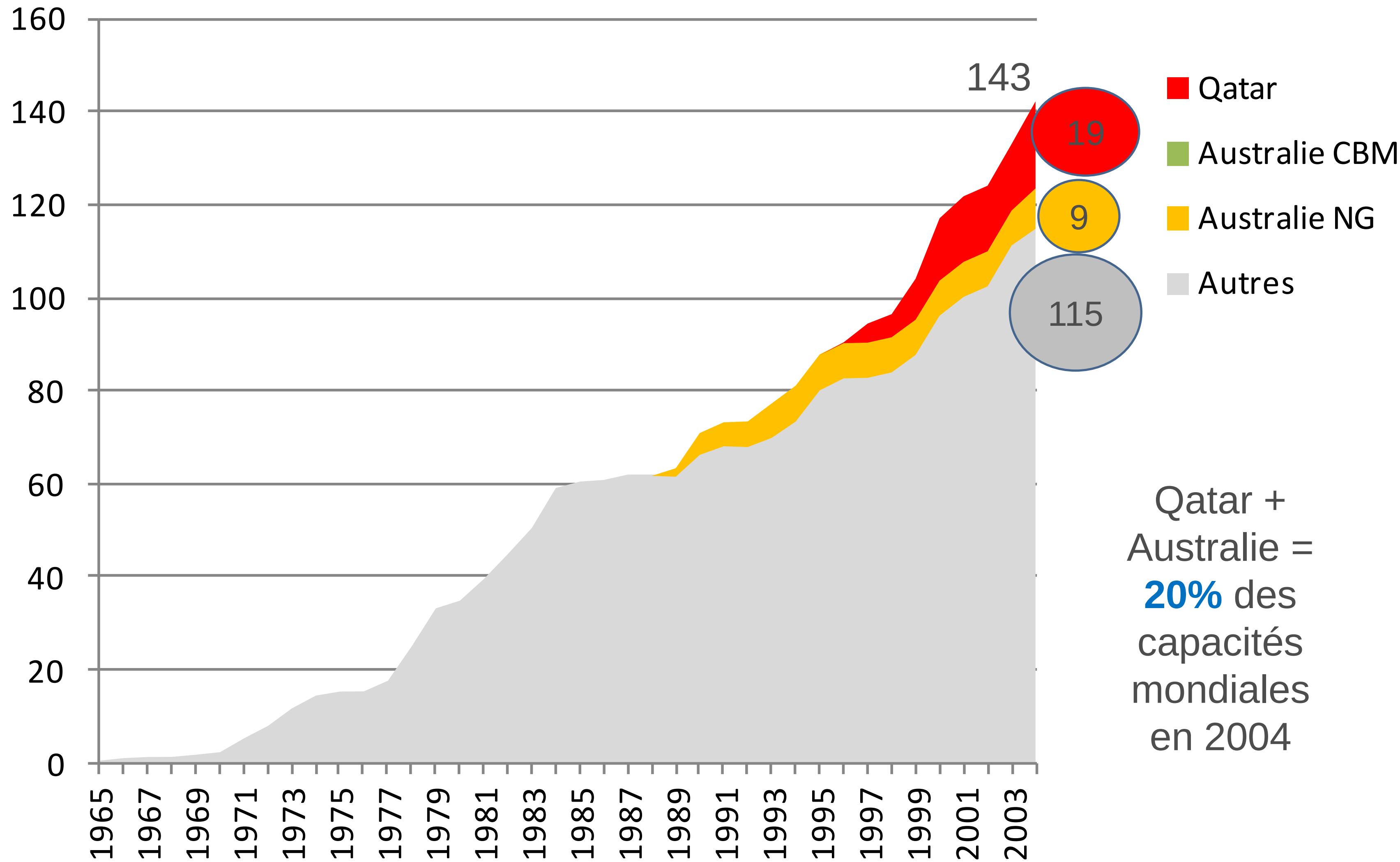
Résumé

- La part du Qatar et de l'Australie dans la production mondiale de GNL passera de 20% en 2004 à 35% en 2013 et 43% en 2022.
- Qatar et Australie ont représenté 50% de l'accroissement de la production mondiale de GNL entre 2004 et 2013 . C'est au Qatar que la progression est la plus importante. Cette période consacre le Qatar comme le plus grand producteur mondial de GNL
- Qatar et Australie pourraient représenter 60% de l'accroissement de la production mondiale de GNL entre 2013 et 2022 . Cette fois , c'est en Australie qu' aura lieu la plus forte croissance .
- Malgré le développement australien très ambitieux , le marché du GNL devrait rester tendu , du fait des faibles capacités mises en production entre la « période Qatar » et la « période Australie » .Ces nouveaux projets australiens seront chers .

Evolution des capacité 1965 – 2004 , unité MT/an

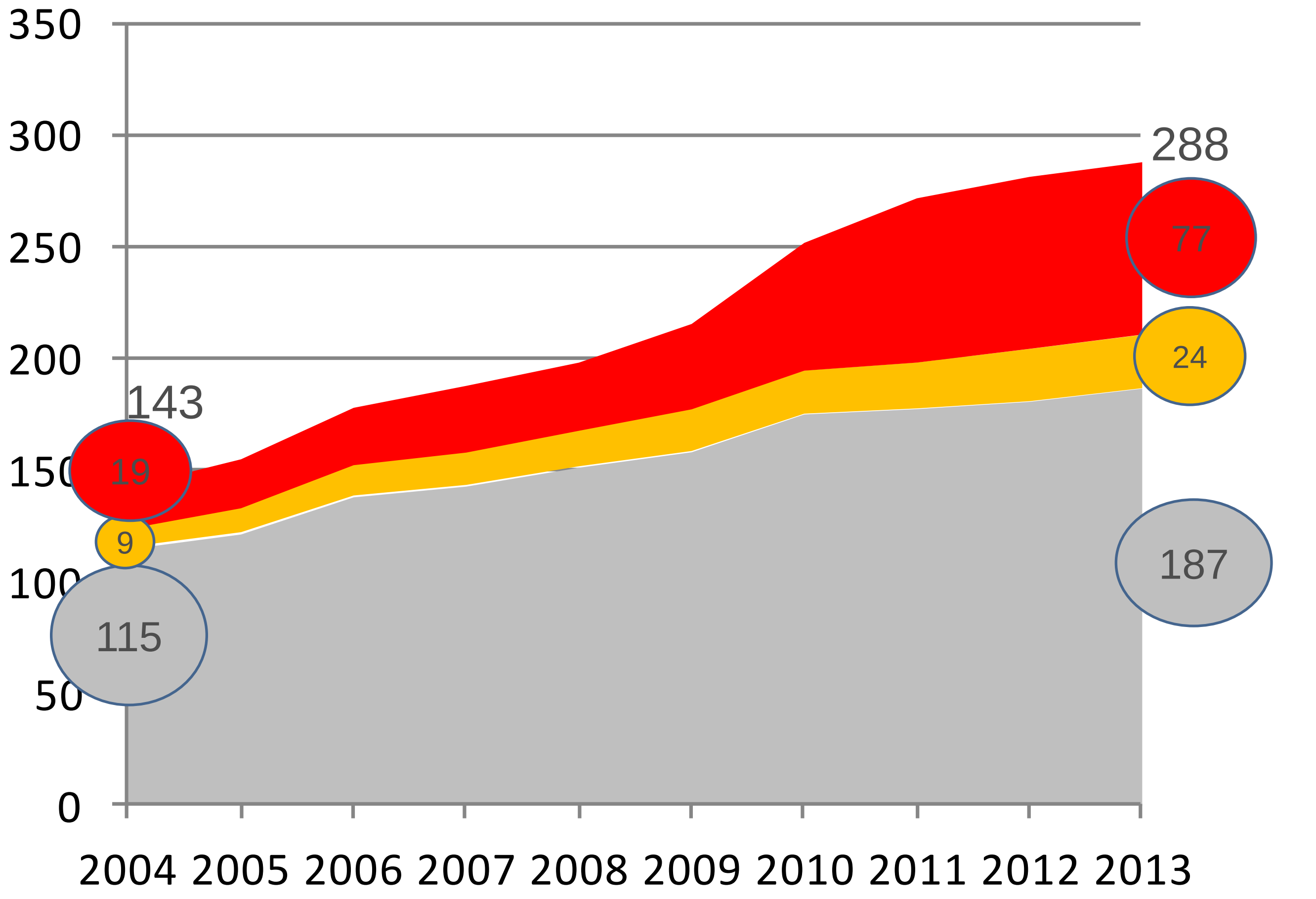


Evolution des capacité 1965 – 2004 , unité MT/an



Qatar + Australie = **20%** des capacités mondiales en 2004

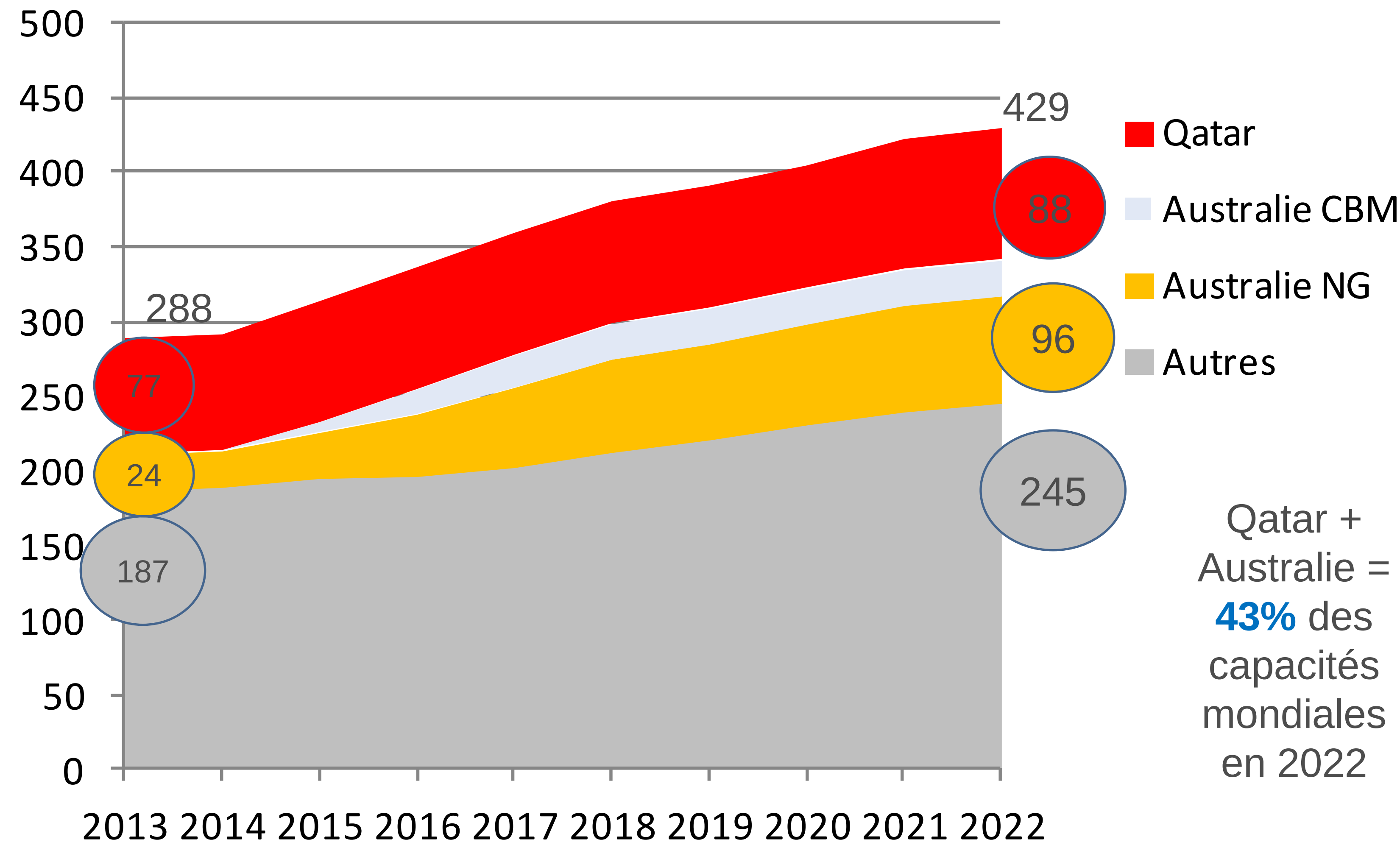
Evolution des capacité 2004 – 2013 , unité MT/an



Qatar + Australie = **35%** des capacités mondiales en 2013

50% de la croissance 2004-2013 (145 MT) repose sur Australie (15) et Qatar (58)

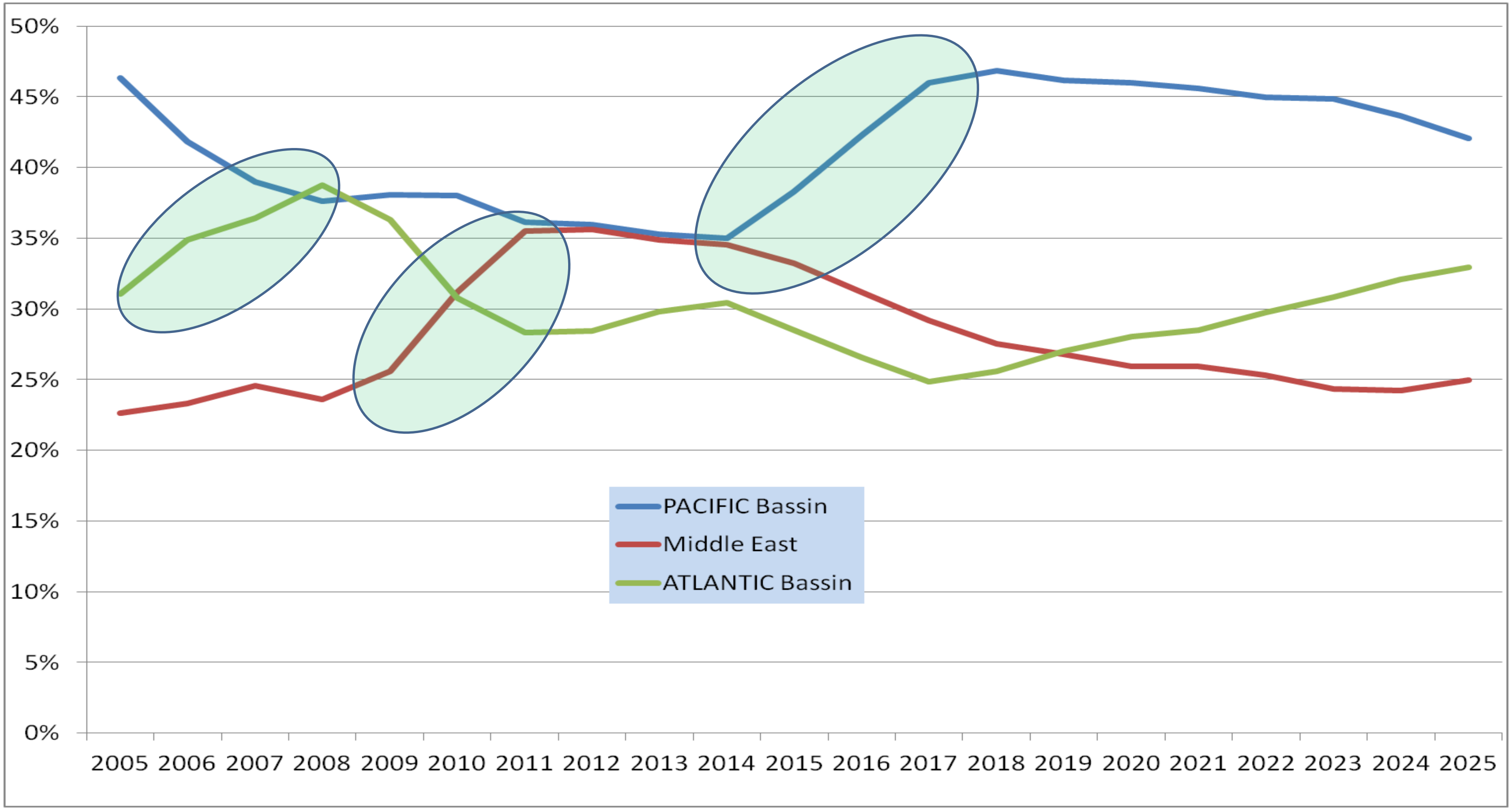
Evolution des capacités 2013 – 2022 , unité MT/an



Qatar + Australie = **43%** des capacités mondiales en 2022

60% de la croissance 2013-2022 (141 MT) repose sur Australie (72) et Qatar (10)

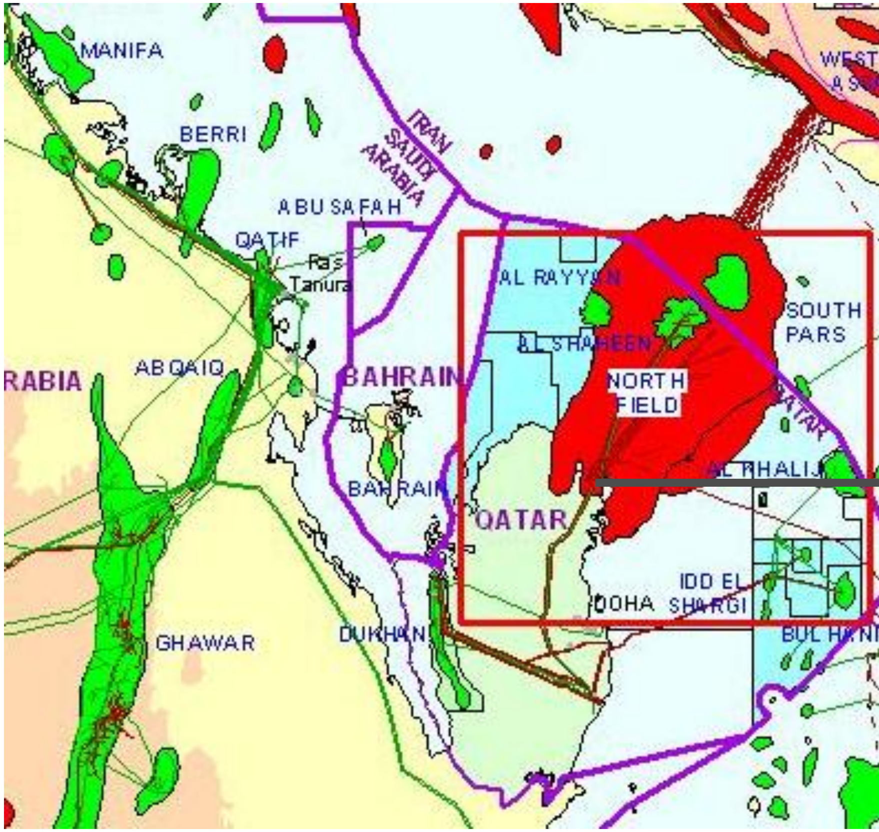
Capacités GNL monde



Recentrage sur le bassin Pacifique, qui retrouve la part qu'il avait en 2005

TOTAL

FOCUS QATAR



		QATARGAS		
QG I	T1-3	9,9	(3*3,3)	
QG II	T4	7,8		
QG II	T5	7,8		
QG III	T6	7,8		
QG IV	T7	7,8		41,1
		RASGAS		
Rasgas	T 1-2	6,6	(2*3,3)	
Rasgas	T 3-5	14,1	(3*4,7)	
RasLaffan	T 6-7	15,6	(2*7,8)	36,3
		GLOBAL		
TOTAL		77,4		77,4

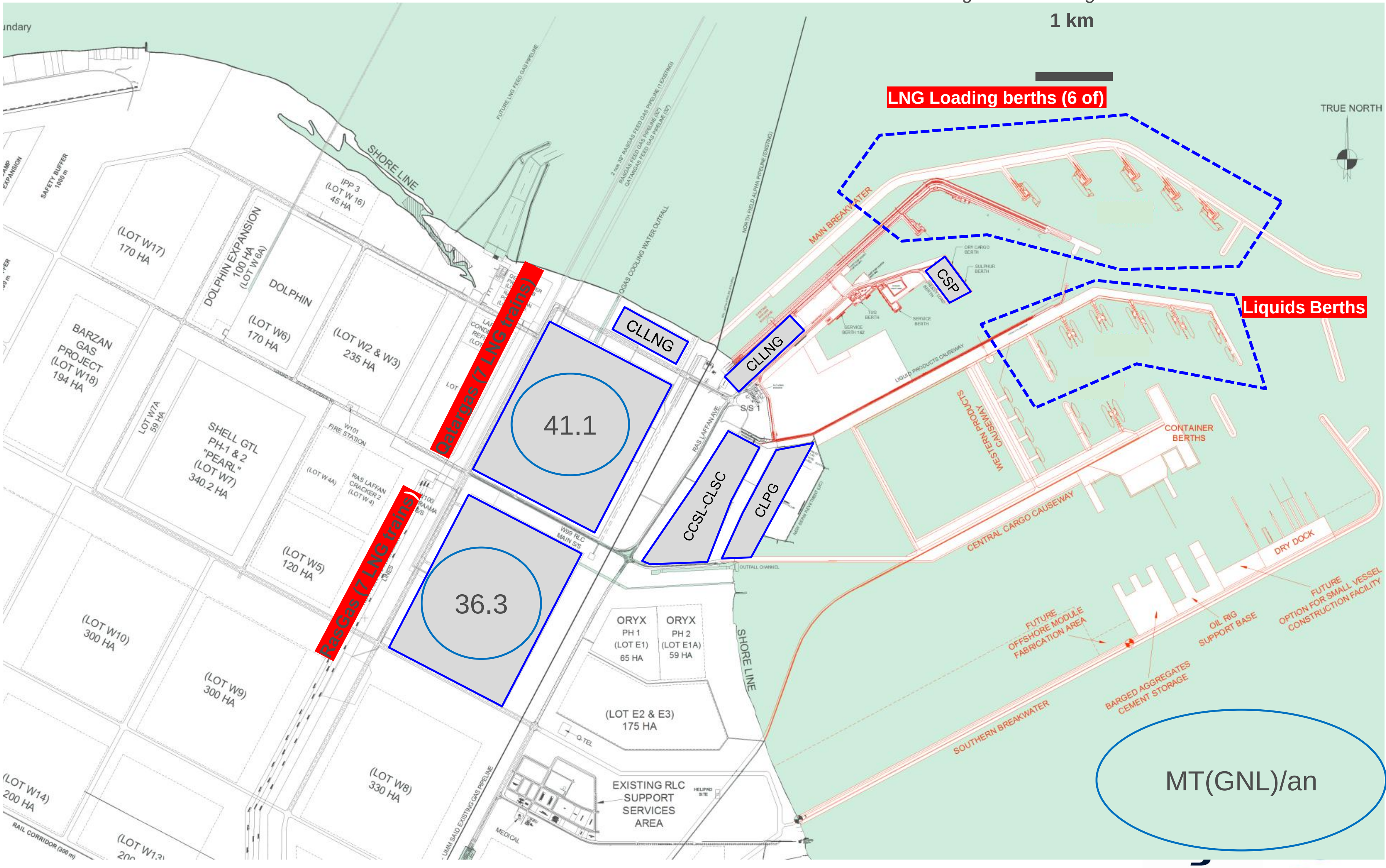
QATAR

North Field initial gas reserves = 900 tcf

25500 Gm3

Ras Laffan – Site Plan

CLLNG = Common Lean LNG Storage
CSP = Common Sulphur Facility (liquid transport, granulation and loading)
CCSL = Common Condensate Storage and Loading
CLSC = Common Low Sulfur Condensate Storage and Loading
CLPG = Common LPG Storage and Loading

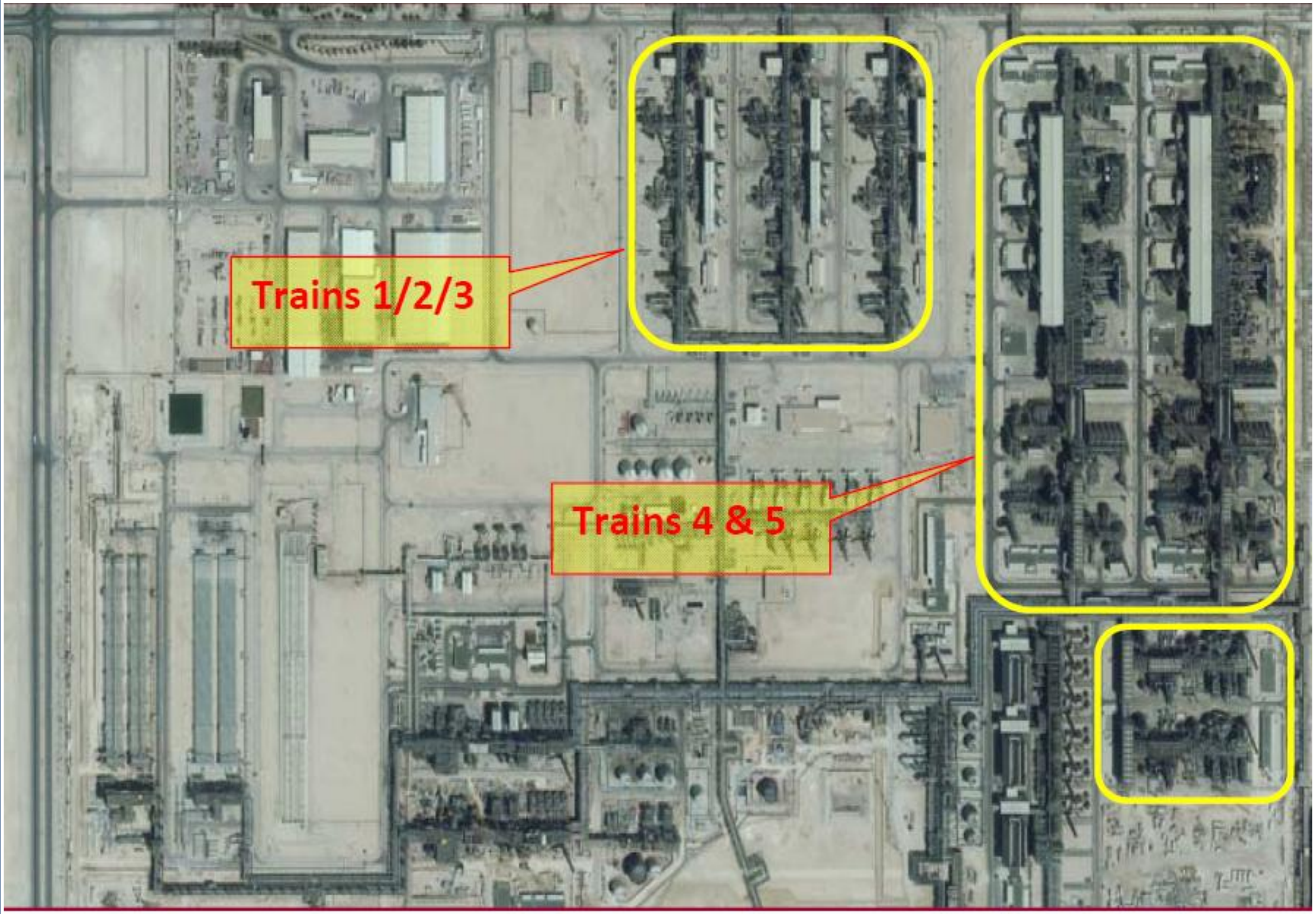


Qatargas 1 – In 2001, whole plant (port on left side)

QG Plant

3*3.3 MT/yr

2*7.8 MT/yr

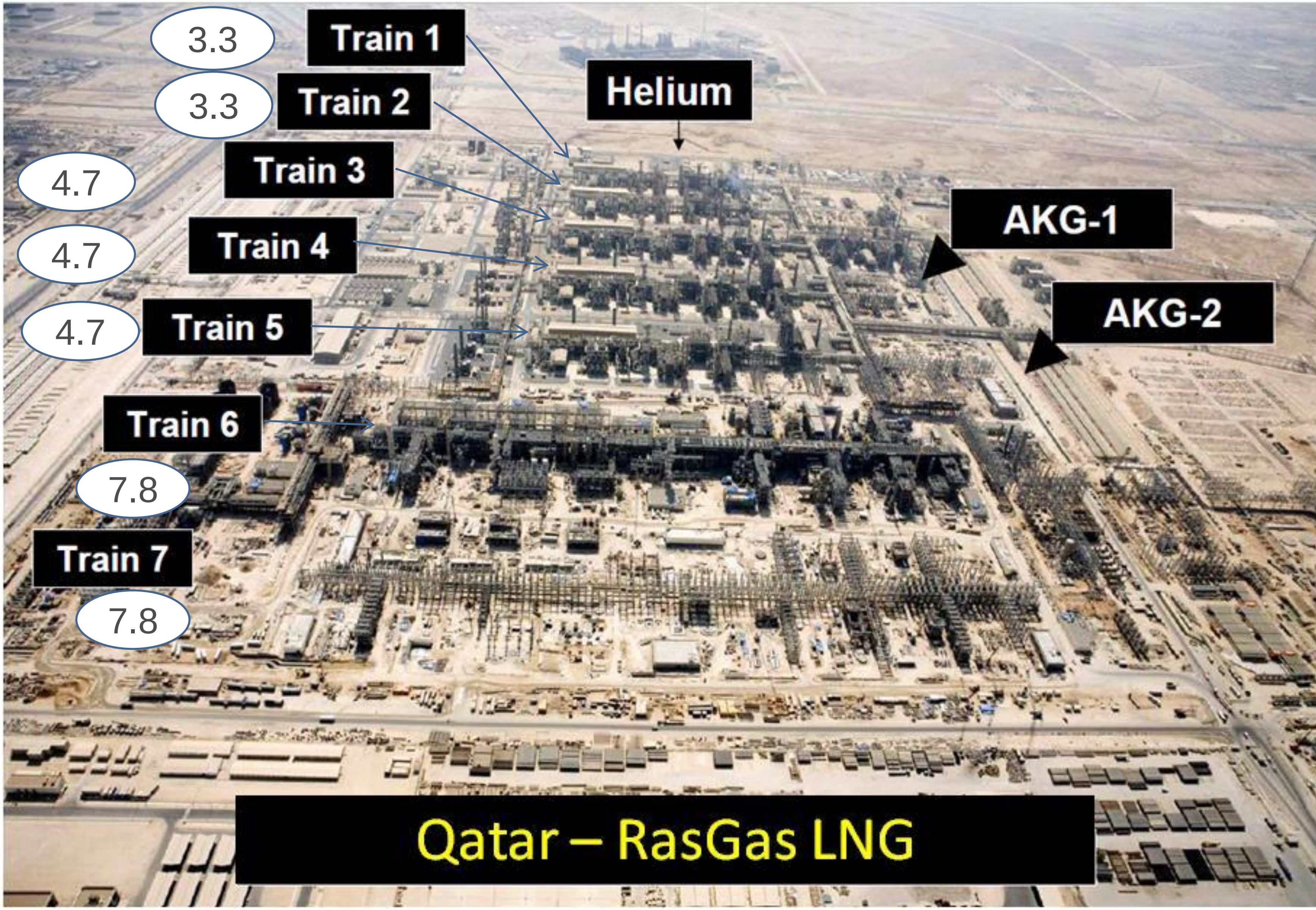


- Approx. 600m long
- Area by train: approx. 9ha
- Excludes inlet receiving facilities and SRU's

Comparison of QG1 Standard vs. QG2 New Mega-Trains 4 & 5

TOTAL

RasGas (36.3 MT)

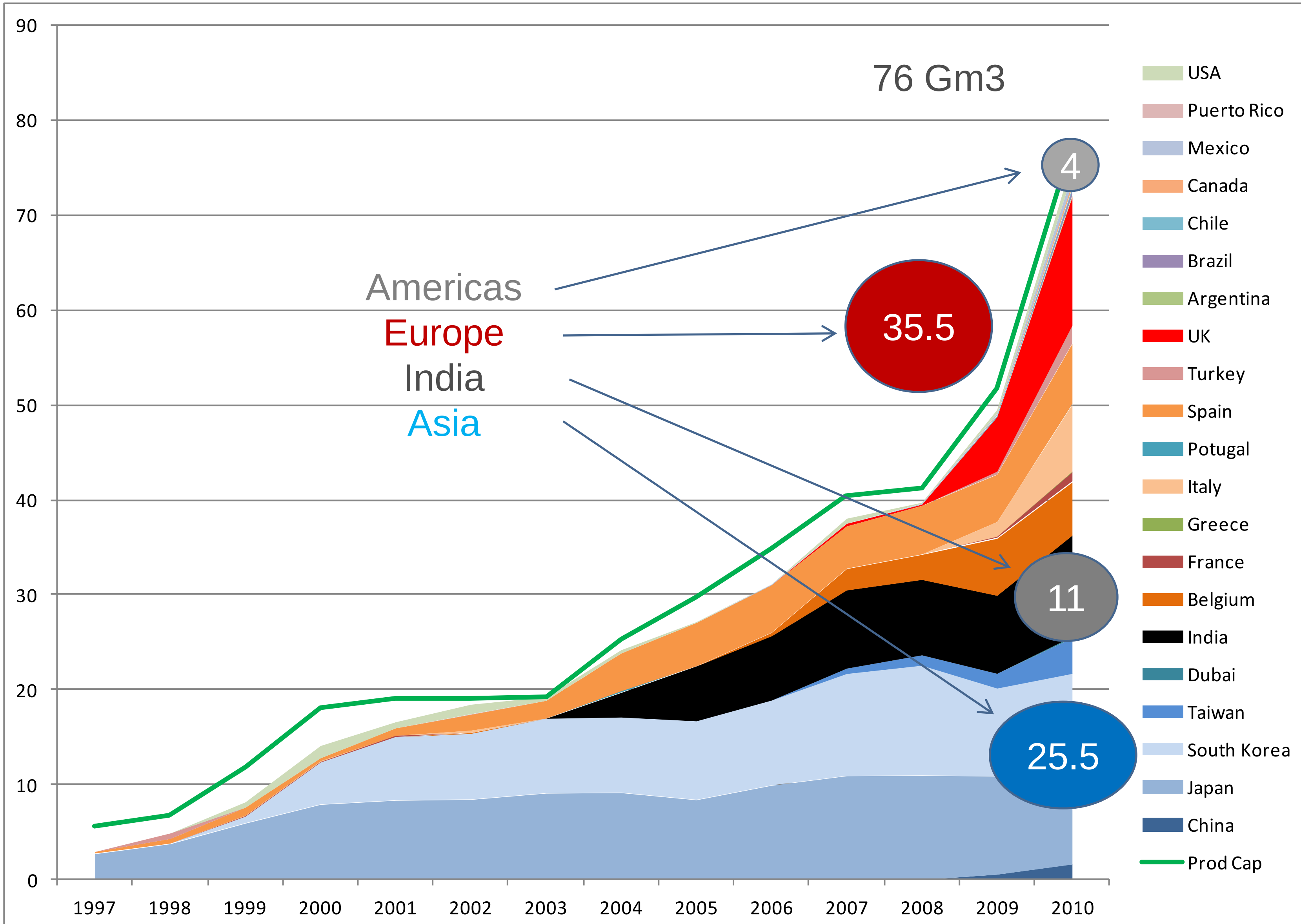


TOTAL

QG1 Ships – Al Jasra and Al-Wakrah

Ras Laffan port – Full utilization (April 2011)

Exportations de GNL du Qatar en Gm3 (Cedigaz)



FOCUS AUSTRALIE

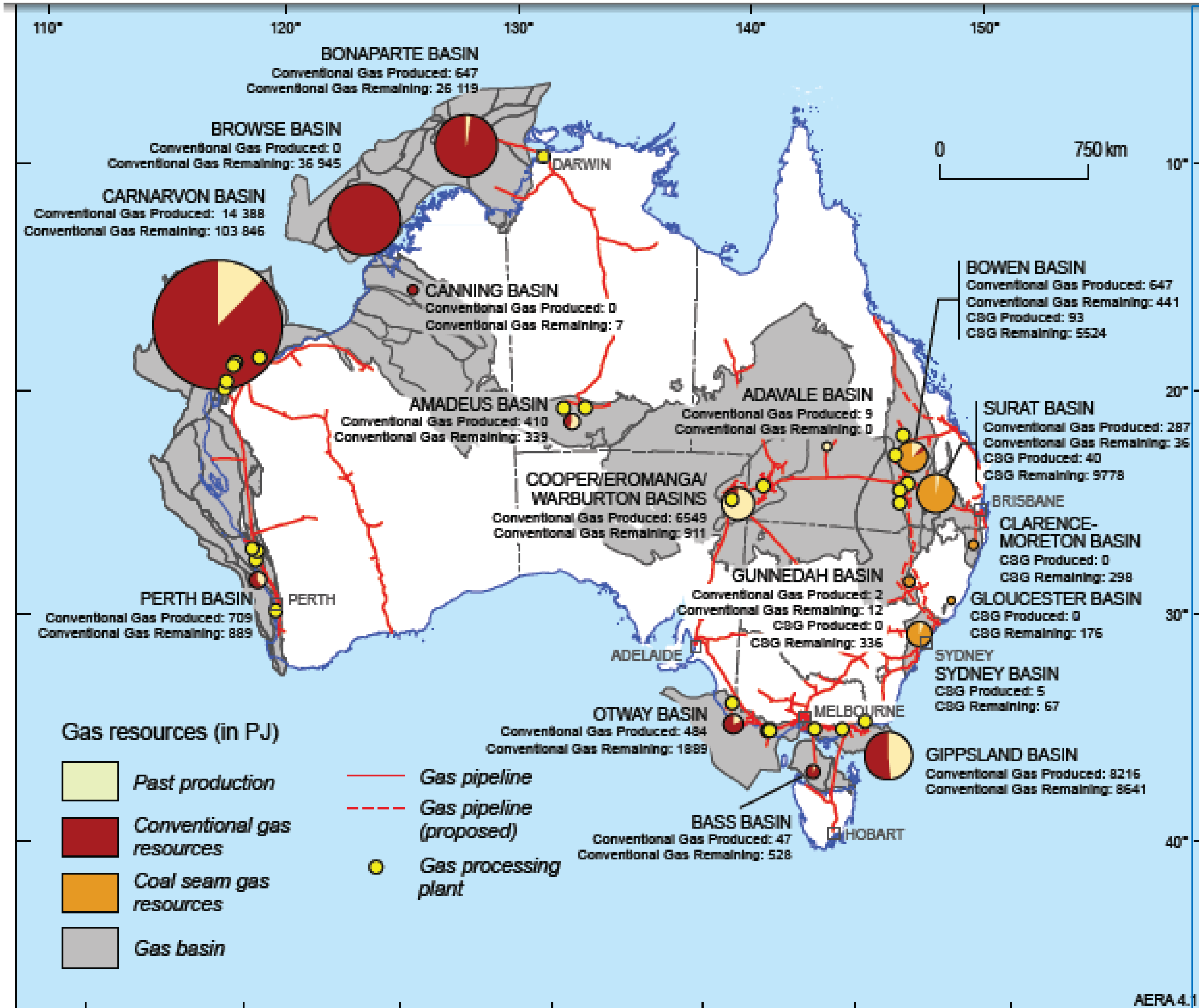


Figure 4.1 Location of Australia's gas resources and infrastructure

Source: Geoscience Australia

GNL en 2022

CONVENTIONNEL

CARNAVON
44.5

BROWSE et
BONAPARTE
27.5

CBM

QUEENSLAND
CBM
25

TOTAL
97 MT

TOTAL

(1) Gaz conventionnel (Offshore)

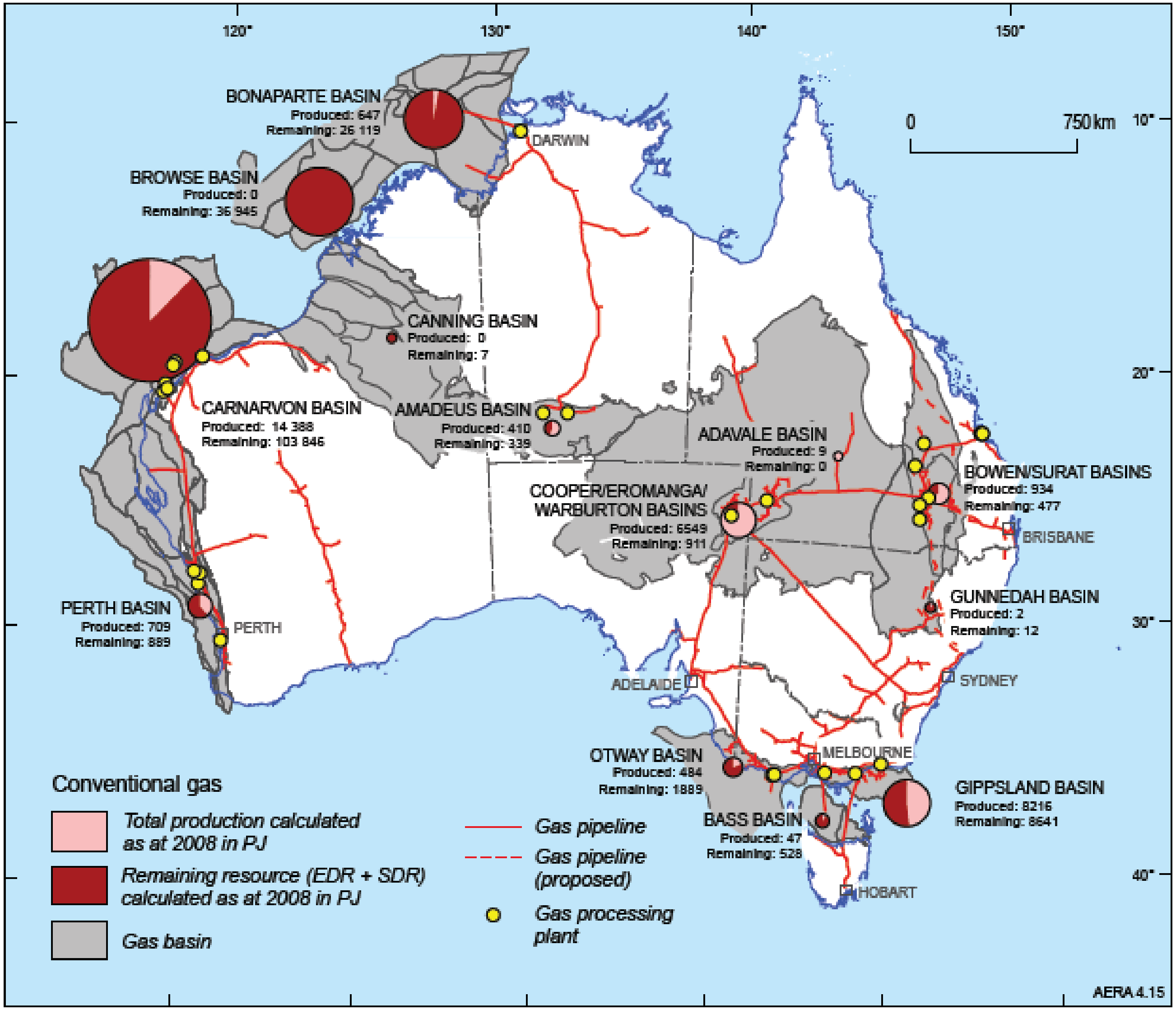


Figure 4.15 Australia's conventional gas resources, proven gas basins and gas infrastructure

Source: Geoscience Australia

USINES GNL du BASSIN de CARNAVON

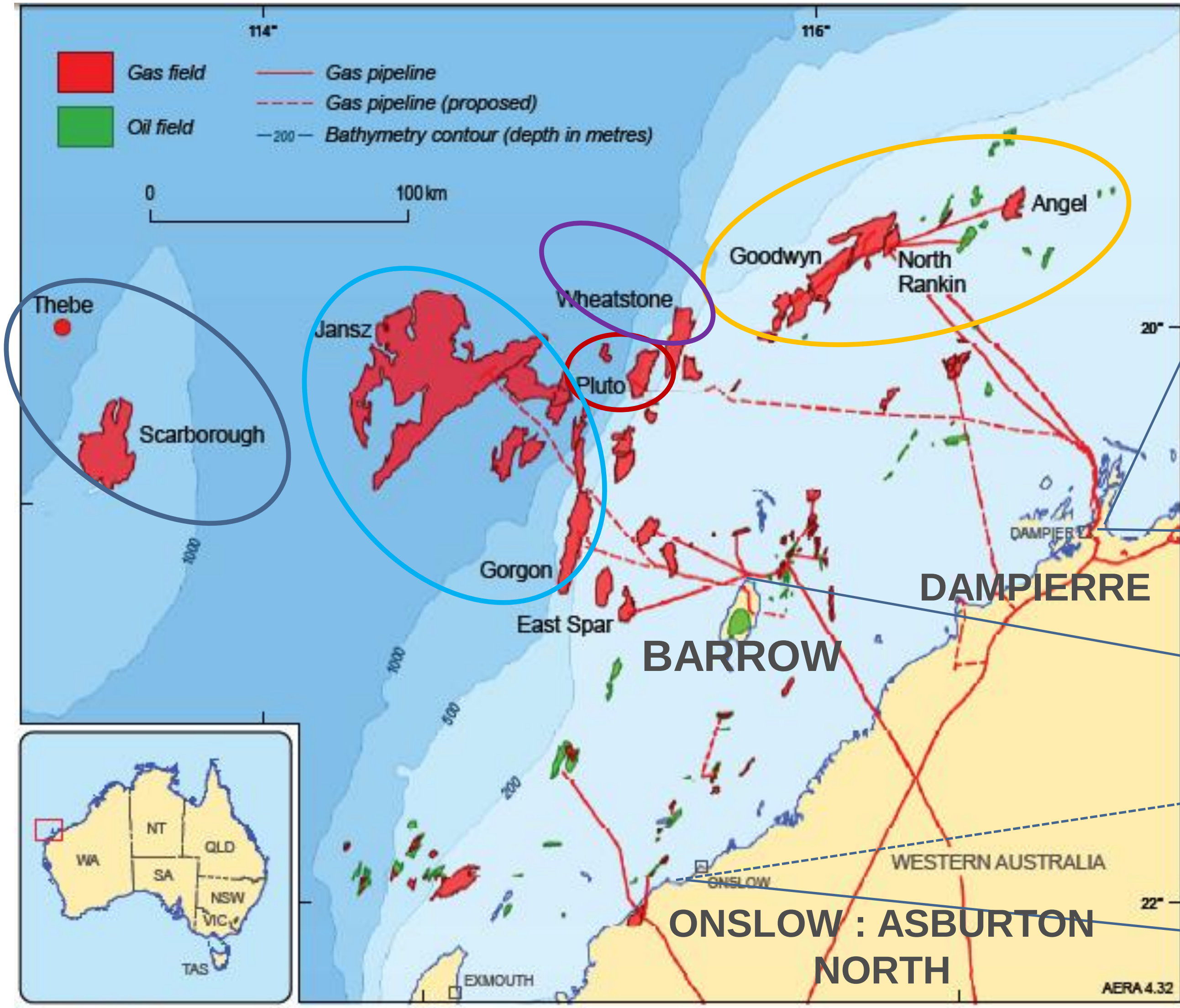


Figure 4.32 Gas fields in the Carnarvon Basin

Source: Field outlines are provided by GPinfo, an Encom Petroleum Information Pty Ltd product. Field outlines in GPinfo are sourced, where possible, from the operators of the fields only. Outlines are updated at irregular intervals but with at least one major update per year

TOTAL = **44.5** MT

NORTH WEST SHELF
16.3 MT (5T)

PLUTO
4.3 MT (1T)
Exp Poss (1/2T)

GORGON
15 MT (3T)
Exp Poss 2T

SCARBOROUGH

WHEATSTONE
8.9 MT (2T)
Exp poss 1T

	Existing		FID
	Probable		Possible

TOTAL

USINES GNL des BASSINS de BROWSE , BONAPARTE

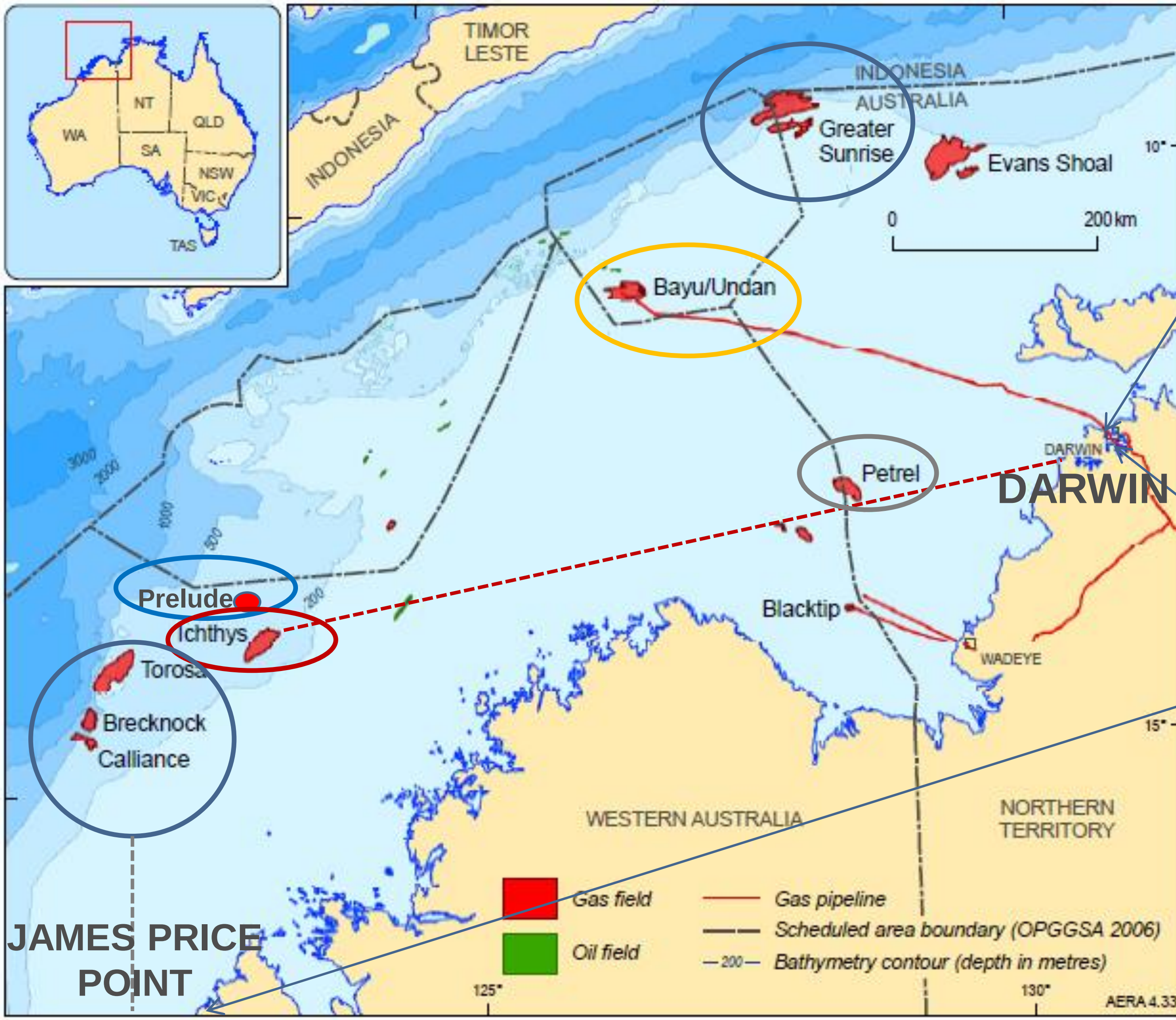


Figure 4.33 Gas fields in Browse and Bonaparte Basins

SUNRISE FLNG – 4 MT	Probable
DARWIN LNG 3.6 MT	Existing
PRELUDE FLNG – 3.5 MT	FID
ICHTHYS 8.4 MT (2T)	Probable
BROWSE 8 MT (2T) Exp poss 1T	Probable
BONAPARTE FLNG	Possible

TOTAL = **27.5** MT

Existing FID Probable Possible

TOTAL

(2) CBM

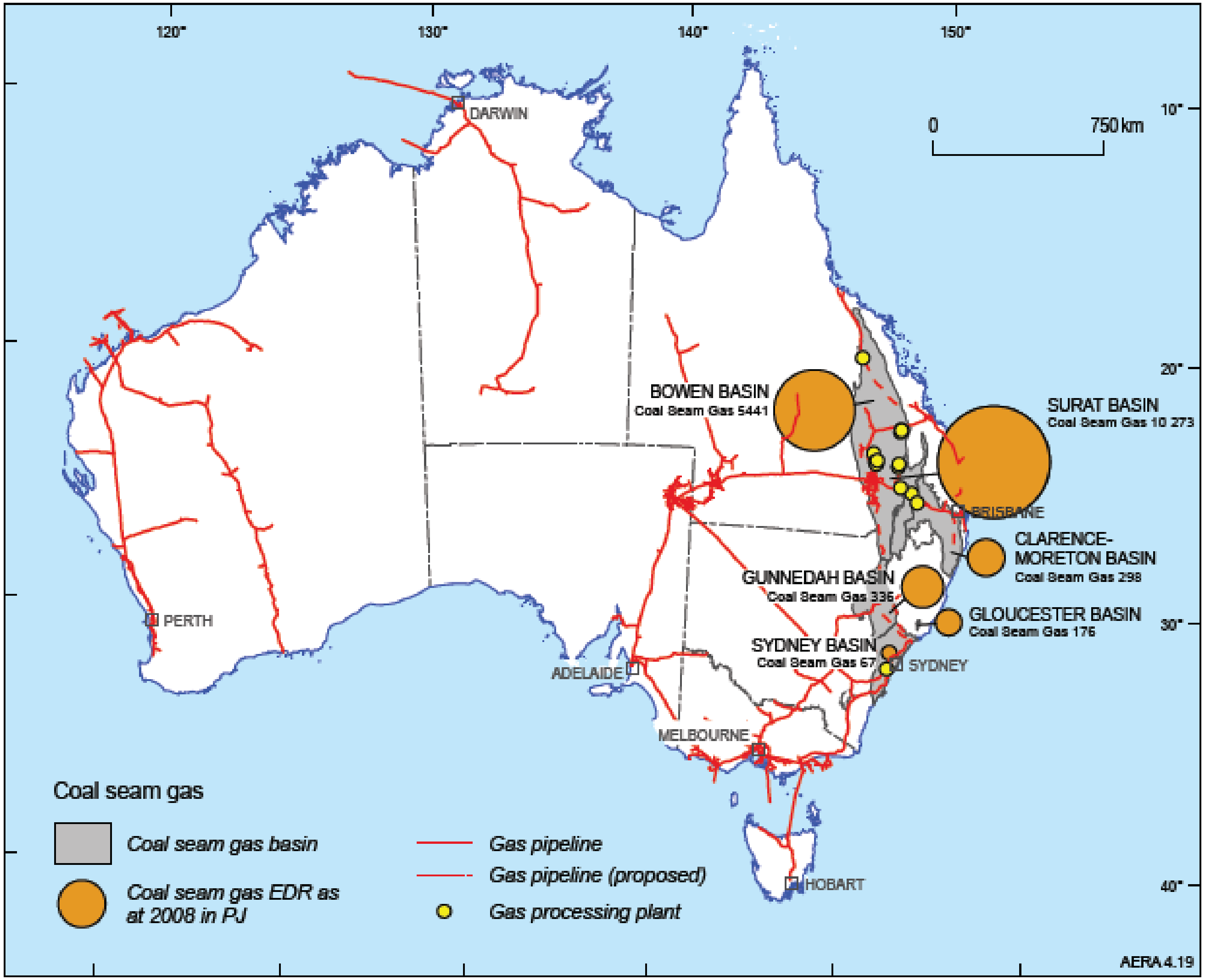
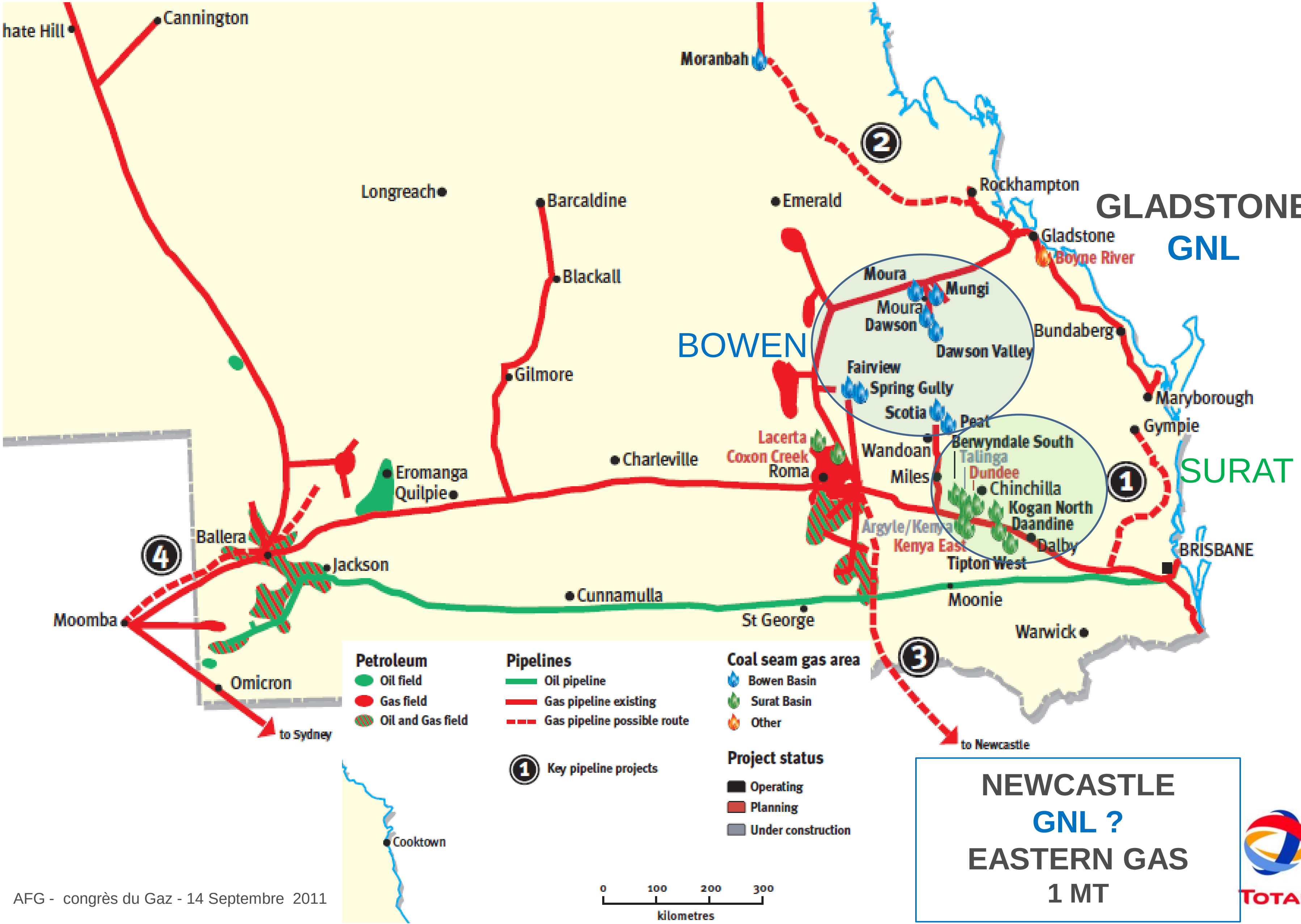


Figure 4.19 Location of Australia's coal seam gas reserves and gas infrastructure

Source: Geoscience Australia

TOTAL

QUEENSLAND CBM AREAS



TOTAL

GLADSTONE

TOTAL = **25.2** MT

Fishermans Landing	GLNG 7.2 MT (2T)	QCLNG 8.5 MT (2T)	APLNG 4.5 MT (1T) Exp poss 1T	Curtis LNG 4.0 MT (1T) Exp poss 1T

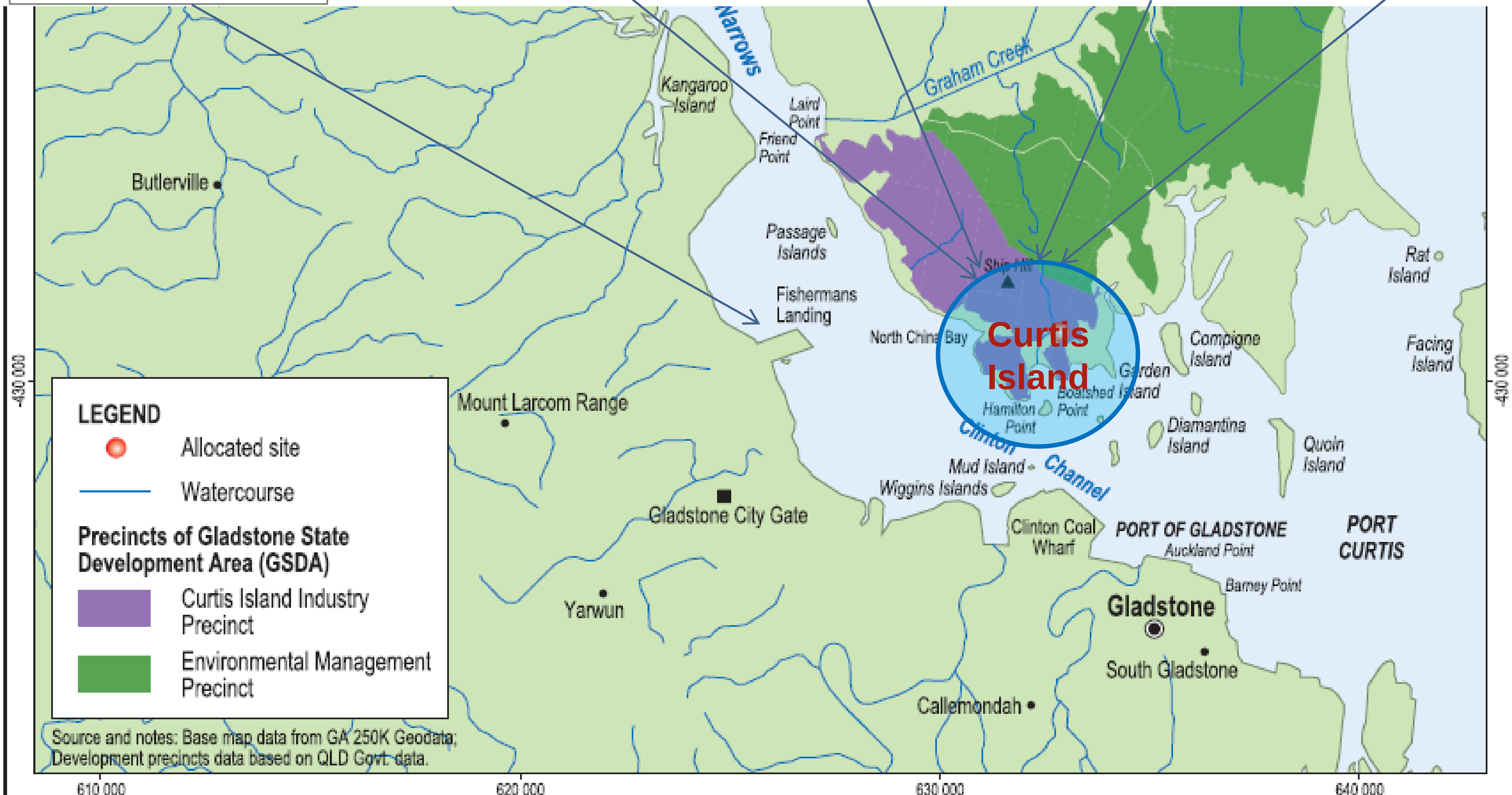
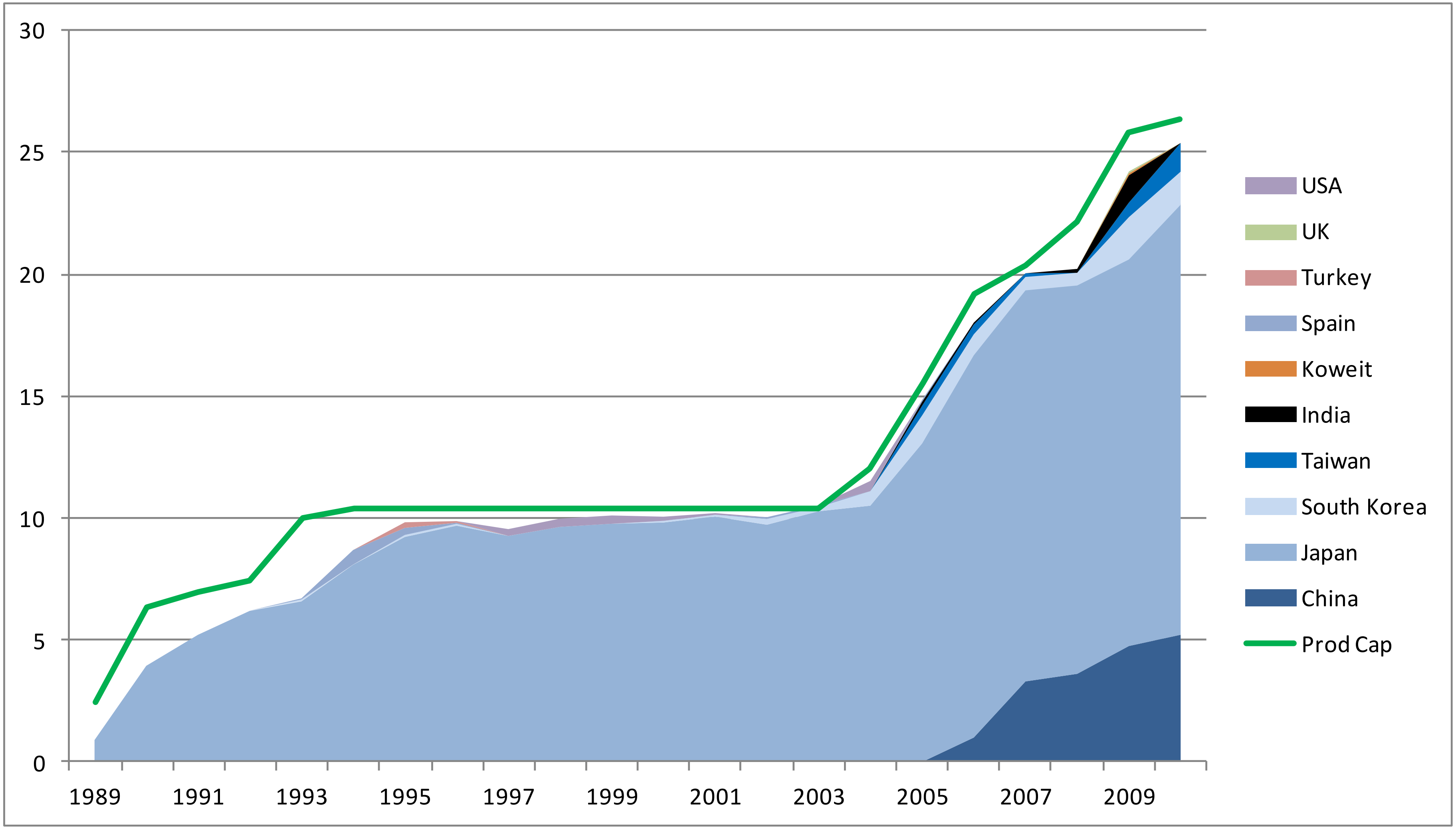


Figure 4.2 Precincts of Gladstone State Development Area (GSDA)

FID

Probable

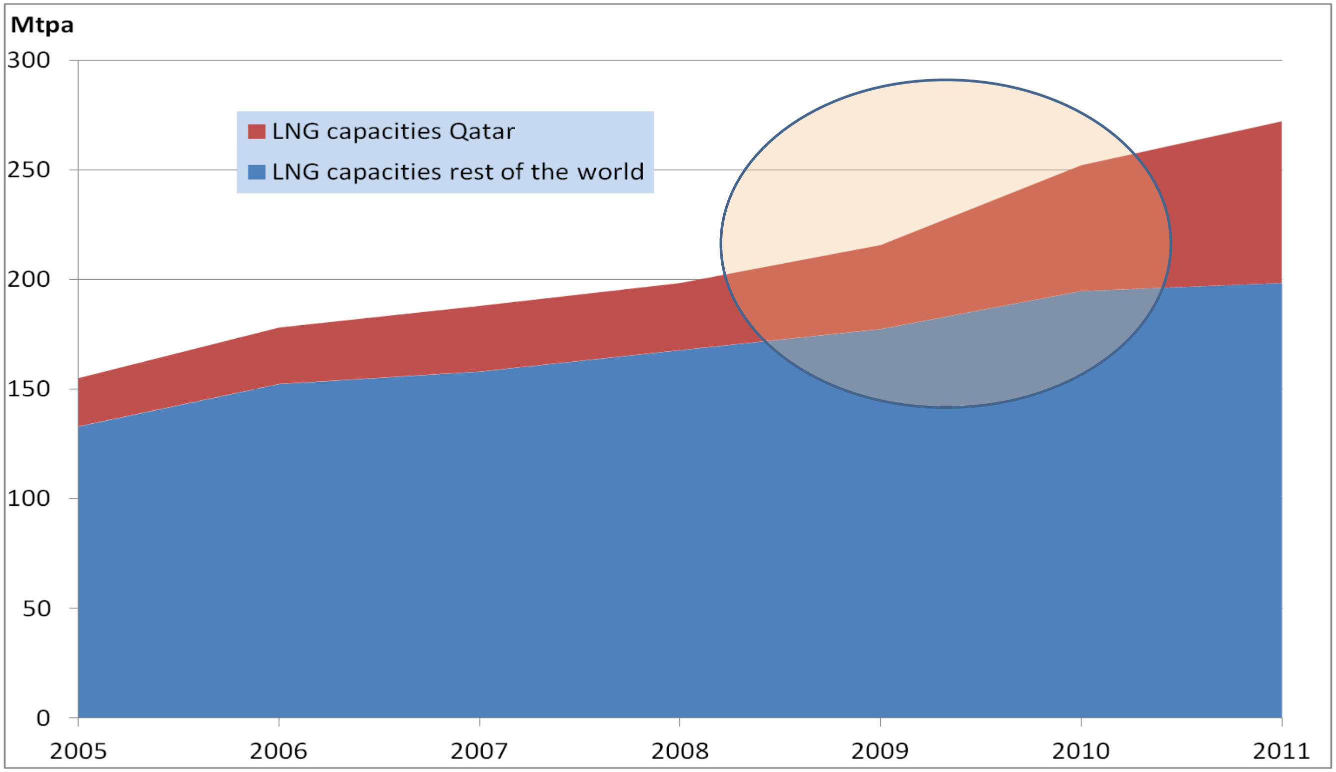
Exportations de GNL de l'Australie en Gm3 (Cedigaz)



TOTAL

IMPACTS MARCHE GAZ

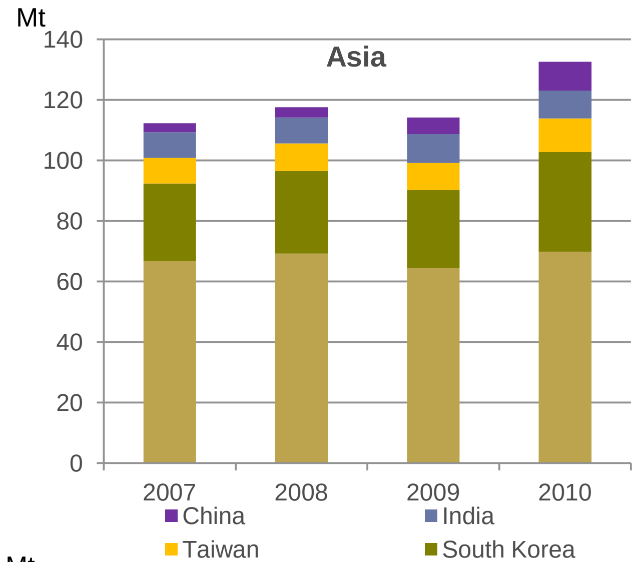
Capacités GNL 2005-2011

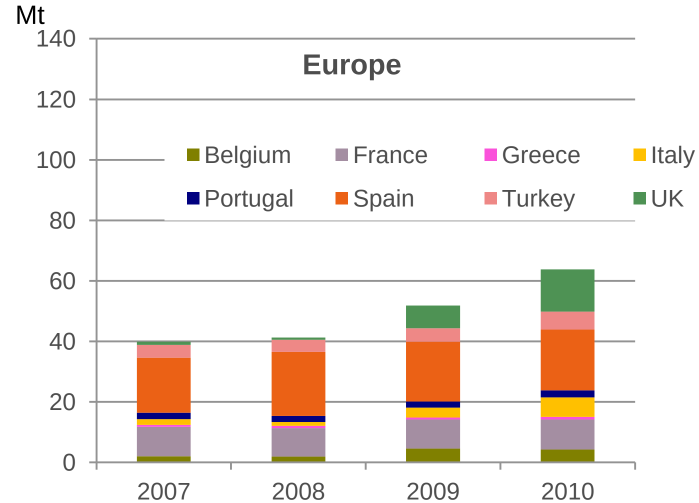


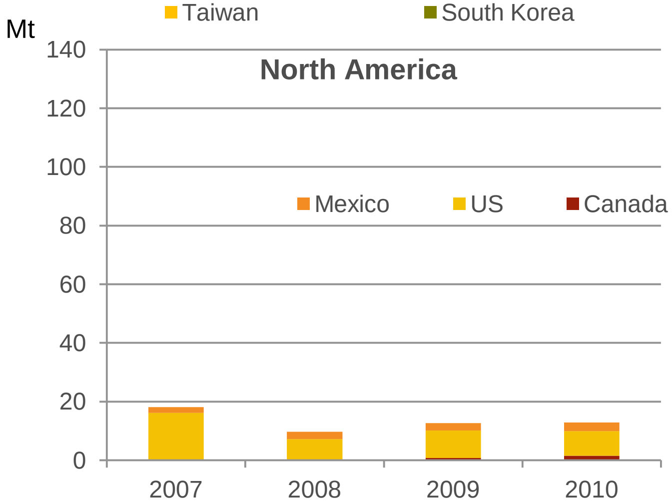
2009 : bulle gazière : l'arrivée des capacités de liquéfaction Qatari se fait au moment

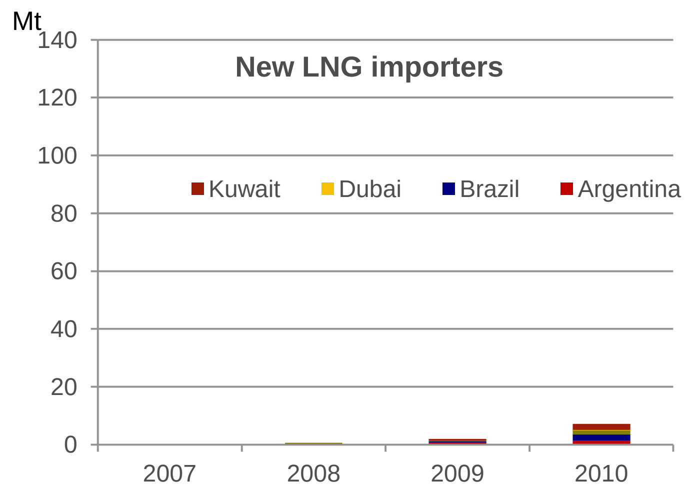
- de la crise économique
- de l'arrivée des shales gas aux USA

GNL: une croissance de la demande pendant la crise



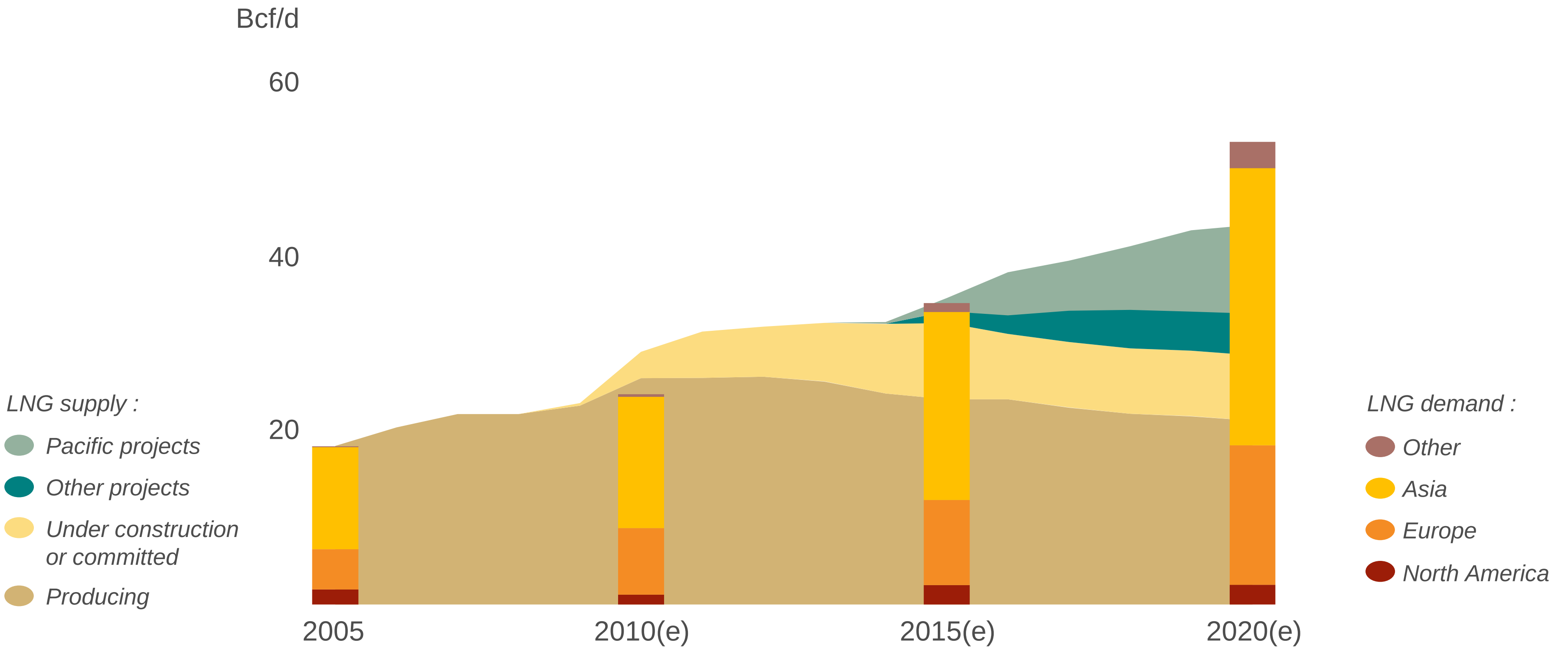






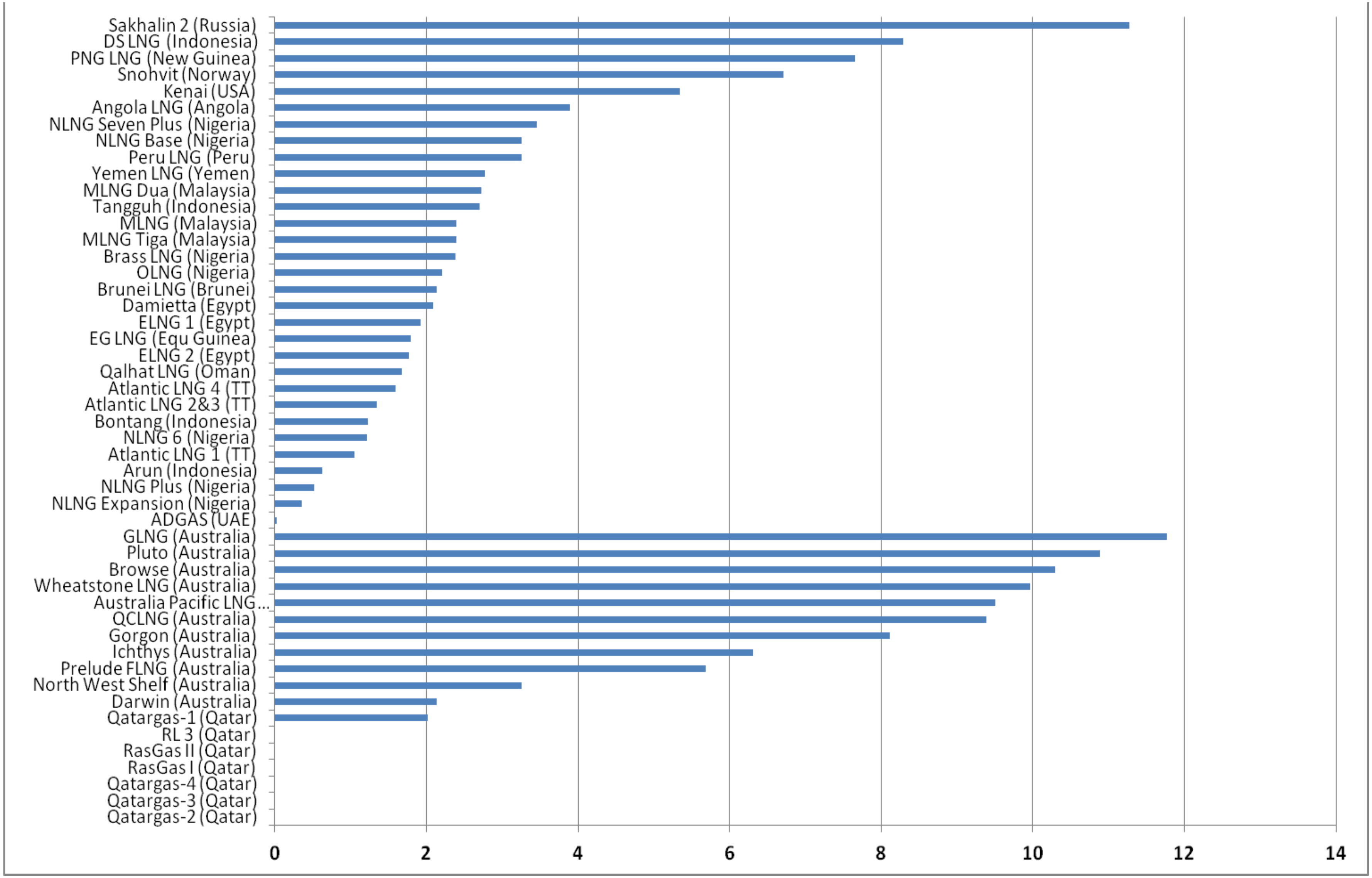
Source : CERA

Strong need for new LNG projects to meet future demand growth



Total estimates

LNG projects FOB cost (Breakeven)



Source WMK

TOTAL