

Monitoring methyl bromide consumption and use

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Topics covered

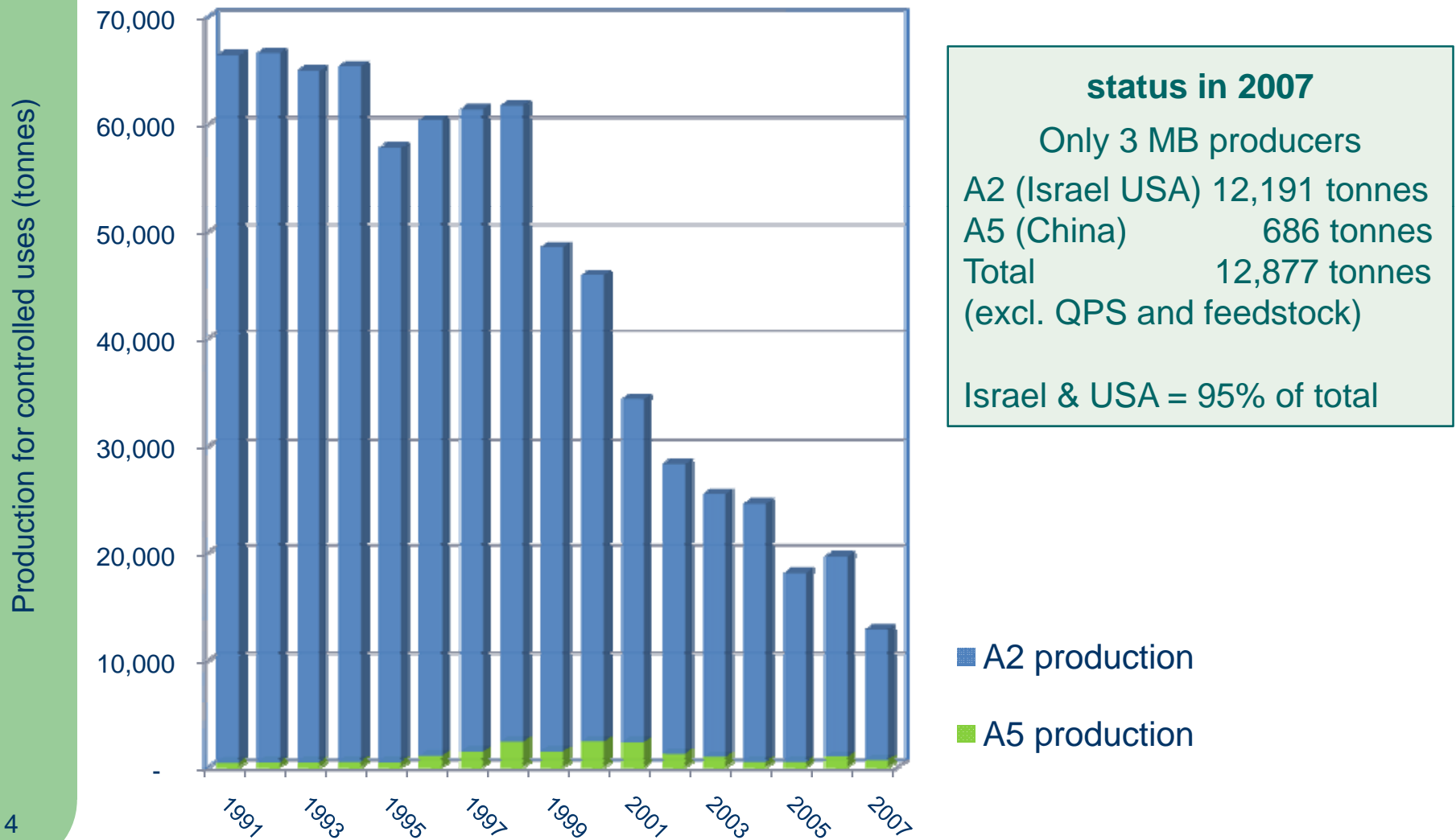
1. Trends in controlled uses of MB
 2. Trends in quarantine and pre-shipment use
 3. Montreal Protocol decisions on reporting on MB consumption and use
 4. Tools for monitoring MB consumption and use
- All quantities are shown in metric tonnes
 - Stated consumption and production figures do not include feedstock

1. Trends in controlled uses of MB

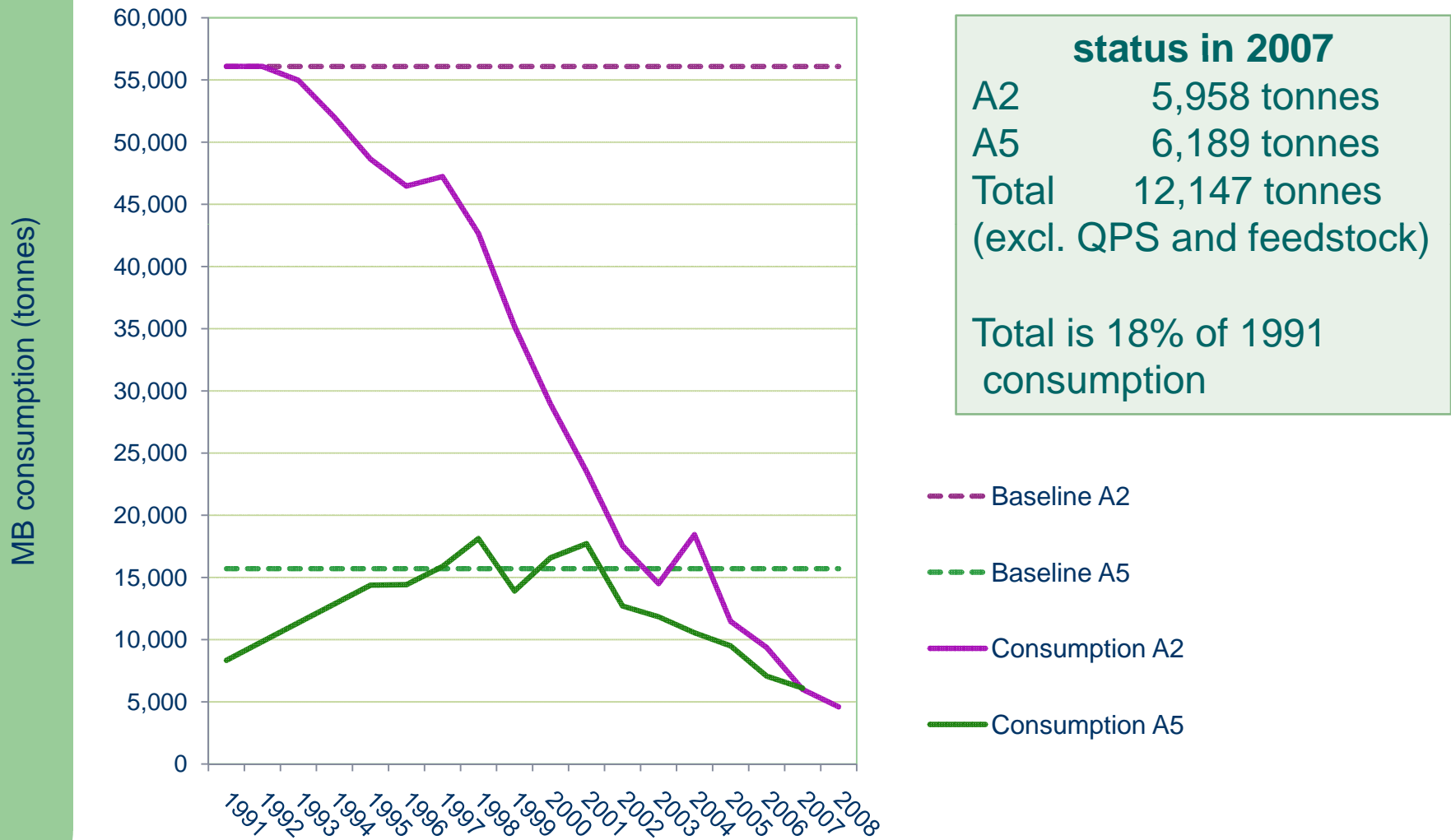
and progress in phase-out



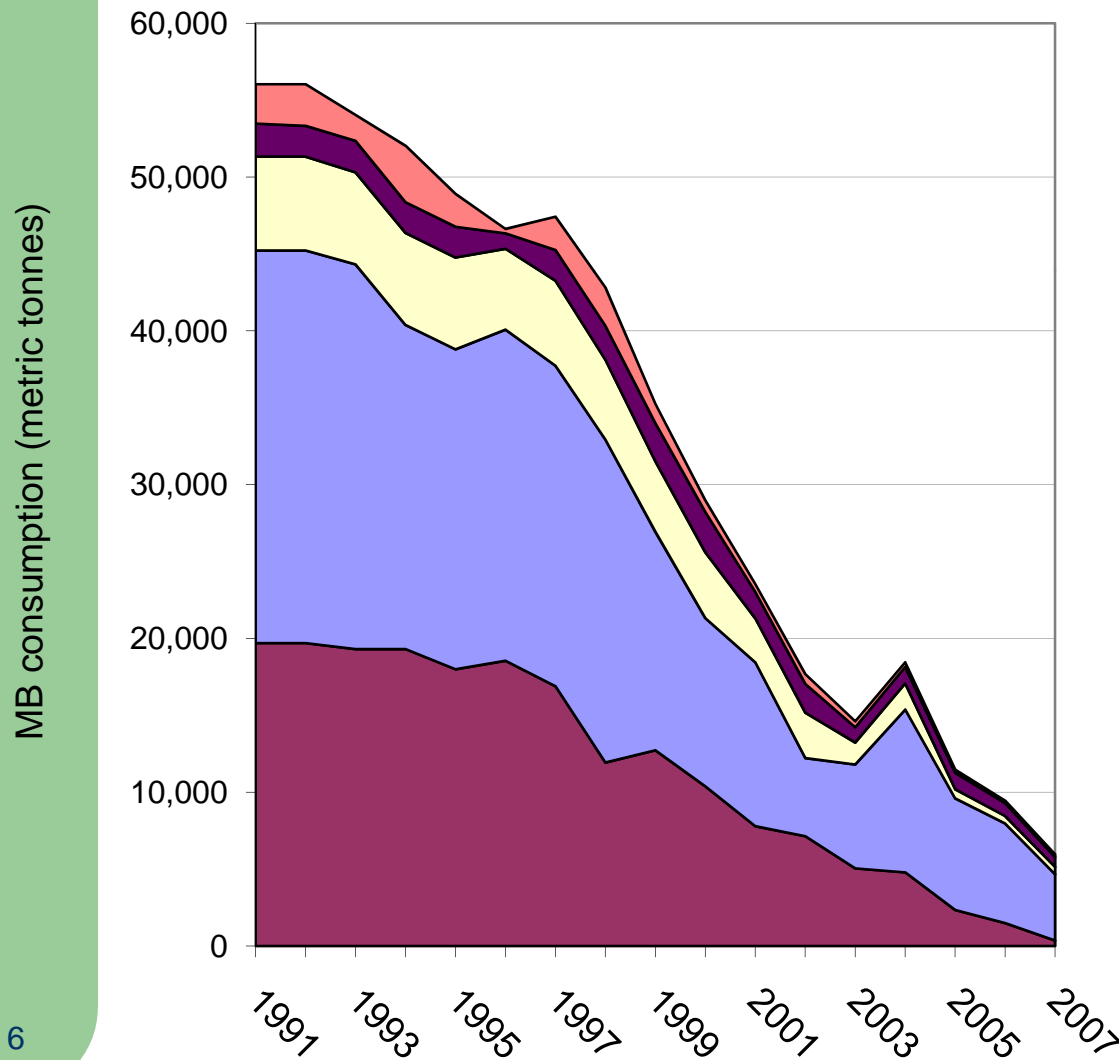
MB production for controlled uses



MB consumption trends: A2 and A5 parties



MB consumption in A2 parties



Status in 2007 (CUEs)

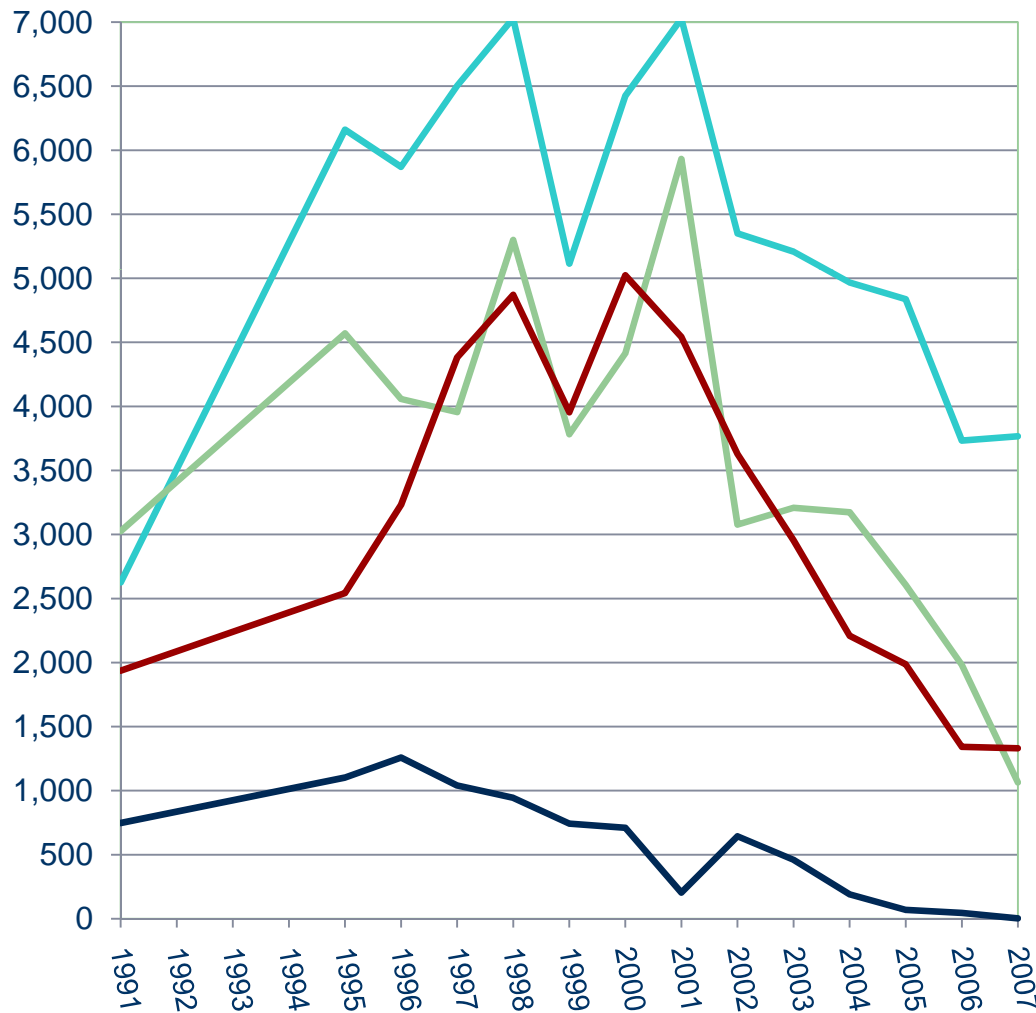
USA	4,302 tonnes
Israel	638 tonnes
Other A2s	1,018 tonnes
Total	5,958 tonnes

USA used 72% of total in 2007.
EU used 6% of total in 2007 and
ceased CUEs in 2008

- Other A2s
- Israel
- Japan
- United States
- EU 27 countries

MB consumption in A5 regions

MB consumption in metric tonnes



Status in 2007
consumption as % of regional baseline:

LAC 59 % of baseline
Asia 31 % of baseline
Africa 24 % of baseline
CEIT <1 % of baseline

— Latin America
— Africa
— Asia
— CEIT

A5 national consumption as % of baseline

Status in 2007

127 A5 Parties (88%) consumed <50% of their national Baseline.
Only 17 Parties consumed more than 50% of national Baseline

Status of national MB consumption in relation to national baseline	Number of A5 parties			
	2003	2004	2005	2007
MB consumption was 0% of national baseline	87	91	96	107
MB consumption was 1 - 50% of national baseline	19	22	19	22
MB consumption was 51 - 80% of national baseline	11	10	21	15
MB consumption was more than 80% of national baseline (non-compliance in 2005-7)	25	19	8	2
Total number of A5 countries examined	142	144	144	146

Progress in major A5 consumers

15 A5 Parties consumed 80% of A5 baseline in past.
The combined consumption of top-15 was 19,840 tonnes at peak.

Status in 2007:

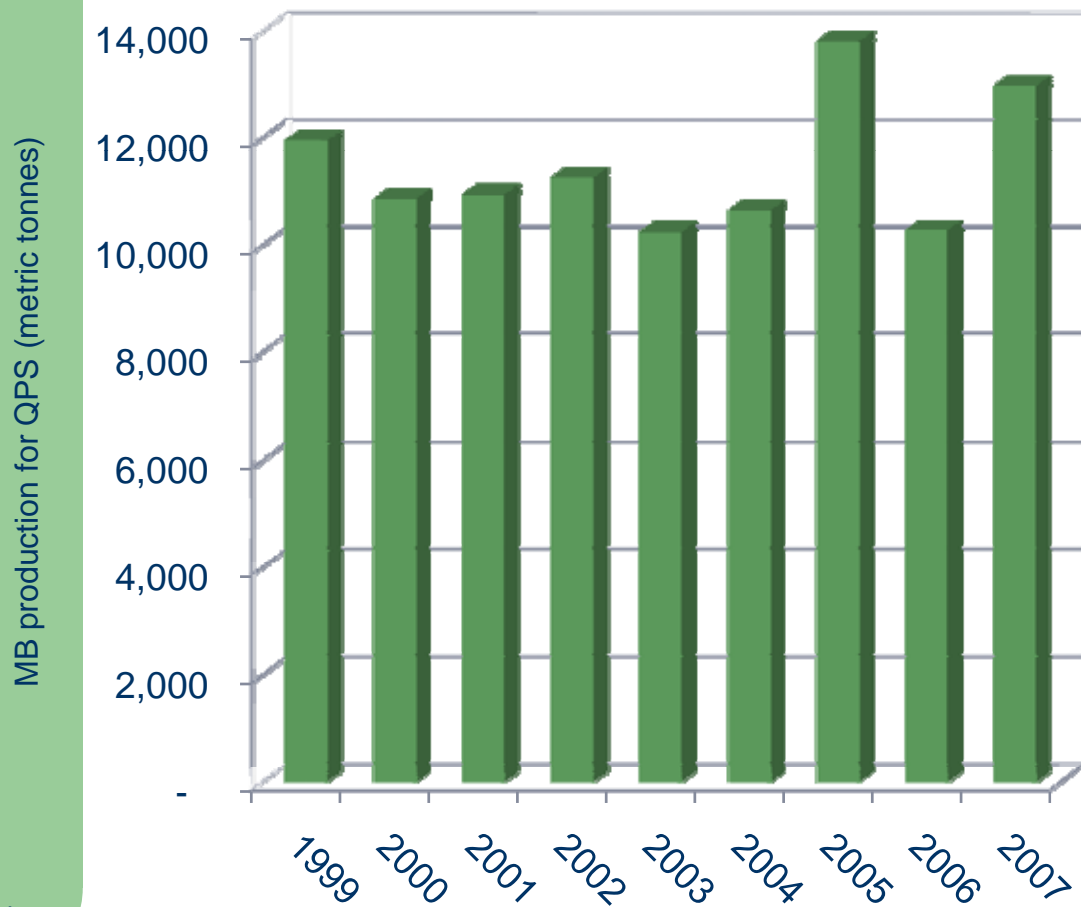
Average national consumption of top-15 was only 42% of baseline.
However progress varies greatly among countries, examples below

Country	National MB consumption (metric tonnes)			MB eliminated from peak year to 2007	MB eliminated from Baseline in 2007	MLF projects
	in peak year	Baseline (1995-98)	2007 (% of baseline)			
China	3,501	1,837	603 (33%)	83%	67%	Yes
Morocco	2,702	1,162	440 (38%)	84%	62%	Yes
Mexico	2,397	1,885	1,491 (79%)	38%	21%	Yes
Brazil	1,408	1,186	0 (0%)	100%	100%	Yes
Zimbabwe	1,365	928	36 (4%)	97%	96%	Yes
Guatemala	1,311	668	485 (73%)	63%	27%	Yes
South Africa	1,265	1,005	100 (10%)	92%	90%	No
Turkey	964	800	0 (0%)	100%	100%	Yes
Honduras	852	432	414 (96%)	51%	4%	Yes

2. Trends in quarantine and pre-shipment (QPS) uses of MB



QPS trends: MB production for QPS

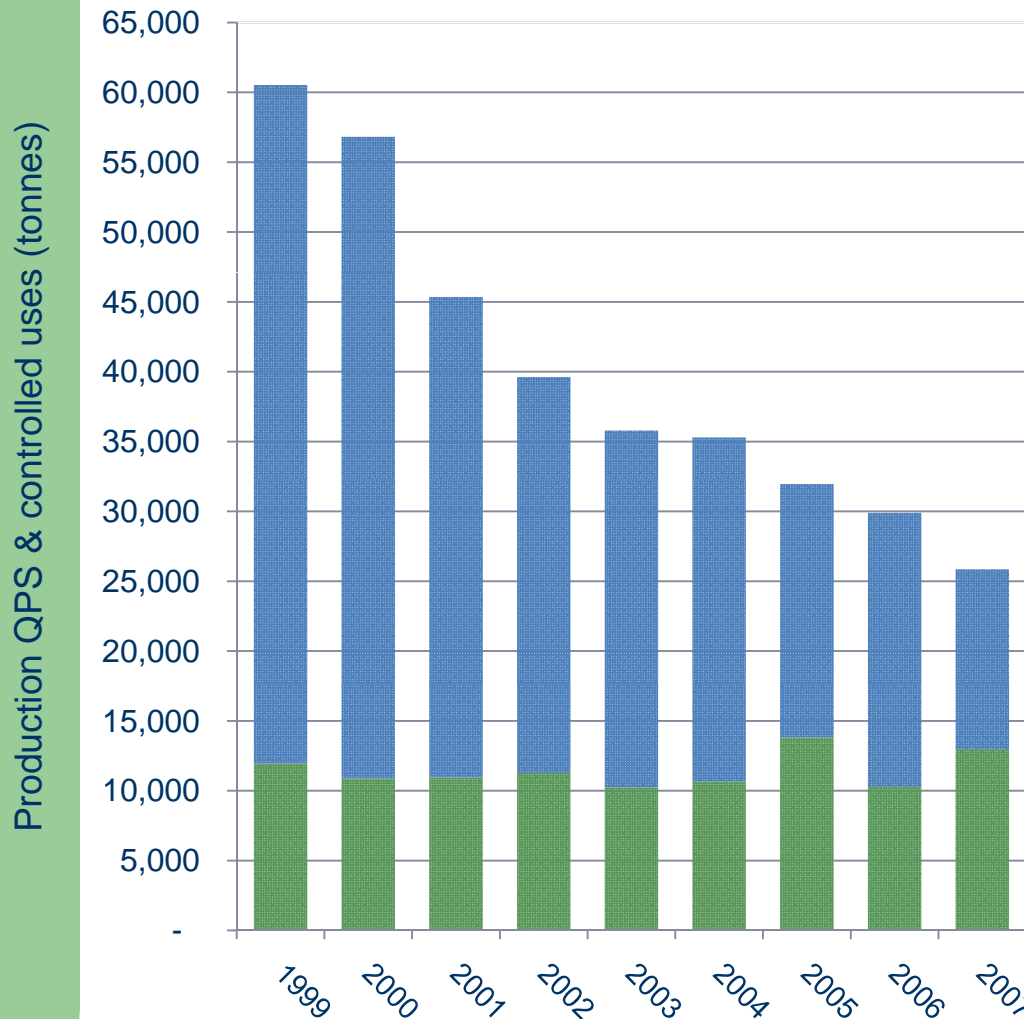


status in 2007

QPS 12,984 tonnes.

QPS production in 2005 and 2007 was significantly higher than previous 5 years

MB production: QPS vs. controlled use



status in 2007	
QPS	12,984 tonnes
Controlled uses	12,877 tonnes
Total	25,861 tonnes
(excl. feedstock)	
QPS was 50% of total in 2007	

■ Production controlled uses
■ QPS production

3. MP reporting requirements on MB consumption and use



MP reporting requirements – MB, QPS

Reporting requirements for MB in general:

- Article 7: Parties report annual data on production, imports and exports, feedstock, destruction, trade with non-Parties.

Reporting requirements for QPS:

- Decision IX/28 (adopted 1997) approved official forms for ODS data reporting, including data on MB production, import and export for QPS applications.
- Beijing Amendment, Article 7(3): requires annual data on amount used for QPS. Beijing Amendment in force from 2002 or 90 days after a Party ratifies.
- Decision XX/6(10) ‘encourages’ parties to submit a national strategy on QPS

MP reporting requirements - CUEs

MP Decisions established a large number of reporting obligations on CUEs, such as:

- Annual reports on implementation of Decision IX/6(1)
- Databases of alternatives for soil, postharvest uses
- Detailed submissions for CUNs
- Summaries of reasons for CUEs
- National phase-out strategy for CUEs, with updates
- Annual accounting framework reports on MB use, quantity acquired and used, and MB stocks at the start and end of year

MP requirements - MB stocks carryover

- MP requirements on MB stocks carryover are not clear.
- Decision XVIII/17 indicates that the following situation conforms with MP provisions: ODS imported for controlled use but some stocks kept for domestic feedstock in future year. It suggests (but does not confirm) it might be acceptable to keep/use stocks of controlled MB for QPS. This would not increase real consumption in year MB was imported.
- However, use of QPS stocks for controlled uses is likely to be unacceptable – would retrospectively increase real ‘consumption’ in year MB was imported. A report already submitted would show incorrect ‘consumption’ (too low).
- Decision XVIII/17 says MOP-21 will revisit stocks in 2009.
- A5 parties that wish to have guidance could write to OzSec with request for their situation to be considered.

Distinguishing between QPS and non-QPS

Ask the following questions about each MB treatment and product to find out if its QPS or non-QPS:

Step 1: Is it a quarantine treatment?

1. What is the target pest species?
2. For exports: is this pest controlled by official authorities in destination country? If yes, its quarantine.
3. For imports: is the pest controlled by official authorities in your own country? If yes, its quarantine.

If the pest species is not under official control by government authorities, it is not a quarantine treatment.

Distinguishing between QPS and non-QPS - 2

Step 2: Is it a pre-shipment (PS) treatment?

1. Is MB treatment carried out >21 days before export? If yes, this is not PS.
2. For exports: is MB treatment required by government authorities in destination country? If yes, this is PS.
3. For imports: Is MB treatment required by government authorities in your country for this product/pest? Did your government's requirement exist before 7 December 1995? If yes, this is PS.
4. Is MB required by a company, bank (letter of credit), or commercial body? If yes, this is not QPS.

MB treatments that are not QPS are counted as part of the national controlled MB consumption



4. Tools for monitoring MB consumption and use



Monitoring MB imports

To track MB effectively its necessary to monitor both QPS and non-QPS imports and uses.

ODS import licensing systems are applied to MB in most A5 parties now. Can be augmented in various ways:

- Quota allocations for both QPS and non-QPS, to assist monitoring of QPS. e.g. EU has operated quotas for both.
- Permits for each MB shipment.
- More countries' participation in iPIC informal prior informed consent system.
- Comprehensive regional lists of trade names and photos of QPS and non-QPS containers/products, including MB mixtures, for customs and enforcement officers.
- Requirement for traders to report back on actual quantity imported/exported (QPS and non-QPS).

Monitoring via pesticide legislation

MB is a pesticide and toxic substance, often regulated under legislation on pesticides, hazardous chemicals etc.

Examples of monitoring/control options under pesticide laws:

- Create separate pesticide registrations and pesticide labels for QPS and non-QPS MB. e.g. Japan created separate registrations, uses red label for quarantine containers, blue for controlled uses.
- Cancel pesticide registrations for crops/uses which no longer use MB, and uses where alternatives are available.
- Register each facility where MB is sold or stored; require annual records on qty acquired, sold, stocks at start and end of year, other details if needed.
- Require fumigators to be trained/licensed – most countries already require this.
- Require each fumigator to keep records or logbook of each MB fumigation – see next slide.

Collecting information on end-uses

Various options for compiling data and tracking MB end-uses:

- MB fumigators required to compile logbook records, recording quantity MB used, target pests, crop/use, area/volume treated, location, and other details.

e.g. EU requires each MB QPS fumigator to keep logbooks, submitted annually to national authorities.

- ODS importers/sellers are required to ensure all MB purchasers/buyers complete a form stating contact details, quantity MB, purpose, etc. e.g. Kenya ODS regulations.
- Surveys of fumigators and end-users – but surveys are time-consuming, can be difficult to get data.
- Invite fumigators and end-users to a workshop where they are asked to complete questionnaires on MB – but not reliable because answers based on memory not records.

Training and related activities

Various tools can be used to increase understanding of the need to monitor, track and report on MB:

- Train fumigators, quarantine authorities, and others that QPS MB should only be used for QPS, and to keep separate records relating to QPS and non-QPS MB.
- Set up separate training/licensing systems for fumigators who handle MB for QPS and non-QPS, to reinforce the importance of tracking MB streams separately.
- Require annual or 2-year training updates for fumigators, as a condition of licenses, so they keep abreast of requirements.
- Include training on alternatives for above groups; involve local/ regional specialists who have long-standing experience in the successful use of alternatives

Monitoring MB stocks

- Require stocks of QPS and non-QPS to be stored as separate batches, and treated as different products.
- Separate pesticide registration and different-coloured pesticide labels will assist this.
- Accounting Framework templates used for essential uses in MP can be adapted to track stocks at enterprise level, e.g. stocks at start and end of year, amount acquired in year, amount sold.
- Stocks can be held at several levels in the supply chain (importers, wholesalers, distributors, fumigators, some end-users), so it is necessary to decide at what level(s) you wish to target stocks recording and reporting.

Preventing illegal use after projects - 1

- Start early, plan ahead.
- Don't leave large MB reduction steps close to phase-out.
- Regulate and monitor both QPS and non-QPS MB.
- Set up monitoring and reporting systems under pesticide legislation, so monitoring can continue by pesticide authorities after MLF projects finish.
- Ensure that past and current MB users have viable alternatives a.s.a.p. – so they won't need MB in future:
 - Farmers need cost-effective pest control tools so they can grow a profitable crop; MB is just one of several tools. Existing options may need improvements in efficacy or profitability.
 - Fumigators need to make a living by selling (other) pest control services and products.
- From now, require remaining MB users to report annually on progress they make in identifying and adopting alternatives.

Preventing illegal use after projects - 2

- Ensure that people who provide technical advice about pest control are well-informed about alternatives, e.g. agric. consultants, pesticide sellers. Most farmers get pest control information from sellers of pest control products, watching other farmers, agric press, and increasingly the internet.
- Adopt incentives to encourage use of alternatives; identify suitable disincentives for MB use; relevant to remaining users.
- Cancel pesticide registrations for non-QPS crops/uses when viable alternatives are available.
- Cancel pesticide registrations for specific QPS uses for which viable alternatives are available/authorised.
- Consider QPS phase-out, so there would be no need to import any MB after the project finishes. e.g. MB has been de-registered in EU under pesticide legislation, cannot be used in EU after 18 March 2010. Also adopted in new ODS regulation by Euro Parliament.