

Illicit tobacco in Australia

2017 Full Year Report

20 April 2018



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Nothing in this Report constitutes legal advice. Information sources, the scope of our work, and scope and source limitations, are set out in the Appendices to this Report. The scope of our review of the contraband, counterfeit and unbranded segments of the tobacco market within Australia was fixed by agreement with the Beneficiaries and is set out in the Appendices.

We have satisfied ourselves, so far as possible, that the information presented in this Report is consistent with our information sources but we have not sought to establish the reliability of the information sources by reference to other evidence.

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Glossary

ABF	Australian Border Force
ABS	Australian Bureau of Statistics
ACIC	Australian Criminal Intelligence Commission (formerly Australian Crime Commission)
ACT	Australian Capital Territory
AIHW	Australian Institute of Health and Welfare
AIT	Anti-Illicit Trade
ΑΤΟ	Australian Taxation Office
AWOTE	Average Weekly Ordinary Time Earnings
AUSTRAC	Australian Transaction Reports and Analysis Centre
BATA	British American Tobacco Australia
bn	Billion
CAGR	Compound Annual Growth Rate
CATI	Computer Aided Telephone Interview
CAWI	Computer Aided Web Interview
Contraband	Genuine manufactured cigarettes that are sold without the payment of applicable excise taxes in the market of consumption. Contraband cigarettes tend to have been bought in a low-tax country and brought into the country of consumption illegally or acquired without taxes (for export purposes) and illegally re-sold in the market of consumption. This category includes genuine products that are brought into a country in amounts exceeding the personal allowance; in Australia this limit is 25 cigarettes or 25 grams of RYO per person
Counterfeit	Manufactured cigarettes that are illegally manufactured and carry the trademark and/or branding of a legally manufactured brand without the consent of the trademark owner. Counterfeit cigarettes are also known as fake cigarettes. For the purposes of this analysis, data relating to counterfeit is not included within the definition of contraband
CPI	Consumer Price Index
DIBP	The Department of Immigration and Border Protection
Domestic cigarettes	Cigarettes that are produced for consumption in Australia
Domestic Illicit Plains	Flows of Illicit White brands that have packaging designed for the domestic Australian market
EOS	Shipment data is provided by each manufacturer to independent research agencies who process and combine it into a single set of data to reflect ex-factory shipments for all three manufacturers
EPS	Empty Pack Survey
FCTC	Framework Convention on Tobacco Control
G	Gram
GDP	Gross Domestic Product
H1	First half of the year i.e. the period from January through June
H2	Second half of the year i.e. the period from July through December
Illicit Whites	Manufactured cigarettes that are usually manufactured legally in one country/market but which the evidence suggests have been smuggled across borders during their transit to Australia, where they have limited or no legal distribution and are sold without the payment of tax. These flows include Domestic Illicit Plains and Illicit Whites (non – domestic).



Glossary (cont.)

Illicit Whites (non – domestic)	Flows of Illicit White brands that do not have plain packaging designed for the domestic Australian market
Inflows	Total volume of cigarettes coming into Australia
ITA	Imperial Tobacco Australia
Kg	Kilogram
KPI	Key Performance Indicator
LDC	Legal Domestic Consumption
LDS	Legal Domestic Sales
LTM	Last Twelve Months
LTM H1	Last Twelve Months to the end of June (e.g. 1 July 2016 to 30 June 2017)
LTM H2	Last Twelve Months to the end of December (e.g. 1 January 2017 to 31 December 2017)
м	Million
MSI	MSIntelligence
ND(L)	Non-Domestic Legal is the legitimate tobacco purchased in duty free or abroad within personal allowance limits. Since 1 July 2017, consumers have a limit of 25 cigarettes or 25g of loose tobacco
Non-domestic cigarettes	Cigarettes that are not Australian (i.e. health warnings missing or not in English, brands not sold in Australia, packs with identifying marks from other markets such as tax stamps)
OECD	Organisation for Economic Cooperation and Development
PDI	Personal Disposable Income
PML	Philip Morris Limited
Рр	Percentage point
Project SUN	A study of the illicit cigarette market in the European Union by KPMG
Outflows	Legitimate tobacco purchased in Australia and taken abroad
RMR	Roy Morgan Research
RSP	Retail Selling Price
RYO	Roll Your Own
TSG	Tobacco Stakeholder Group. Formerly known as the Tobacco Industry Forum (TIF)
TST	Tobacco Strike Team
TRN	Tobacco Retailer Notification Scheme
Tonnes	Thousand kilograms
WHO	World Health Organization
Unbranded tobacco	Illegal loose leaf tobacco upon which no duty has been paid and which carries no labelling or health warnings. It is sold and consumed either in RYO form (called Chop Chop) or inserted into empty cigarette tubes. Commonly sold in both bags or boxes
Unspecified	Unspecified market variant refers to cigarette packs that do not bear specific market labelling or duty free labelling
ΥοΥ	Year on Year



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1. Executive Sumary and Key findings

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Executive summary and key findings

Whilst the volume of overall tobacco consumption declined, the proportion of illicit tobacco consumption increased from 14.3% to 15.0%

1.1 Key messages

Consumption of illicit tobacco products by category and as a percentage of overall consumption, 2007 - 2017^{(1)(2)(3)(4)(a)(b)}



Legal tobacco consumption declined whilst Illicit tobacco consumption increased

- The total volume of tobacco consumption in Australia in the full year 2017 was 15.6 million kg. Compared to 2016, total volume decreased by 6.1%, as declining legal consumption of manufactured cigarettes offset a rise in loose tobacco.
- Total consumption of illicit tobacco declined by 1.0%. However this represents an increase in the proportion of consumption from 14.3% in 2016 to 15.0% in 2017. This increase is principally due to a rise in consumption of contraband including Domestic Illicit Plains. The rise happened despite a decline in consumption of unbranded tobacco.
- Following the release of Australian Institute of Health and Welfare's latest estimates of smoking prevalence for 2016 we have restated our estimates of smoking prevalence from 2014 to 2016. This resulted in a slight increase in our estimate for illicit consumption versus prior reports. In 2017, the restatement has resulted in an increase in the estimated illicit consumption from 14.7% to 15.0% of total consumption.
- If this 2.3 million kg of tobacco had been consumed legally, it would have represented an estimated excise value of AUD 1.91 billion.(c)

Contraband volumes have increased over the past year

- Contraband consumption accounted for the majority of total illicit tobacco consumption, increasing to 51.1% of the total illicit consumption (or 1.20 million kg) in 2017 from 38.5% in 2016. Contraband comprises non - domestic contraband as well as Domestic Illicit Plains and Illicit Whites (non-domestic).
 - In 2017 there was an increase in the prevalence of both non domestic contraband (from 6.4% to 7.9% of all manufactured cigarettes consumed) as well as Domestic Illicit Plains (from 0.56% to 1.93%).
 - Flows of Chinese and Indonesian labelled packs were the largest non-domestic inflows accounting for 25% and 6% of the total non-domestic flows in 2017 respectively.
- Counterfeit remains a very small share of illicit tobacco consumption (0.05m kg or 2.0% of total illicit consumption).

Meanwhile, consumption of unbranded tobacco decreased

- Unbranded (or 'Chop Chop') consumption accounts for 47% of total illicit consumption.
- The volume of unbranded tobacco decreased 21.9% compared to 2016.
- Notes: KPMG have not had the opportunity to validate results for (a) 2007-2011.
- Sources: (1) PWC, Illegal Tobacco: counting the cost of Australia's black market, 2007, 2009.
- Values below 0.1 have been removed for clarity purposes Calculated at the average excise rate for 2017.
- Deloitte, Illicit Trade of Tobacco in Australia, 2010. 2011. 2012. (2)Industry data; see specific report sections for further detail.
- (3)





(b)

(c)

Executive summary and key findings

KPMG UK is a leading advisor in the field of illicit tobacco consumption measurement

1.2 The purpose of this report

Imperial Tobacco Australia Limited (ITA) and Philip Morris Limited (PML) have commissioned KPMG UK to estimate the size of the consumption of illicit tobacco in Australia. Reports are produced annually. The purpose of this report is:

- 1. To provide an overview of the nature and dynamics of the legal and illicit tobacco markets in Australia, and
- 2. To provide an independent estimate of the size of the illicit tobacco market in Australia.

This full year 2017 report measures the consumption of illicit tobacco in Australia. It reports on events occurring during the twelve month period from January 2017 through December 2017. This 2017 report is produced using a methodology in line with previous KPMG 'Illicit Tobacco in Australia' reports. However, following feedback from various law enforcement stakeholders, we have adjusted our approach to identify the flows of Illicit Whites to include both Domestic Illicit Plains as well as Illicit Whites (non-domestic).

1.3 KPMG UK's anti-illicit tobacco measurement experience

KPMG UK has significant experience in the measurement of illicit tobacco consumption across a number of markets as well as Australia. Our work has covered markets in Europe, Latin and North America, Asia and the Middle East.

Our work was pioneered in Europe where we have published an annual report on illicit cigarette consumption since 2006. In 2013, it was conducted on a pan-industry basis for the first time, being jointly commissioned by British American Tobacco Plc, Imperial Tobacco Limited, JT International SA and Philip Morris International Management ('Project SUN'). The study included all 28 European Union Member States (with previous reports covering all member states at that point in time). Project SUN was conducted for the second time in 2014, the first occasion on which the study also included the non-EU markets of Norway and Switzerland.

Since 2017, Project Sun has been commissioned by the Royal United Services Institute, an independent think-tank focused on defence and security research.





2. Australian tobacco market

2.1 Tobacco consumption in Australia2.2 Legal tobacco market

The legal and illicit markets are made up of manufactured cigarettes and loose tobacco

2.1 Tobacco consumption in Australia

Tobacco consumption refers to total volume of consumption for all types of tobacco as mapped out in figure 2.1. This section deals with the tobacco market and related products:

Figure 2.1: Australia tobacco market map



Legal tobacco products

There are two main types of legal tobacco products considered in this report (shisha, cigars and pipe tobacco have been excluded for the purposes of this study):

Manufactured cigarettes – Made for the legal tobacco market and sold in packets.

Loose tobacco – Legal loose leaf tobacco sold in pouches and used in Roll-Your-Own (RYO) cigarettes, which are consumed using rolling papers or tubes.

As will be shown in Section 5.1, additional legal consumption is possible in the form of non-domestic legal product. The non – domestic legal product is tobacco purchased abroad by consumers and imported legally into Australia, either within personal allowance limits or by paying duty on the amount over this allowance.

Illicit tobacco products

Illicit tobacco is either grown or produced locally or procured illegally from overseas markets without the payment of customs duties. This tobacco is sold to consumers at lower prices than Australian cigarettes, avoiding Australian customs obligations, or is brought into the country in amounts exceeding the allowable personal limit.

Contraband

These cigarettes are manufactured legally outside of Australia but are non-compliant with Australian regulations and are smuggled into the Australian market. Contraband also includes cigarettes that are purchased legally outside Australia but exceed the personal import allowance and have no duty paid.

Contraband cigarettes are legitimately manufactured by the trademark owner but imported illegally (by third parties or consumers) to avoid Australian government regulations, quarantine inspections and local product controls⁽¹⁾.

- Notes: (a) Formerly known as Tobacco Industry Forum (TIF), recently changed as the result of changes by the Australian Taxation Office (ATO) forums.
- Sources: (1) Legal and Constitutional Affairs Legislation Committee, 23 February 2015.
 - (2) Tobacco Stakeholder Group (TSG).
 - (3) Inquiry into Illicit tobacco, Submission 74, 10th February 2016



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Illicit Whites

Illicit Whites are manufactured cigarettes that are usually manufactured legally in one country/market but which the evidence suggests have been smuggled across borders during their transit to Australia, where they have limited or no legal distribution and are sold without the payment of tax. These flows include Domestic Illicit Plains and Illicit Whites (non – domestic). Domestic Illicit Plains are flows of Illicit White brands that have packaging designed for the domestic Australian market. Illicit White brand flows that do not have plain packaging designed for the domestic Australian market are Illicit Whites (non – domestic).

Illicit Whites cigarettes have been included in our analysis of contraband.

Counterfeit

These cigarettes are illegally manufactured and sold by a party other than the trademark owner. Once manufactured, they are smuggled into Australia most commonly via ports in large freight containers and other channels including airmail.

According to the Tobacco Industry Stakeholder Group (TISG)^(a) they do not adhere to industry production standards and may pose additional serious health risks. They are also known as fake cigarettes⁽²⁾.

Unbranded tobacco

Unbranded tobacco is often sold as finely cut loose leaf tobacco in 250g or half kilogram amounts.

This product carries no labelling or health warnings and is consumed in RYO form or inserted into empty cigarette tubes that are available from legitimate tobacco retailers, often sold in the original cigarette tube boxes. The product is then sold in pre-filled tubes or loose in bags (called Chop Chop).⁽²⁾

The Australian Criminal Intelligence Commission and TSG believe that most unbranded tobacco is imported rather than grown in Australia but there have been increasing seizures of locally grown tobacco, discussed on page 36. It is believed to be distributed by retailers and pop up tobacconists in the same way as counterfeit and contraband products⁽³⁾.

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Australian tobacco market

Legal domestic sales continued to decline in 2017

2.2 Legal tobacco market

2.2.1 Historic legal domestic sales

Figure 2.2.1: Legal domestic sales in Australia, 2008 – 2017^{(1)(2)(a)(b)}



CAGR (%)	2008- 2017	2016-2017
Manufactured cigarettes	(4.1)%	(9.2)%
Loose tobacco	3.9%	5.8%
Total market	(3.1)%	(6.9)%

Overall sales of legal domestic tobacco decreased by 6.9% between 2016 and 2017; a relatively large decline compared to the average CAGR decline of 3.1% between 2008 and 2017.

The market has been declining steadily since 2009 driven by declining manufactured cigarette sales. Between 2016 and 2017 legal domestic sales of manufactured cigarettes experienced a decline of 9.2%, whereas loose tobacco sales increased by 5.8%. These results are again supported by industry volume data reflecting a decrease in overall sales by manufacturers in the year.⁽³⁾

Whilst manufactured cigarette sales volumes have declined at an annual rate of 4.1% since 2008, loose tobacco sales volumes have increased at an annual rate of 3.9%. Current year growth rates continue the ongoing mix shift towards loose tobacco. Legal domestic sales for 2013 were based on an analysis of Exchange of Sales data (EOS)^(c) and Euromonitor data⁽²⁾ as discussed in previous reports. For subsequent reports, KPMG has examined a range of data sources, including industry exchange of sales and off-take data, supplied by independent research agencies.

Notes: (a) Numbers in the above chart may not sum due to rounding.

- (b) Market estimates are adjusted to include sales not attributable to the three major tobacco manufacturers.
- (c) Refer to the glossary for further definition.
- Sources: (1) KPMG analysis of Aztec IRI (scan) databases and data from Nielsen Australia.
 - (2) Euromonitor, Legal domestic sales (from trade sources and national statistics), accessed 2013, 2014, 2015.
 - (3) Aztec IRI Exchange of Sales.



Australian tobacco market

British American Tobacco has the largest market share in manufactured cigarettes whilst Imperial Tobacco has the biggest market share in loose tobacco

2.2.2 Australia legal tobacco competitive overview Figure 2.2.2a: Market share by manufacturer, 2017^{(1)(a)}



Total market: 10.9 million kilograms

Market share

The three major tobacco manufacturers have large market shares across both the manufactured cigarette and loose tobacco market in Australia. British American Tobacco has a market share of 40% in manufactured cigarettes, which represents a 1% increase from 2016. From 2016 to 2017 the market shares of Philip Morris Limited and Imperial Tobacco decreased from 32% to 30% and 29% to 28% respectively, with other manufacturers gaining a 2% share in 2017.

Philip Morris Limited 18% British American Tobacco 29%

Loose tobacco

Total market: 2.3 million kilograms

Imperial Tobacco has the largest market share in loose tobacco. BATA and PML are the only other major competitors in this market.



Figure 2.2.2b: Market share of manufactured cigarettes by price category, 2007 – 2017⁽²⁾⁽³⁾

Price category

Cigarettes are subject to a specific excise duty, which is levied per cigarette and does not change with the retail price. An increase in the specific excise duty would, all other things being equal, maintain the absolute price differential between low and high priced cigarettes. Since 2007, the market share of low priced cigarettes has increased at the expense of

- Notes: (a) Data gathered from Aztec IRI indicates that the three major manufacturers account for approximately 98% of the domestic market of manufactured cigarettes. However, there maybe legal imports which might not have been included in this data.
 - (b) The differences with the 2016 report arise since the most up to date data available from Aztec IRI database has been used.

medium and high priced cigarettes as people are switching to cheaper cigarettes. This trend has developed further in 2017 as premium and medium priced cigarettes lost further market share (down two and one percentage points respectively).

Sources: (1) Aztec - IRI LDS data, 2017.

- (2) KPMG analysis of Aztec IRI scan data
 - (3) Euromonitor, Tobacco in Australia, August 2016.



Australian tobacco market

No tobacco is grown in Australia for legal commercial sale

2.2.3 Supply and distribution of legal manufactured tobacco in Australia

Figure 2.2.3 Supply chain for legal tobacco products in Australia



To precisely quantify non-domestic legal consumption, parties using internet and mail channels would need to declare all purchases / sales in excess of the allowed quantities to the ABF. Failure to declare all these purchases may result in a minor understatement of both non-domestic legal and contraband consumption. Non-domestic legal consumption is discussed further in Appendix A6 (p.74).

Sources: (1) Excise Act 1901 (Cth) s 28

(2) Australian Taxation Office, Tobacco excise (4 January 2016) Australian Taxation Office

(3) Customs By – law No. 700053





3. Macroeconomic environment

- 3.1 Macroeconomic context
- 3.2 Gross domestic product growth
- 3.3 Unemployment
- 3.4 Personal Disposable Income
- 3.5 Consumer Price Index

Australia's economic growth and unemployment rate are in line with the OECD

3.1 Macroeconomic context

This section provides background on the Australian economy as a change in GDP growth, unemployment, personal disposable income, or inflation could impact consumer behaviour and subsequently tobacco consumption.

The decline in legal domestic sales since 2009 needs to be examined in the context of the affordability of tobacco products. Personal disposable income (PDI) and the consumer price index (CPI) are analysed in order to assess possible reasons for changes in consumer behaviour.

3.2 Gross Domestic Product

Historically, Australia has outperformed the OECD average for GDP growth. Between 2008 and 2017, the economy grew at a compound annual growth-rate (CAGR) of 2.6%. In 2017, GDP growth in Australia was the same as the wider OECD at 2.4%, having not been below the OECD average since 2010.

Wages have been growing at a relatively slow rate. This had a detrimental impact upon consumer and household consumption, which constitutes around 60% of total consumption in Australia.⁽¹⁾ Elsewhere, although there has been a recovery in mining sector investment, this may be somewhat offset by slowing house price rises and resulting property development.⁽²⁾

Figure 3.2: Year-on-year GDP Growth, 2008 – 2017^{(3)(4)(a)(b)}



- Notes: (a) Historical numbers for GDP have been updated and have been based on data from the Economist Intelligence Unit.
- (b) 2017 data is based on latest available estimates.
 Sources: (1) ABC, GDP: Australia's economic growth improves but weak
 - consumers disappoint the optimists, December 2017.
 (2) The Economist, Economist Intelligence Unit, Australia (accessed
 - January 2018).
 - (3) The Economist Intelligence Unit, GDP at constant prices, accessed January 2018.
 - (4) OECD, GDP (expenditure approach), accessed January 2018.
 (5) ABC, Unemployment falls to four-and-a-half-year low at 5.4pc, November 2017.

3.3 Unemployment

Unemployment in Australia has historically been below the OECD average, although from 2013 to 2017 the gap has narrowed from a 2.3% difference to 0.2%, primarily due to declines across the OECD. In contrast Australia has seen marginal reductions over the same period, with slight increases in recorded unemployment in both 2014 and 2016.

The unemployment rate fell in 2017 primarily due to a fall in the participation rate of 0.1% to 65.1%.⁽⁵⁾ Of the net increase in employment during the period, full-time roles constituted the majority compared to part-time roles⁽⁶⁾.

Unemployment rates differs across Australia, with the highest found in Western Australia (6.6%) and South Australia (6.1%). Unemployment is lowest in the Australian Capital Territory where it sits at just 3.8%.⁽⁷⁾

Figure 3.3: Recorded unemployment, 2008 – 2017^{(8)(9)(b)}



- (6) FT, Australia unemployment holds at 4-year low, January 2018.
- (7) Australian Government: Department of employment, Unemployment Rates (15+) by State and Territory, November 2017 (%).
- (8) The Economist Intelligence Unit, recorded unemployment as a percentage of total labour force, accessed January 2018.
- (9) OECD, harmonised unemployment rates, accessed January 2018.



Macroeconomic environment

Personal disposable income in Australia has been increasing consistently each year

3.4 Personal Disposable Income

Australia has experienced a period of consistently increasing PDI over the past decade. PDI per capita increased by a CAGR of 3.4% p.a. between 2008 and 2017.

PDI per capita grew 2.6% between 2016 and 2017. This growth is natural given falling unemployment rates, particularly where the majority of new roles are in full-time employment⁽¹⁾. However, the gap between the richest and the poorest population remains quite large, with the top 20% earning five times more than the bottom $20\%^{(2)}$.

3.5 Consumer Price Index

Australia's CPI has grown at a slightly faster pace than the OECD average, rising consistently since 2008. The Australian Bureau of Statistics suggest that inflation growth in the last quarter of 2017 has been driven by increased prices of automotive fuel (+10.4), tobacco (+8.5%), domestic holiday travel and accommodation (+6.3%) and fruit (+9.3%)⁽⁶⁾.





Figure 3.5: Consumer Price Index, 2008 – 2017^{(4)(5)(a)}



Notes: (a) 2017 data is based on latest available estimates. (b) Some numbers may be marginally different from 2016 report as

- the same have been updated using the latest data.
- Sources: (1) FT, Australia unemployment holds at 4-year low, January 2018.
 - (2) OECD better life index, Australia, accessed in January 2018.
 (3) Euromonitor, Annual disposable income per capita, accessed
 - (a) Euromonitor, raman appeable means per capital, accessed January 2018.
 (4) Euromonitor, Index of consumer prices; accessed January 2018.
- (5) OECD Economics, Consumer prices, accessed January 2018, rebased to 2008.
- (6) ABS, Consumer Price Index, December 2017.





- 4.1 Tobacco regulation in Australia
- 4.2 Enforcement landscape
- 4.3 Recent development of excise duty and tobacco affordability in Australia
- 4.4 Regional tobacco prices
- 4.5 Relative price of illicit tobacco

The tobacco market in Australia is one of the most tightly regulated in the world

4.1 Tobacco regulation in Australia

In this section, we discuss key government legislation and activities undertaken to control tobacco consumption. State and Territory legislation complements and supplements federal legislation by prescribing and proscribing activity dealing directly with the retail sale and display of tobacco products. The combined effect of the Federal, State and Territory legislation is that all manner of tobacco product advertisement and promotion to the public is strictly and rigidly controlled.

The Intergovernmental Committee on Drugs' *National Tobacco Strategy 2012-2018* aims to reduce smoking prevalence nationally from over 15% in 2012 to 10% in 2018.⁽¹⁾ To reduce smoking prevalence, numerous tobacco control regulations have been enacted over time as demonstrated in Figure 4.1. A more detailed overview of recent legislative changes both at the Australian Commonwealth level and the State level are detailed in Appendix A5.

WHO Framework Convention on Tobacco Control Australia became a Signatory to the World Health Organization's *Framework Convention on Tobacco Control* (FCTC) on 5 December 2003. The Conference of the Parties have adopted detailed guidelines for effective implementation of many of the legislative, executive, administrative and other measures required under the FCTC. Together, the FCTC and its guidelines have the potential to help set the priorities of Australian governments, including Commonwealth, State and Territory, in relation to tobacco control policies and programs.

The FCTC also provides a framework for international cooperation in a number of areas of tobacco control in which Australia and other Parties cannot effectively act alone.

These include the regulation of cross-border tobacco advertising, promotion and sponsorship and the implementation of measures to address illicit trade in tobacco products. Australia has the responsibility to cooperate with other FCTC Parties to address trans-boundary tobacco control problems and to assist other Parties in meeting common challenges to effective tobacco control.

The Australian tobacco industry participated in a consultation around the Protocol to Eliminate Illicit Trade in Tobacco Products (AITP). The AITP was adopted on 12 November 2012 and opened for signature from 10 January 2013 to 9 January 2014. When the AITP was closed for signature, it had been signed by 53 countries and the European Union. However, Australia is not among the countries that have signed the AITP. The AITP will only be legally binding once it has been formally ratified by 40 countries. As of January 2018, 34 countries and the European Union have ratified the Protocol. If the protocol is ratified by 40 countries, it would be binding only on the Parties to the protocol⁽²⁾.

National Tobacco Strategy

The *National Tobacco Strategy 2012-18* was released in January 2013. The strategy highlights nine priority areas including:

- 1. Protect public health policy, including tobacco control policies, from tobacco industry interference.
- Strengthen mass media campaigns to: motivate smokers to quit and recent quitters to remain quit; discourage uptake of smoking; and reshape social norms about smoking.
- 3. Continue to reduce the affordability of tobacco products.
- 4. Bolster and build on existing programs and partnerships to reduce smoking rates among Aboriginal and Torres Strait Islander people.
- 5. Strengthen efforts to reduce smoking among populations with a high prevalence of smoking.
- 6. Eliminate remaining advertising, promotion and sponsorship of tobacco products.
- 7. Consider further regulation of the contents, product disclosure and supply of tobacco products and alternative nicotine delivery systems.
- 8. Reduce exceptions to smoke-free workplaces, public places and other settings.
- 9. Provide greater access to a range of evidence-based cessation services and supports smokers to quit.

The strategy also proposes actions to combat the illicit trade of tobacco.

Tobacco advertisement regulation

In 1992, the *Tobacco Advertising Prohibition Act 1992* (Cth) banned the publication and broadcast of tobacco advertisements.

Subsequent amendments to that legislation have resulted in online tobacco retailers having to display health warnings and comply with restrictions on advertisement wording. All State and Territory laws also ban tobacco advertising.

Tobacco packaging regulation

The *Tobacco Plain Packaging Act 2011* (Cth) made Australia the first country in the world to implement plain packaging of tobacco products. This Act requires that all tobacco products be packaged in the same standard colour packaging, bans all marks other than word trademarks on the packaging and only allows differentiation between packaging by the brand and variant names, all printed in Lucida Sans font.

Sources: (1) Intergovernmental Committee on Drugs, National Tobacco Strategy 2012-2018 (2012).

(2) WHO Framework Convention on Tobacco Control, Protocol.



A number of regulations have been imposed to reduce smoking in Australia

Figure 4.1: Tobacco regulation timeline in Australia, 1992 – 2017



Key Manufacturer regulation

- Smoke-free environment
- Retailer regulation
 - Excise Duty

Inbound traveller allowance International action



New legislation continues to focus on the expansion of smoke-free environments

4.1 Tobacco regulation in Australia

Smoke-free environment legislation

The majority of smoke-free environment laws in Australia are determined by State and Territory parliaments and further fragmented by local council by-laws. The Australian Federal Government enacted legislation to create smoke-free environments in areas within its own jurisdiction, such as airports⁽¹⁾. From the late 1990s, State and Territory parliaments followed the Commonwealth's lead and began enacting legislation banning smoking in those places the States and Territories have jurisdiction over, such as indoor dining areas and bars^(a).

This trend of regulating smoking in public spaces has $continued^{(2)}$.

In South Australia, a ban on smoking in public outdoor dining areas when food is being provided came into effect on 1 July 2016⁽³⁾. New laws in the Australian Capital Territory also commenced during 2016 enabling the Australian Capital Territory Government to make declarations of smoke-free public places or events. That Government subsequently declared with effect from 7 September 2016 that all children's play spaces managed by the Government are smoke-free public places⁽⁴⁾.

In New South Wales, the Smoke-free Environment Regulation 2016 (NSW) made footpaths, streets and public thoroughfares smoke-free areas if within 4 metres of certain courtyards or gardens from 1 September 2016. A large number of new smoking bans also commenced on 1 September 2016 in Queensland, extending to major sports facilities, major event facilities, health facilities, school facilities, public swimming facilities, early childhood education and care facilities, residential aged care facilities, government precincts, outdoor pedestrian malls, public transport waiting points, skate parks, and sporting grounds and spectator areas during organised under-age sporting events. The Queensland smoke-free environment amendments also banned smoking in certain parts at almost all national parks and empowered local governments to ban smoking at any outdoor public place not covered by the Queensland State laws⁽⁵⁾.

New smoke-free laws also took effect from 1 August 2017 in Victoria. These laws ban smoking in outdoor dining areas, food fairs and certain food areas at community and street festivals⁽⁶⁾.

Smoke-free environment laws have traditionally targeted the smoking of tobacco products. Now, the laws in Queensland, the Australian Capital Territory, Victoria and Tasmania extend the concept of 'smoke' to include the use of e-cigarettes. This has the consequence of also banning the vaping of e-cigarettes in smoke-free places^(b).

- Notes: (a) See for example Tobacco Products Regulation Act 1997 (SA), Health (Smoking in Enclosed "Public Places) Regulations 1999 (WA), and Smoke-free Environment Act 2000 (NSW)
- Sources: (1) Airports Act 1996 (Cth) s 174 and Airports (Control of On-Airport Activities) Regulations 1997 (Cth) Part 6.
 - (2) Recent examples include the Smoke-free Environment Regulation 2016 (NSW), Tobacco Amendment Act 2016 (Vic), Tobacco and Other Smoking Products (Smoke-free Places) Amendment Act 2016 (Qld), Smoke-Free Legislation Amendment Act 2016 Sand the Public Health Amendment (Healthy Tasmania) Act 2017 (Tas)
 - (3) Tobacco Products (Smoking Bans in Public Areas Longer Term) Variation Regulations 2015 (SA).
- (b) See the Tobacco and Other Smoking Products Act 1998 (Qld), Tobacco Act 1987 (Vic), Smoke-Free Public Places Act 2003 (ACT) and Public Health Act 1997 (Tas)
- (4) Smoke-Free Public Places Amendment Act 2016 (ACT) and Smoke-Free Public Places (Play Spaces) Declaration 2016 (No 1) (ACT).
- (5) Tobacco and Other Smoking Products (Smoke Free Places) Amendment Act 2016 (Qld) and Tobacco and Other Smoking Products Amendment Regulation (No. 1) 2016 (Qld).
- (6) Tobacco Amendment Act 2016 (Vic).



There are further excise increases to be implemented whilst regulations governing retailers continue to be tightened

4.1 Tobacco regulation in Australia (cont.)

Retailer regulations

Australian States and Territories ban the sale of tobacco products to anyone under the age of 18 years. During the 1990s, States introduced laws that imposed harsher penalties on vendors that sold cigarettes to individuals under 18 years^(a). Some States undertake surveillance programs to ensure compliance.

With the exception of Victoria and Queensland, all States and Territories require tobacco retailers to hold a licence^(b). Licence fees vary between jurisdictions but at their highest are now up to AUD \$740.90 per annum in Tasmania and set to increase in that State to AUD \$ 1, 111.35 in 2018⁽¹⁾.

States and Territories have also banned retailers from point of sale advertising and the display of tobacco products within stores. New South Wales, South Australia, Australian Capital Territory (ACT), the Northern Territory, Queensland and Tasmania all have legislation in place banning point of sale displays. Victoria and Western Australia have similar bans, but grant limited exemptions for specialist outlets. However, both those jurisdictions are gradually removing these exemptions. Victoria has started this process by enacting legislation that no longer permits the issue of specialist licenses from 1 April 2014⁽²⁾. In Western Australia, legislation is before the Parliament which if enacted will phase out specialist tobacconist displays over 2 years⁽³⁾.

New South Wales, Victoria and Queensland all now prohibit sales of tobacco products from temporary outlets⁽⁴⁾. If passed, the legislation currently in the Western Australia Parliament will also introduce a similar ban on sales of tobacco products at sporting, cultural or other events⁽⁵⁾.

During 2017, law-makers continued turning their attention towards regulating the retail sale of e-cigarettes. In Victoria, legislation took effect from 1 August 2017 placing tobacco product type restrictions on e-cigarettes including restrictions on advertising, product displays, price displays and under 18 sales⁽⁶⁾. On 29 November 2017, new Tasmanian laws started that imposed on e-cigarettes and their accessories the same sale, supply, promotion, physical display and price display restrictions that apply to tobacco products. That legislation also took a further step than other Australian jurisdiction ecigarette regulations by banning the sale of e-cigarettes and their accessories in specialist tobacconist stores⁽⁷⁾. In South Australia, legislation is before the Parliament that if enacted, will also regulate e-cigarettes much like tobacco products⁽⁸⁾.

- (3) Tobacco Products Control Amendment Bill 2017 (WA) clause 6.
- Public Health (Tobacco) Act 2008 (NSW) s 11(4), Tobacco Act 1987 (Vic) s 15L, Tobacco and Other Smoking Products Act 1998 (Qld) s 13C
- (5) Tobacco Products Control Amendment Bill 2017 (WA) clause 10
- (6) Tobacco Amendment Act 2016 (Vic).
- (7) Public Health Amendment (Healthy Tasmania) Act 2017 (Tas)
- (8) Tobacco Products Regulation (E-Cigarette Regulation) Amendment Bill 2017 (SA)
- Notes: (a) See for example *Tobacco Control Act* 1990 (WA), *Public Health Act* 1991 (NSW) and *Public Health Amendment (Tobacco) Act* 1996 (NSW)
 - (b) License terminology differs by State; for example it is referred to as a Tobacco Retail Notification (TRN) number in New South Wales.
- Sources: (1) Public Health Act 1997 (Tas) ss 74B and 74F; Public Health (Smoking Product Licence) Regulations 2009 Reg 4 (Tas); Fee Units Act 1997 (Tas) s 5.
 - (2) Tobacco Act 1987 (Vic) s 15SA (Vic) and Victoria, Victoria Government Gazette, No. S81, Tuesday 18 March 2014, 1.



There are further excise increases to be implemented whilst regulations governing retailers continue to be tightened

4.1 Tobacco regulation in Australia (cont.)

Duty free and customs allowances

From 1 September 2012, the inbound traveller allowance for tobacco products was reduced from 250g or 250 cigarettes per person to 50g or 50 cigarettes⁽¹⁾. This further decreased to 25g of loose tobacco (excluding cigarettes) or 25 cigarettes per person from 1 July 2017⁽²⁾.

In 2012, the Federal Government enacted the *Customs Amendment (Smuggled Tobacco) Act 2012* (Cth), which created new offences for smuggling or possessing illicit tobacco including imposing for the first time custodial sentences for smuggling tobacco. New South Wales, Victoria and Western Australia also have legislation that criminalises the possession of illicit tobacco or tobacco on which the appropriate excise duties have not been paid⁽³⁾.

Tobacco duty fault-based offences

In February 2018, The Treasury Laws Amendment (Illicit Tobacco Offences) Bill 2018 was presented in the House of Representatives. The Amendments made by the Bill defines tobacco in order to align the meaning for excise and excise-equivalent customs duty purposes. The amendments state penalties for illicit tobacco that has been domestically manufactured or produced and illicit tobacco for which the origin of production or manufacturing is unknown or uncertain. The penalties for these offences are set at a level that deters illegal activity and are in line with the increasing rates of duty that apply to tobacco as per the 2016-17 and 2017-18 Budget measures. The defaulters can face imprisonment, be asked to pay penalty units or five times the amount of duty on that tobacco, or both, depending upon the nature of the offence⁽⁴⁾.

Excise duty increases

Australian excise duty has historically risen with inflation with the exception of a 25% increase in 2010 and a series of eight 12.5% increases starting in December 2013. The 2013-14 federal budget included a change to indexation of excise duty for tobacco and tobacco products from the Consumer Price Index (CPI) to Average Weekly Ordinary Time Earnings (AWOTE)⁽⁵⁾. AWOTE has historically grown 1.4 percentage points faster than CPI, therefore the indexation is likely to increase excise duty faster than the old indexation legislation.

In September 2016, an excise increase of 12.5% was implemented for the fourth time. This was in line with the announcement made by the Federal Government in 2013 of increasing excise and customs duty for tobacco products by an additional 12.5% annually for the next four years in addition to the switch to AWOTE⁽⁶⁾. As a result of these tax increases, the excise on a pack of cigarettes in Australia has increased by 60% (compounded over the last four years) above the increase of AWOTE. In September 2016, the Federal Parliament enacted legislation adding a further four annual 12.5% customs and excise duty increases for 2017, 2018, 2019 and 2020⁽⁷⁾.

During 2017, the Federal Parliament enacted legislation seeking to harmonise the duty rate between loose tobacco products and the tobacco contained in factory made cigarettes. The result of these laws is that the currently lower duty rates for loose tobacco will increase over four years so that by 1 September 2020 loose tobacco will have the same duty rate per kilogram as cigarettes containing the average tobacco content rate per stick⁽⁸⁾. This will be achieved by calculating the per kilogram excise and excise-equivalent customs duty rates on the basis that the average tobacco content of a cigarette is 0.7 grams⁽⁹⁾.

Sources: (1) Customs By-law No. 1228133 (Cth).

- (2) Customs By-law No. 1700053 (Cth).
- Public Health (Tobacco) Act 2008 (NSW) ss 6, 7 and 8, Tobacco Act 1987 (Vic) s 11A and Tobacco Products Control Act 2006 (WA) s 105
- (4) Treasury Laws Amendment (Illicit Tobacco Offences) Bill 2018, Parliament of Australia.
- (5) Commonwealth, Budget Strategy and Outlook 2013-14, Budget Paper No.1 (2013-2014), 1-19.
- (6) Chris Bowen, 'Government to increase tobacco excise' (Media Release, No. 015, 1 August 2013)
- (7) Customs Tariff Amendment (Tobacco) Act 2016 (Cth) and Excise Tariff Amendment (Tobacco) Act 2016 (Cth).
- (8) Customs Tariff Amendment (Tobacco Duty Harmonisation) Act 2017 (Cth) and Excise Tariff Amendment (Tobacco Duty Harmonisation) Act 2017 (Cth)
- (9) ATO, Aligning the tax treatment of roll your own tobacco and cigarettes, 18 August 2017.



The enforcement landscape continues to focus on facilitating trade, travel and migration while protecting Australia's border

4.2 Enforcement landscape

Overview of key enforcement agencies

For years, public authorities have targeted the reduction of illicit tobacco available within the Australian market place. Illicit tobacco remains a highly attractive market for organized crime groups in Australia despite potential imprisonment and a fine of five times the amount of duty evaded.⁽¹⁾

Throughout 2017, a number of national and state organisations were involved in Australia's border protection. Their responsibilities included border control, the management of moving of people and goods across these borders, and enforcement of relevant policies. Some of the key enforcement agencies included:

- Department of Home Affairs Established on 20th December 2017, the Department of Home Affairs is a central policy agency which provides coordinated strategy and policy leadership for Australia's national and transport security, federal law enforcement, criminal justice, cyber security, border, immigration, multicultural affairs, emergency management and trade related functions. It includes the entirety of the Department of Immigration and Border Protection (DIBP).⁽²⁾
- The Department of Immigration and Border Protection – Responsible both for migration, citizenship and humanitarian protection, and compliance and border security control. The Australian Border Force (ABF) was created to be the operational arm of DIBP and is responsible, amongst other things, for "investigations, compliance and enforcement in relation to illicit goods."⁽³⁾
- The Australian Taxation Office (ATO) Continues to act in dealing with illegal tobacco in Australia, in particular illegal tobacco growing.⁽⁴⁾
- Australian Federal Police (AFP) and state police Supports national and local illegal trade investigations, makes arrests, and executes search warrants.
- Australian Transaction Reports and Analysis Centre (AUSTRAC) – Responsible for regulating and investigating money laundering and terrorism financing.
- The Australian Criminal Intelligence Commission (ACIC) – Works across international borders to better understand the organised crime environment and discover new threats. This information is used "to stop criminals exploiting emerging opportunities and perceived gaps in law enforcement information"⁽⁵⁾.

Sources: (1) Australian Border Force, ABF continues to smash tobacco syndicates in Victoria, August 201

- (2) homeaffairs.gov.au/
- (3) https://www.homeaffairs.gov.au/australian-border-forceabf/protecting, accessed Feb 2018.
- (4) ATO, Stamping out illegal tobacco, accessed Feb 2018.
- (5) ACIC.gov.au/about-us
- (6) ACIC Annual Report, 2016-17.

During 2016-2017, ACIC collaborated with numerous organisations (Maritime Border Command and the Australian Border Force, Australian Defence Force, Australian Federal Police and state agencies) on Project Baystone Askella, increasing its understanding of operations directed from offshore locations and collaboration between Malaysian and Chinese nationals. This is a wide ranging project that has resulted in numerous tobacco product seizures including approximately 10 million cigarettes smuggled into Australia without payment of excise.⁽⁶⁾

The Trident Taskforce, of which ACIC had historically been an active part of, continues to monitor the waterfront for any illicit smuggling activity of all kinds including tobacco. Whilst the Trident Taskforce is active only in Victoria, ACIC is a part of various other taskforces.

Alongside offshore targeting the ACIC has also focused on a criminal syndicate operating in Melbourne (Project Eligo Gritstone Lockout) involved in large-scale commercial operations; the ABF had seized over 700 kg of tobacco from this group by the end of June 2017⁽⁶⁾

Other organisations such as state health departments and the ACCC also have enforcement powers to seize illegal tobacco from retailers, e.g. NSW Health, conducted 71 inspections for illicit tobacco in a full year to 2017 and seized ~240,000 cigarettes and 24 kg of loose tobacco⁽⁷⁾. Individual stores are also targeted by inspectors, such as the \$72,000 fine received by a tobacconist in September 2017 for selling cigarettes without health warnings⁽⁸⁾. Numerous other seizures have occurred throughout 2017 as outlined on page 36.

ATO made multiple crop siezures in 2017. Between July 2016 and May 2017, ATO made nine seizures and destroyed 56 tonnes of tobacco valued at \$47.8 million⁽⁹⁾.

- (7) ABC "Illegal tobacco imports on the rise; criminals using high heels, fluffy toys to stash cigarettes", January 2017.
- (8) Kate Aubusson, 'Sydney duo slapped with biggest ever fine for tobacco offences', *The Sydney Morning Herald* 23 September 2017
- (9) Australian Taxation Office, '\$9 million in illegal tobacco seized and destroyed in Northern Victoria', May 2017



The enforcement landscape continues to focus on facilitating trade, travel and migration while protecting Australia's border

4.2 Enforcement landscape (cont.)

The evolution of key enforcement agencies

The DIBP (Department of Immigration and Border Protection) became a fully integrated department effective 1 July 2015. Since 20th December 2017, after the establishment of the Department of Home Affairs, DIBP, in its entirety has been made a part of the Department of Home Affairs⁽¹⁾. A key purpose of DIBP is to 'protect Australia's border while facilitating trade, travel and migration'⁽²⁾. Tackling the illicit tobacco trade falls within this broader remit. The DIBP actively engages with both partner countries and industry to collaborate and to assist in 'managing a border continuum,' specifically before, at and after the border points.⁽²⁾

The 2020 overarching strategic objectives for DIBP are wide ranging and include⁽³⁾:



The ABF has said that continued and sophisticated attempts are made through illicit tobacco to defraud Australian taxpayers of legitimate revenue, and illicit tobacco continues to be an attractive market for organised criminal syndicates due to lucrative profits attached⁽⁴⁾. In early 2018 it launched a national awareness campaign to encourage the public to report any suspicious activity in order to support it's 6,000 officers across Australia.⁽⁶⁾ The Tobacco Strike Team (founded October 2015) is solely focused on targeting, investigating and prosecuting the serious and organised elements of illicit tobacco trade.

The ABF Strike Team received an additional funding of \$7.7 million for 2016-2018.⁽⁶⁾ Through the year to 2017, the Strike Team detected in excess of 123m individual cigarettes and over 64 tonnes of tobacco intended to evade customs.⁽²⁾ Throughout 2017 there have also been various charges brought against individuals and syndicates across locations, notably Victoria and Melbourne, by the ABF and Strike Force.⁽⁴⁾⁽⁷⁾⁽⁸⁾

Australian authorities are also furthering existing relationships with foreign enforcement agencies to tackle the trade of illicit tobacco, conducting joint border patrols, co-ordinated activities and providing aerial surveillance when requests are received from neighbors and partners.⁽²⁾ During 2017 an investigator from HMRC in the UK was deployed to work with the ABF and Australia Tax Office, in part to assist with work on illicit tobacco.⁽⁰⁾

Sources: (1) homeaffairs.gov.au/

- (2) DIBP Annual Report, 2016-17.
- (3) DIBP Strategy 2020.
- (4) Australian Border Force, Tobacco criminal syndicate dismantled in Melbourne, 2017.
- (5) psnews, Border Force launches awareness campaign, February 2018.
- (6) The Guardian, Australian smokers to pay more than \$45 for a packet of cigarettes, May 2016.
- (7) Australian Border Force, Three men charged over Melbourne illicit tobacco haul, Feb 2017.
- (8) Australian Border Force, ABF continues to smash tobacco syndicates in Victoria, August 2017.
- (9) ACIC Annual Report, 2016-17.



In addition to the 12.5% annual excise increases each year to 2020, taxation of roll your own tobacco will be increased to align with taxes on manufactured cigarettes

4.3 Recent development of excise duty and tobacco affordability in Australia

Figure 4.3a: Values of tobacco excise and customs duty, Australia, January 2008 – September 2017^{(1)(a)}



The largest excise increase was a 25% increase introduced on 30 April 2010. Annual ad hoc excise increases were applied in December 2013 and then in September each year from 2014 to 2017. Legislative amendments made in 2016 will result in further excise increases of 12.5% per annum in 2018, 2019 and 2020. This increase is over and above the annual indexation linked to $\mathsf{AWOTE}^{(2)}.$

These factors have resulted in the excise on tobacco products increasing by 15% between December 2016 and December 2017 (up to AUD \$0.69 per stick and AUD \$901.39 per kg of tobacco content for other forms)⁽³⁾.



Figure 4.3b: Index of tobacco prices and per capita PDI, Australia, 2008 – 2017^{(4)(5)(a)(b)(c)}

Although PDI per capita has continued to grow, the excise rate increase in 2010, combined with subsequent increases, contributed to tobacco prices increasing at a higher rate than PDI per capita.

- Notes: (a) 2015 AWOTE is based on latest available estimates, accessed February 2016.
 - (b) Indexed with 2008 values taken as 100.
 - (c) The differences with the 2015 report arise since Euromonitor has reported new figures as per March 2017.
- Sources: (1) Australian Taxation Office, www.customs.gov.au.
 - (2) Australian Government Australian Taxation Office, New legislation: Excise and excise-equivalent customs duty – index tobacco excise to average weekly ordinary time earnings, 25 June 2013.

The increases have resulted in a decline in relative affordability when compared to previous years. This decline in relative affordability is likely to continue with the future planned excise rate increases.

- (3) Australian Taxation Office, Excise rates for tobacco,
- February 2017.
- (4) Euromonitor, Index of tobacco prices, accessed January 2018.
 (5) Euromonitor, Annual disposable income, accessed January 2018.
- (5) Euromonitor, Annual disposable income, accessed January 20
 (6) Parliament of Australia, Tobacco excise increase, accessed
- January 2018.



The AWOTE has continued to grow faster than CPI

4.3 Recent development of excise duty and tobacco affordability in Australia



The 2013-14 federal budget included a change to indexation of excise duty for tobacco and tobacco products from the Consumer Price Index (CPI) to Average Weekly Ordinary Time Earnings (AWOTE) commencing from 1 March 2014. Between 2008 and 2017, AWOTE grew at a CAGR of 3.5%, whilst CPI grew at a CAGR of 2.2% during the same period. Whilst both CPI and AWOTE have been increasing, AWOTE has grown by 15 percentage points more than CPI since 2007.

Notes: (a) 2017 AWOTE is based on latest available estimates from Australian Bureau of Statistics, accessed February 2018.

(b) Indexed with 2008 values taken as 100.

- (c) The historical numbers have been updated as Euromonitor has changed the Index of tobacco prices
- Sources: (1) Euromonitor, Index of tobacco prices, accessed January 2018.
 - (2) Australian Bureau of Statistics.

KPMG

Australia has the highest cigarette prices within the Asia Pacific region

4.4 Regional tobacco prices

Figure 4.4: Price of a pack of 20 Marlboro cigarettes – Australia and selected markets, 2017^{(1)(2)(a)(b)}



Australia and New Zealand have much higher cigarette prices than surrounding markets in South East Asia. With the exception of New Zealand, Australian prices are over 90% higher than any other markets within the region as shown above. This large price differential between Australia and other nearby markets creates an economic incentive for those involved in the illicit market, although tight border controls seek to limit this (see page 35 for more details).

Notes: (a) Prices for a 20 cigarette pack of Marlboro (taxes included); where Marlboro is not available, a comparable premium brand has been used. (b) The prices are as of December 2017.

- Sources: (1) Industry data.
 - (2) www.oanda.com



The prices of all legal and illicit products have risen in the twelve months to December 2017

4.5 Relative price of illicit tobacco

Figure 4.5.1: Prices of illicit tobacco products and Winfield 25s, June 2013 – December $2017^{(1)(a)(b)(c)(d)(e)}$



Data provided by the industry based upon covert purchases^(b) made across Australia highlights the price difference of illicit products compared to legitimate products. While this data will be impacted by the split of random versus intelligence led purchases^(c), the data will provide some insights into the size and change in the market.

The above figure illustrates how prices have changed for a range of illicit tobacco and a legitimate pack of Winfield 25s. Over the period June 2013 to December 2017, the illicit tobacco segments which exhibited a price increase greater than a Winfield 25s pack (75%) were Contraband cigarettes which rose by 79% and Chop Chop Loose, which rose by 124%. Chop Chop Tubes (unbranded tobacco sold in prerolled tubes) prices also rose over the period, but this increase was smaller at around 67%.

Figure 4.5.2: Illicit tobacco prices as a proportion of Winfield 25s, December 2013 – December 2017^{(1)(a)(b)(c)(d)(f)}



Increased excise rates have resulted in an increase in legitimate tobacco prices. As illicit products fail to comply with Australian legislation, the rise in illicit tobacco prices has likely fuelled higher margins for smugglers and illegal retailers.

Between December 2016 and December 2017 the price of Chop Chop Loose as a proportion of Winfield 25's rose from 21% to 30% as a result of a large price increase. This price increase could partly explain the decline in consumption of unbranded tobacco in 2017. Contraband and Chop Chop Tubes also saw a slight increase as a proportion of Winfield 25's price, but the differential remained within five percentage points.

Notes: (a) Contraband prices are an average of price for products found in Sydney and Melbourne. Unbranded prices have been converted to a pack of 25 cigarette equivalents.

- (b) Covert purchases are 'mystery shopper' attempts to purchase illicit tobacco.
- (c) Intelligence led purchases involve gathering data and information on purchase outlets and using it to guide covert purchases. Random purchases are made without suspicion that illicit tobacco products can be purchased from that outlet.
- (d) A pack of Winfield 25s was chosen as the benchmark for changes in tobacco prices. It is an established brand with price changes likely to be representative of the broader legal tobacco market.
- (e) Data for Chop Chop loose price for December 2016 is not available.
- (f) For the purpose of this analysis Chop Chop loose price for December 2016 has been taken to be the same as that of June 2016, since the price for December 2016 was not available.

Source: (1) Industry intelligence data.





5. Size of the Market

5.1 Estimating the illicit tobacco market5.2 Illicit tobacco consumption in Australia

The approach used to estimate the size of the Australian illicit tobacco market is globally consistent, methodical and robust

5.1 Estimating the illicit tobacco market

Methodology and validation

As discussed in section 2.1, KPMG divides the illicit tobacco market into unbranded tobacco and illicit manufactured cigarettes (in the form of counterfeit and contraband). These categories taken together form total illicit consumption. Therefore, it is important to take account of all consumption flows when assessing the amount of illicit tobacco consumed.

The chart below illustrates how KPMG breaks consumption into a number of categories (defined in section 2.1) and how each category requires different data sources to estimate the size of the market and validate the findings.

For each of these categories a separate primary approach is used in order to estimate the volume of illicit tobacco. For unbranded tobacco, a consumption model, based on results from a consumer survey is used.

Figure 5.1a: Estimation of the illicit market^(a)

The consumption model includes Chop Chop (unbranded loose tobacco sold in bags) and unbranded tobacco sold in pre-filled tubes. For illicit manufactured cigarettes an Empty Pack Survey (EPS) analysis is used, based on the collection of discarded cigarette packs across Australia.

This approach has been used consistently in each report over the past three years, which provides more reliable insights into market trends.

We believe this approach provides an estimate of the size of the illicit market in Australia that is as robust as possible within current research techniques. However, to further increase the level of confidence in this estimate, alternative approaches are used to validate the illicit tobacco volumes generated by the consumption model and the EPS analysis.



Illicit tobacco consumption

Note: (a) Definitions for the above sales categories can be found in the glossary on page 2 and page 3.



We have used a broad range of approaches to produce an estimate for the size of the Australian illicit tobacco market

5.1 Estimating the illicit tobacco market (cont.)

The validations can be used as alternative estimations, or to support trends and changes noted in the market. In this section, each of the approaches are described before the process of estimation and validation is explained. A detailed overview of these approaches can be found in Appendices A1, A2 and A3. A detailed list of all data and information used can be found in Appendix A12.

Primary approaches

Consumption model

This approach is based on the responses of consumers to the survey conducted by Roy Morgan Research (RMR) in H1 2017 and H2 2017. The survey is commissioned by BATA, ITA and PML.

Survey participants represent the demographic, geographic and social factors that characterise the Australian population. The survey asks consumers about their consumption of both legal and illicit tobacco. These survey responses are then combined with other data sources by KPMG to arrive at an estimate for total illicit tobacco consumption. Consumers are asked about both unbranded tobacco and illicit manufactured cigarettes.

For the purpose of this report, the consumption model number for unbranded volumes in 2017 is based on the average of the H1 2017 and H2 2017 consumer survey results. Since consumers are likely to give a more accurate estimate of their purchase behaviour over a shorter time period, using an average of both surveys provides a more robust number for 2017. Detailed results of the consumer survey are discussed in section 6.

Empty Pack Survey (EPS)

An EPS is a study undertaken independently by MSIntelligence (MSI) who collect 12,000 discarded cigarette packs per survey across 16 different population centres in Australia. The EPS is conducted every six months. The brand and country of origin of each collected pack is assessed by MSI to determine whether it is a domestic or non-domestic product. Products from different countries of origin are labelled as non-domestic. The collected packs are then sent to the participating manufacturers for analysis to determine genuine and counterfeit packs. KPMG uses the EPS results to extrapolate overall consumption in the market. The percentages of non-domestic and counterfeit packs are applied to the volume of legal domestic sales in order to establish the total consumption of manufactured cigarettes in Australia. The EPS approach provides an objective and statistically representative estimate of the size of the illicit manufactured cigarette market. The results are not subject to respondent behaviour and are therefore less prone to sampling errors than many other alternative methodologies. The 16 population centres covered by the sample plan covers the equivalent of over 73% of Australia's population.

A small proportion of non-domestic cigarettes are likely to have been brought into Australia legally by Australians travelling overseas or by tourists and permanent settlers arriving in Australia. Travel statistics from the Australian Bureau of Statistics are reviewed by KPMG in order to estimate the likely volume.

An analysis of the amount of non-domestic legal brought into Australia by these two groups can be found in Appendix A6. Areas that are typically frequented by tourists and international students (e.g. sports stadia, tourist attractions, railway stations) are excluded from the EPS to avoid overestimating non-domestic legal consumption and to provide a representative sample of the local population's consumption.

These non-domestic legal cigarettes are removed from the total non-domestic volume by KPMG, which leaves the total estimated illicit manufactured cigarette market, split into contraband and counterfeit cigarettes as described in section 2.

Since 2012, the empty pack surveys have been jointly commissioned by the industry (BATA, ITA and PML). Before H1 2013, the study was carried out by ACNielsen. Prior surveys were also run in 2009 and 2010 by ACNielsen (who also have experience of conducting EPS in Europe) on behalf of PML, and these have been made available to KPMG for use in this report. The methodology and sample walking routes used by MSI are consistent with those used previously by ACNielsen.

For the purpose of this report, EPS surveys have been conducted by MSI in Q2 and Q4 2017. The results from these surveys have been used to arrive at an estimate for the illicit manufactured cigarette consumption for 2017. This method is consistent with the approach used by KPMG in Project SUN to assess the level of counterfeit and contraband cigarettes across the EU Member States. It is a widely accepted method for measuring the illicit market.



Rolling papers and seizures are used to validate the results of the consumption model and EPS

5.1 Estimating the illicit tobacco market (cont.)

Means of validation

Rolling papers analysis

This analysis has been developed by KPMG and has been used with other clients to infer the volume of loose tobacco smoked from the quantum of papers sold. It compares sales of rolling papers provided by ITA⁽¹⁾ with the legal sales of loose tobacco to estimate a consumption gap between legal and illicit.

In order to use this approach several assumptions are made:

- 1. Grams per rolled cigarette⁽²⁾⁽³⁾.
- 2. Wastage rate of rolling papers⁽²⁾⁽³⁾.
- 3. Rolling papers used for consumption of illegal drugs⁽⁴⁾.

Data obtained in consumer surveys carried out by the industry and sales figures from rolling papers manufacturers are used in order to verify these assumptions, along with data from the National Drug and Alcohol Centre. Since a new National Drug Strategy Household Survey was conducted in Australia in 2016, we have updated the estimates of rolling papers used for consumption of illegal drugs in this report.

We have found from previous analyses that, given the number of assumptions in this approach, its main use is to provide a range of estimates for the market size to help validate other analysis.

However, the continued divergence of results suggests either an underestimation from the consumption model or some invalid assumptions in the rolling papers analysis. We shall continue to assess the ongoing validity of the underlying assumptions and try to understand alternative approaches.

Seizures data

Seizures data obtained from the ABF shows the volume and type of tobacco intercepted as sea cargo⁽⁵⁾. Using seizure data to size the illicit market is often unreliable since it is difficult to ascertain the proportion of total illicit product that is seized. Detections depend as much on the performance of the customs or law enforcement agency as they do on the presence of illicit activity or the ingenuity of those involved. In addition, seizure data used to intercept tobacco products coming into Australia will not pick up loose tobacco that may have been illegally grown in Australia.

Whilst seizure data is unlikely to generate an accurate estimate for the illicit tobacco market, it can be used to indicate trends and validate any considerable changes to the illicit market. For example, an increase in manufactured cigarette flows from a country picked up in the EPS could be validated with a corresponding increase in seizures from that country or in manufactured cigarettes representing a growing percentage of seizures. We also use internal tobacco company intelligence data as a validation of trends, however, since this data is commercially sensitive we are not authorised to publish it.

Sources: (1) Aztec - IRI Scan data

- (2) Industry estimates.
- (3) Roy Morgan Research, Consumer survey
- (4) Australian Institute of Health and Welfare, The National Drug Strategy Household Survey, 2013, 2016.
- (5) Australian Customs and Border Protection Service, Annual Report 2015, October 2015.



Size of the illicit tobacco market – Methodology

The validation of our measurements with additional data sources provides confidence in the results

5.1 Estimating the illicit tobacco market (cont.)

Figure 5.1b: Overview of approach to estimating illicit tobacco



The consumption model and EPS approaches are thought to be the most robust for estimating the illicit tobacco market in Australia. Figure 5.1 shows the process by which the consumption model and EPS analysis are validated through alternative analysis.

1. Primary approaches

O Unbranded tobacco: The consumption model uses data from the RMR consumer survey, external data sources such as the Australian Institute of Health and Welfare and the Australian Bureau of Statistics to estimate the results. We consider it to be the best way of sizing the unbranded tobacco market.

B Illicit manufactured cigarettes: The EPS, conducted in Australia by MSIntelligence, is the most reliable measure of contraband and counterfeit. It also forms the foundation for Project SUN^(a).

A + B Total illicit tobacco: The total illicit tobacco market size estimate is calculated by adding the results of the validated EPS analysis for manufactured cigarettes (i.e. contraband and counterfeit) with the output of the validated consumption model for unbranded tobacco. The results are presented in kilograms to show total consumption of both loose tobacco and manufactured cigarettes.

2. Validation

Rolling papers analysis is used in order to validate the unbranded tobacco market. Whilst assumptions relating to grams per rolled cigarette, rolling paper wastage rates, and cannabis usage are hard to verify, rolling papers analysis is helpful to determine the likely ratio between consumption of loose tobacco and illicit loose (unbranded) tobacco.

The consumption model has historically been used in order to estimate the illicit volume of manufactured cigarettes. As such it provides a good approach by which to assess the EPS results.

(a) A study of the illicit cigarette market in the European Union by KPMG.

3. Additional validation

Total illicit tobacco consumption (i.e. unbranded tobacco and manufactured cigarettes together) can be validated further by seizures data.

Seizures data can be used in order to validate the likely mix of illicit tobacco consumption. If the consumption model and EPS show a large change in the mix of illicit products, seizures data should support this change.

Using this validation process enables us to understand and corroborate any significant changes to illicit tobacco consumption.

Ongoing data source monitoring

We take a forward looking approach to ensure the most appropriate data is used in the modelling process. For example, many surveys of smoking prevalence are conducted at irregular intervals whereas the actual decline is smooth over time between these periods. To avoid major future restatements that distort trends, we continuously monitor the relevance of data sources and may rebase some data based on historic and forecast trends.

To ensure comparability with our ongoing methodology, we have applied these changes retrospectively. See Page 51 and 52 of Appendix A1 for details.

KPMG

Note

Size of the illicit tobacco market

Declines in unbranded tobacco and legal manufactured cigarette consumption has resulted in a decline in overall tobacco consumption

5.2 Illicit tobacco consumption in Australia

Figure 5.2a: Consumption of tobacco products by category, 2007 – 2017^{(1)(2)(a)(b)(c)(d)(e)}



The total level of tobacco consumption in Australia was estimated at 15.6 million kg in 2017, of which 2.3 million kg was estimated to be illicit. Our estimate of total consumption represents a fall in volume of 6.1% from 2016, whilst the consumption of illicit tobacco as a proportion of total consumption increased from 14.3% in 2016 to 15.0% in

Since 2016, there was a change in the mix of the illicit products consumed away from unbranded tobacco and towards manufactured cigarettes. Volumes of illicit unbranded tobacco have declined by 21.9% whilst volumes of illicit manufactured cigarettes have increased by 29.6% between 2016 and 2017.

Figure 5.2b: Share of illicit tobacco consumption, 2017^{(3)(e)}



	2017 kgʻ000s	% change (2016–2017)
Counterfeit	47	(4.5%)
Contraband ^(e)	1,201	31.5%
Unbranded	1,100	(21.9%)
All illicit product	2,348	(1.0%)
Non-domestic (legal)	28	(25.9%)
Legal domestic sales	13,243	(6.9%)
Total consumption	15,619	(6.1%)

Contraband consumption is the largest component of illicit manufactured cigarette consumption. The volume has increased by 31.5% since 2016, driven by an increase in both domestic as well as non-domestic illicit consumption. In 2017, the non-domestic contraband increased from 6.4% to 7.9% of all manufactured cigarettes consumed whilst the Domestic Illicit Plains increased from 0.56% to 1.93%.The volume of non-domestic (legal) product remained small.

Counterfeit remains a very small component of illicit tobacco consumption (2.0%) although this volume has decreased by 4.5% from 2016 to 2017.

As a result, the decline in total consumption is due to a reduction in consumption of both legal tobacco and unbranded tobacco.

Notes: (a) Counterfeit and contraband estimations are unavailable for 2007.

- (b) Non-domestic legal volumes are smaller than 0.1 million kg and volume labels have not been included for this category.
 - (c) KPMG have not had the opportunity to validate results for 2007-2011.
 - (d) Numbers in the chart do not sum due to rounding.
- (e) Contraband includes non-domestic contraband as well as the volumes of Illicit Whites (non-domestic) and Domestic Illicit Plains.
- Sources: (1) PriceWaterhouseCoopers, Australia's Illegal Tobacco Market, 2007, 2009
 - (2) Deloitte, Illicit Trade of Tobacco in Australia, 2010, 2011, 2012.
 - (3) KPMG analysis



2017.

Size of the illicit tobacco market

The estimate of unbranded tobacco appears to be below the amount indicated by the rolling paper analysis

5.2 Illicit tobacco consumption in Australia (cont.)

Table 5.2: Results of primary methodologies, 2016 - 2017

2016 and 2017 results (tonnes)				
		2016	2017	% Change (2016 2017)
1.Illicit manufactured cigarettes	Contraband ^(a)	913	1,201	31.5%
	Counterfeit	50	47	(4.5%)
	Total	963	1,248	29.6%
2. Unbranded tobacco		1,408	1,100	(21.9%)
3. Total illicit tobacco		2,371	2,348	(1.0%)

1. Illicit manufactured cigarettes

Based on analysis of the EPS undertaken by MSIntelligence, the 2017 estimation of the illicit manufactured cigarettes market is 1,201 tonnes for contraband and 47 tonnes for counterfeit. This equates to an increase of around 30% in total illicit manufactured cigarettes (counterfeit and contraband) over the year from 2016.

Figure 5.2.1: KPMG estimates of illicit manufactured cigarettes, 2016 – 2017⁽¹⁾



2. Unbranded tobacco

The consumption model indicates that the volume of unbranded tobacco consumed decreased by 21.9% between 2016 and 2017, from 1.41 million kg to 1.10 million kg.

The rolling papers analysis suggests that the unbranded tobacco market is likely to be between 1.87 million kg and 2.65 million kg. The 1.10 million kg falls far below this range.

This continued divergence of results suggests either an underestimation from the consumption model or some invalid assumptions in the rolling papers analysis. However, given the continued divergence and to ensure the size of the issue is not being underestimated, we shall seek alternative methods of validation in any future reports.

Figure 5.2.2: Volume of illicit unbranded tobacco generated by the rolling papers analysis, 2012 – 2017⁽¹⁾



Consumption model output

Notes: (a) Contraband includes non-domestic contraband as well as the volumes of Illicit Whites (non-domestic) and Domestic Illicit Plains. Sources: (1) KPMG analysis.



Sea cargoes have represented the majority of seizures made in recent years

5.3 Enforcement context

Reported border seizures

Since 2011-12 the number of detections in sea cargo by the ABF has trended upwards, except the decline in $2015-16^{(1)}$. The weight of tobacco seized also trended upwards in 2016 - 17, after trending downwards in the past three periods. The sea detections increased by 42% in 2016 - 2017.

Figure 5.3.1: Sea cargo seizures, 2008 – 2017^{(1)(2)(3)(a)(b)(c)}



Illicit tobacco in international mail

Figure 5.3.2: Undeclared tobacco detections in international mail $^{(3)}$

	2016 – 17
Number of seizures	59,612
Total (tonnes)	54

International mail smuggling is one of the ways of tobacco smuggling into Australia with frequent mailings of small portions (0.7–1kg in 2016). Both the number of seizures and the total volume of tobacco smuggled increased in 2016-17.

Notes:

- (a) Illicit tobacco detections were also made in air cargo. However, volumes are considerably smaller and are not published in the annual report.
- (b) Pre 2010-11 tobacco seizures have been converted from cigarette equivalents based on the conversion rates used for consumption modelling.
- (c) Numbers for 2012-13 have been updated and are based on data provided by the Australian Customs and Border Protection Service.



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Sources: (1)

(2)

(3)

ABF Detection Data, 2016.

DIBP, Annual Report, 2016-17.

Tobacco Detections - 2016, Provided by the industry with

approval of Department of Immigration and Border Protection.
ABF and other enforcement agencies made a number of seizures in 2017

5.3 Enforcement context

Evolution of points of entry

The majority of tobacco and cigarette detections continue to occur within the sea cargo environment. However, the ABF has been observing increased activity in undeclared small consignments through the passenger, air cargo and international mail streams. For instance in the year to 2017, an equivalent weight of 54 tonnes was detected through mail, compared to 264 tonnes through sea cargo⁽¹⁾. According to ACIC, the illegal tobacco trade is dominated by serious and organised criminal syndicates who are attracted by lucrative profits on offer through tax evasion⁽²⁾.

The ABF and other enforcement agencies continue to use other methods of detecting and seizing illicit tobacco. For example, detector dogs are trained and deployed in order to detect tobacco being smuggled through the border.⁽³⁾

In the year 2016-17, ABF's tobacco strike team seized a total of 123m cigarettes and over 64 tonnes of tobacco.⁽⁴⁾

Figure 5.3.1: Key seizures in 2017



Manufactured cigarettes seizure.

Loose tobacco seizure.

Domestic seizure

Air cargo/mail order seizure

Sources: (1) ABF, Two years of ABF - 400 tonnes of tobacco seized, August 2017

- Australian Border Force, Tobacco criminal syndicate dismantled in (2) Melbourne, 2017.
- Department of Immigration and Border Protection, Detector Dog (3) Program - working with dogs to help protect Australia.
- DIBP Annual Report, 2016-17.
- The Land, Crime gangs coaxing farmers into growing illegal (5) tobacco: ATO, April 2017. Australian Border Force, Seven-month investigation smashes
- (6) tobacco syndicate in Melbourne and Adelaide, March 2017.
- (7) Australian Taxation Office, ATO seizes \$5.8 million of illicit
- tobacco in regional Victoria, March2017. Shepparton News, Tobacco crop seized, May2017. (8)
- Australian Border Force, 11 months' jail for trafficking illegally (9) imported cigarettes, December 2017.

- (10) Australian Taxation Office, ATO blitz three criminal tobacco plantations in regional Victoria, May2017.
- (11) Australian Taxation Office, \$9 million in illegal tobacco seized and destroyed in Northern Victoria, May2017.
- (12) Australian Border Force, Three years' jail for Melbourne man importing almost 1.8 tonnes of tobacco, June 2017.
- (13) AFP, Multi-agency operation destroys global criminal syndicate, August 2017.
- (14) Australian Border Force, ABF continues to smash tobacco syndicates in Victoria, August 2017.
- (15) Australian Border Force, Man arrested for multiple cigarette importations through international mail, September 2017 (16) Australian Border Force, Almost two million illegal cigarettes
- seized in Brisbane, September 2017 (17) Australian Border Force, Border Watch referral puts a stop to
- illegal tobacco imports, November 2017.





6.1 Consumer survey overview6.2 EPS Results

Consumer survey findings – Consumer survey overview

Roy Morgan Research sampling overview

6.1 Consumer survey overview

6.1.1 Roy Morgan Research survey overview

The consumer survey is primary research carried out to establish the size of the illicit unbranded tobacco market in Australia. The industry survey, commissioned by the industry (BATA, ITA and PML), was again carried out by Roy Morgan Research (RMR) to ensure comparability with previous years.

The survey focuses on tobacco consumption behaviour by adult smokers who smoke on a regular basis^(a). Consumers are asked about their consumption and purchase of legal and illicit tobacco products including:

- Unbranded loose tobacco (both 'Chop Chop' sold loose in bags or in pre-filled tubes).
- Counterfeit and contraband manufactured cigarettes.

The consumer survey was conducted at least annually from 2009 and then biannually from 2013. There is a three week response period and the survey made use of Computer Assisted Web-based Interviewing (CAWI), previously Computer Assisted Telephone Interviewing (CATI) was used. The H1 2017 survey was carried out between 17 June and 06 July 2017 and the H2 2017 between 12 October and 01 November 2017. Respondents took on average 6.6 minutes to complete the survey.^(b)

Participants in the online research were compensated with points or credits based on the length of the questionnaire. These accumulate over many studies and can then be redeemed for prizes or gift vouchers. Respondents have to complete a number of consumer surveys focusing on a range of issues in order to accumulate enough points to exchange for vouchers of a certain value.

Figure 6.1.1: Roy Morgan Research (RMR) survey full year attrition chart⁽²⁾

There are state-by-state regulations that guide the implementation of rewards for such consumer surveys, and this RMR survey complies with all such regulations nationally.

6.1.2 Consumer survey sampling methodology

RMR draws its sample from an Australia-wide database (urban and rural areas) collected through its 'Establishment Survey'. This survey is conducted throughout the year and includes information on demographics and attitudes.

The sample for the tobacco questionnaire is weighted by location, age and gender using RMR Single Source data in order to be representative of the national population. The Single Source^(c) distribution of income, occupation and work status of smokers is then used to rim weight^(d) the data. The survey only samples people over 18 years old. Non-private dwellings and institutions, occasional (<5 days per week) and non-smokers are excluded. RMR also uses a one quarter exclusion rule for respondents^(e).

To meet target responses, RMR supplements its sample with samples from a set of qualified third-party suppliers (large reputable international suppliers of online research samples).

The Australian Institute of Health and Welfare (AIHW) has indicated that this approach is probably the "most appropriate way to measure this type of information"⁽¹⁾.

Founded in 1941, Roy Morgan Research (RMR) is an established Australian market research company. RMR has significant experience working with consumer surveys monitoring legal and illicit tobacco consumption and has provided the consumer research for all of the previous versions of this report.

- 22,596 received an e-mail invitation to complete the survey 7,047 clicked the e-mailed survey link 5,786 qualified to take part 2,451 were 'qualified' smokers 2,101 completed the survey^(f)
- RMR contacts a panel by email to undertake the survey.
 - Differing screening processes for panels may help better identify potential respondents (22,596) who fit the demographic requirements of the study.
- ~35% of those who clicked the survey emailed to them passed the screening and qualified to take part
- The panel is filtered out with screening questions to enable the required demographics and a representative sample.
- The respondents are now broadly representative of Australia's demographics.
- The survey asks more screening questions about smoking habits and products smoked. This establishes that the panel are regular smokers of manufactured cigarettes and/or RYO.
 - 86% of those eligible completed the survey, resulting in 2,101 full responses.
- Notes: (a) For the purposes of this report, a regular smoker is a person who smokes tobacco products on at least five days in a given week.
 - (b) The Australian Market and Social Research Society's 'Guideline for Market and Social Research Interviews' recommends a maximum survey length for incentivised online surveys of 20 minutes.
 (c) Single Source is RMR's database collected through their
 - (c) Single Source is RMR's database collected through their Establishment Survey that focuses on demographic and behavioural factors and closely matches the ABS Census. It is used to establish quotas for other surveys.
- Source: (1) Proof Committee Hansard, Parliamentary Joint Committee on Law Enforcement, March 2016.
- (d) Rim weighting uses mathematical algorithms to provide an even distribution of results across a dataset while balancing certain categories such as age to pre-determined totals. It weighs specified characteristics simultaneously and disturbs each variable as little as possible.
- (e) The respondent cannot have done the study in the most recent prior quarter.
- (f) To meet project timelines, the field period closed on 01 November 2017, with 2,101 completed surveys.
- (2) Roy Morgan Research, Consumer survey Q4 2017.



The primary driver of the decline in unbranded tobacco consumption was a decline in purchase frequency

6.1.2 Purchasers of illicit unbranded tobacco

Figure 6.1.2a: Proportion of respondents who reported purchasing illicit unbranded tobacco, 2012 – H2 2017^{(1)(2)(a)}



The H2 2017 RMR consumer survey saw an increase in the proportion of respondents purchasing unbranded tobacco compared to H1 2017. The decrease in the average frequency of purchase was partially offset by an increase in volume between H1 2017 and H2 2017 as the average amount purchased increased from 0.17 kg per occasion to 0.20 kg (below). These trends resulted in the average annual volume per consumer decreasing from 2.35 kg in H1 2017 to 2.26 kg in H2 2017, a decline of 4%.

The consumption model number for total unbranded volumes is based on the average of the two consumer survey results in that twelve month period. Both average frequency of purchase and average purchase volumes were lower in 2017 than in 2016. As a result, overall unbranded volumes decreased from 1.41 million kg in 2016 to 1.10 million kg in 2017.



Figure 6.1.2b: Average frequency of purchase per

annum, 2012 – H2 2017^{(1)(2)(a)}

Figure 6.1.2c: Average volume purchased (kg) per occasion, 2012 – H2 2017 $^{(1)(2)(a)}$



Note: (a) 2012, 2013, 2014, 2015, 2016, 2017 analysis is based on CAWI / CATI consumer survey results.

Sources: (1) Deloitte, Illicit Trade of Tobacco in Australia, 2012.

(2) Roy Morgan Research (RMR), Consumer survey, H1 2013, H2 2013, H1 2014, H2 2014, H1 2015, H2 2015, H1 2016, H2 2016, H1 2017, H2 2017.



The EPS sampling plan comprises 12,000 empty packs collected across 16 population centres in Australia twice a year

6.2 EPS results

6.2.1 Australian EPS sampling plan⁽¹⁾⁽²⁾

The EPS analyses discarded cigarette packets that have been collected from a set area. The aim is to collect a representative sample of discarded cigarette packets that can then be analysed to provide information about the nature of consumption of manufactured tobacco products.

Empty packs are collected on a proportionate basis from a number of neighbourhoods. Packs are collected from streets and easy access public bins in areas in the sampling plan.

For the purpose of this report, an EPS was carried out by an independent market research agency, MSIntelligence (MSI) across October – December 2017. The Q2 and Q4 2017 EPS collection was based on a sampling plan consistent with the previous EPS sampling plan: 12,000 packs were collected, the same neighbourhoods were sampled and the same 16 population centres were covered. This covered approximately 73% of the total population as shown in Figure 6.2.1.

Packs are collected from pre-determined neighbourhoods, selected to be representative of the city being sampled. Similarly, the neighbourhoods selected are also consistent with the previous surveys. Packs are collected irrespective of their brand and country of origin. Collection routes specifically exclude sports stadia, shopping malls and stations, or any other locations where non-domestic incidence is likely to be higher as a result of a skewed population visiting these areas and may not be representative of local consumption.

To ensure the sample is representative, packs are weighted based on the proportion of each city's population after the collection is completed.

Founded in 2001, MSI is a private company with headquarters in Geneva, Switzerland specialising in market research. MSI has particular experience in the tobacco industry and has conducted over 1,000 EPS in more than 85 countries.

Table 6.2.1 Q4 2017 EPS sampling plan:

Population centres	Population (million) 2016 estimate ^{(2)(a)}	Number of sampled neighbourhoods	Sample packs	Weighted packs
Sydney	4.6	40	3,000	3,253
Melbourne	4.5	40	2,500	2,959
Brisbane	2.3	30	1,200	1,526
Perth	1.9	30	1,000	1,322
Adelaide	1.3	25	800	890
Gold Coast – Tweed Heads	0.6	13	400	412
Newcastle	0.4	13	400	292
Canberra - Queanbeyan	0.4	10	300	287
Sunshine Coast	0.3	10	300	199
Wollongong	0.3	10	300	197
Hobart	0.2	10	300	151
Geelong	0.2	10	300	125
Townsville	0.2	10	300	120
Cairns	0.2	10	300	99
Darwin	0.1	10	300	92
Toowoomba	0.1	10	300	77
Total sample	17.6	281	12,000	12,000
Total population of Australia	24.2			

Note: (a) Population numbers are from the Australian Census, 2016. The results are preliminary rebased estimates and not the final estimate.

Sources: (1) MSIntelligence Research, *Empty Pack Survey*, Q2 2013, Q4 2013, Q2 2014, Q4 2014, Q2 2015, Q4 2015, Q2 2016, Q4 2016, Q2 2017 and Q4 2017. (2) Australian Bureau of Statistics.



Between Q4 2016 and Q4 2017 non-domestic cigarette consumption increased in 13 of the 16 population centres samnlen

6.2.2 Australian EPS results - Non-domestic incidence by population centre

Figure 6.2.2a: Total non-domestic incidence by population centre, Q4 2016 – Q4 2017⁽¹⁾



centres

The Q4 2017 Empty Pack Survey found non-domestic packs in all population centres sampled.

Despite geographical variances, the trend in incidence was relatively consistent between the largest population centres and other areas sampled. In Q4 2017, weighted nondomestic incidence increased by 2.0 percentage points in the four largest population centres of Sydney, Melbourne, Brisbane and Perth. Similarly, weighted non-domestic incidence increased by 2.3 percentage points in the other population centres over the same period.

Adelaide, Toowoomba and Townsville were the only areas to experience a decline in non-domestic incidence over the period Q4 2016 - Q4 2017.

In Q4 2017, Gold Coast had the highest level of non-domestic incidence, whilst in the previous two quarters (Q4 2016 and Q2 2017), non-domestic incidence had been highest in Toowoomba and Cairns respectively. Both these areas have seen a decrease to Q4 2017.

Sydney's share of the total non-domestic cigarettes collected in Australia declined to 28% in Q4 2017 from 36% in Q4 2016.

Sources: (1) MSIntelligence Research, Empty Pack Survey, Q4 2016 and Q4 2017.



Recent increases in non-domestic incidence has been due to a rise in the flows of a wide range of brands

6.2.3 Australian EPS results - Non-domestic incidence by brand flow





A blended approach, assigning equal weighting to the Q2 2017 and Q4 2017 EPS, has been used to estimate the size of the illicit manufactured cigarette consumption volume for 2017. As highlighted earlier, using the blended method is consistent with the approach used by KPMG in Project SUN (and the recent Australian reports undertaken by KPMG to assess the level of counterfeit and contraband cigarettes across the EU Member States). A blended approach gives a more accurate view on the full year findings as each bi-annual EPS is reflective of market trends at that point in time only.

As per the EPS, non-domestic incidence has decreased slightly to 8.6% in Q4 2017 from 8.8% in Q2 2017. When both survey results are combined, it gives a total non-domestic incidence of 8.7%, an increase of 1.5 percentage points from 2016.

The share of Illicit Whites brands flows of non-domestic manufactured cigarettes consumption was 0.5% in 2017, representing a decline of 0.3 percentage points from the 2016 figure. The levels of Illicit White brand flows continue to remain below the peak of 1.8% experienced in Q4 2013.

Between 2016 and 2017, the flows of non-domestic Marlboro and Mevius have increased whilst flows of non-domestic Dunhill have slightly declined.

Notes: (a) Our definition of Illicit Whites (see the glossary) was updated in 2014.

- (b) The 2017 figures are based on the blended result of the Q2 2017 and the Q4 2017 EPS using the weighted number of cigarettes.
- (c) Numbers in the above chart may not sum due to rounding.
 (d) Some of the labels with values less than 0.3% have been removed for clarity purposes.

Sources: (1) MSIntelligence Research, *Empty Pack Survey*, Q2 2013, Q4 2013, Q2 2014, Q4 2014, Q2 2015, Q4 2015, Q2 2016, Q4 2016, Q2 2017 and Q4 2017 (2) AC Nielsen, *Empty Pack Survey*, 2009, 2010, 2012.

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Excluding duty free, Chinese labelled products remained the largest component of non-domestic incidence in 2017

6.2.4 Australian EPS results - Country of origin flows

Figure 6.2.4: Total non-domestic incidence by country of origin flows as a percentage of total manufactured cigarette consumption Q4 2009 – Q4 2017^{(1)(2)(a)(b)(c)}



Asian countries were the primary source of inflows of nondomestic manufactured products into Australia, with high levels of duty free products also present. China (including China duty free) remains the largest individual source country for non-domestic manufactured cigarette flows in both the Q2 2017 EPS (accounting for over 28% of all non-domestic flows) and the Q4 2017 EPS (accounting for over 27% of all non-domestic flows). The share of Chinese inflows increased from 1.5% of total incidence in 2016 to 2.2% in 2017.These Chinese non-domestic flows are predominantly flows of brands trademark owned by China National.

Indonesia comprises the second largest flow of products from any individual country (excluding Duty Free products), followed by flows from South Korea. Marlboro, the largest non-domestic brand flow to enter Australia, originates from approximately 50 countries with the largest share of flows originating from Indonesia at 0.3%.^(d)

Flows of non-domestic manufactured cigarettes with unspecified labelling remained a noteworthy component of non-domestic inflows in both the Q2 and Q4 2017 EPS with an annual share of 0.7% of total incidence. This share has increased from around 0.6% in 2016 and is down significantly from 2013 levels, with a high proportion of the remaining flows accounted for within the Illicit White brand flows category.

- Notes: (a) The 2017 figures are based on the blended result of the Q2 2017 and the Q4 2017 EPS using the weighted number of cigarettes. (b) Numbers in the above chart may not sum due to rounding.
 - (c) Some of the labels with value less than 0.3% have been removed for clarity.
 - (d) The flows exclude the Duty Free products.
- Sources: (1) MSIntelligence Research, *Empty Pack Survey*, Q2 2013, Q4 2013, Q2 2014, Q4 2014, Q2 2015 and Q4 2015, Q2 2016, Q4 2016, Q2 2017 and Q4 2017. (2) AC Nielsen, *Empty Pack Survey*, 2009, 2010, 2012.



In 2017, flows of products with JTI trademarks replaced flows of BAT trademarked products to become the third largest non-domestic flow

6.2.5 Non-domestic flows by trademark owner

Figure 6.2.5: Non-domestic incidence by trademark owner flows Q4 2009 - Q4 2017^{(1)(2)(a)(b)(c)}



Flows from brands with trademarks owned by either Philip Morris International (PMI) or China National accounted for around half of all non-domestic packs found in Australia in the Q4 2017 EPS. Brands trademark owned by JTI were the third largest inflow, representing 1.1% of total incidence in the Q4 2017 survey and an overall decline of 0.1 percentage points from the Q2 2017 EPS.

This growth in non-domestic incidence was primarily driven by flows of products trademark owned by PMI (0.2pp increase between 2016 and 2017), China National (0.5pp increase) and JTI (0.5pp increase).

Notes

- (a) The 2017 figures are based on the blended result of the Q2 2017 and the Q4 2017 EPS using the weighted number of cigarettes. (b) Numbers in the above chart may not sum due to rounding.
- (c)
- Some of the labels with value less than 0.3% have been removed for clarity. The three main manufacturers from South Korea as per the 2017 EPS are PMI, KT&G and JTI. (d)

MSIntelligence Research, Empty Pack Survey, Q2 2013, Q4 2013, Q2 2014, Q4 2014, Q2 2015 and Q4 2015, Q2 2016, Q4 2016, Q2 2017 and Q4 2017. Sources: (1) AC Nielsen, Empty Pack Survey, 2009, 2010, 2012.



Counterfeit flows incidence remains low

6.2.6 Australian EPS results - Counterfeit flows

Figure 6.2.6a: Counterfeit flows incidence as a percentage of total manufactured cigarette consumption Q2 2012 - Q4 2017^{(1)(2)(a)(b)(c)(d)(e)}



Counterfeit levels remain very low an similar to levels seen in 2016. The Q4 2017 EPS indicated that 0.40% of manufactured cigarettes consumed in Australia were counterfeit flows. Overall, the incidence of counterfeit increased from 0.38% in 2016 to 0.40% in 2017.

Notes: (a) Counterfeit incidence is not available for 2009, 2010 and 2011.

- (b) The counterfeit volume is reported from manufacturers participating in EPS: BATA, ITA and PML. No other counterfeit is included in the volumes reported due to lack of information.
 - (c) The full year 2017 figures are based on the blended result of the Q2 2017 and Q4 2017 EPS.
 - Numbers in the above chart may not sum due to rounding. Some of the labels with value less than 0.01% have been removed for clarity. (d)
 - (e)
- Sources: MSIntelligence Research, Empty Pack Survey, Q2 2013, Q4 2013, Q2 2014, Q4 2014, Q2 2015, Q4 2015, Q2 2016, Q4 2016, Q2 2017 and Q4 2017 (1)
 - AC Nielsen, Empty Pack Survey, 2012. (2)



In 2017, there was an increase in the flows of Domestic Micit Plains

6.2.7 Australian EPS results – Illicit Whites brand flows

Figure 6.2.7a: Consumption of Illicit White flows as a percentage of total manufactured cigarette consumption 2012-2017^{(1)(2)(a)(b)(c)(d)(e)(f)}



According to the 2017 EPS, 0.50% of all manufactured cigarettes consumed in Australia were Illicit Whites (nondomestic), a decrease from the 0.75% of consumption identified in the 2016 EPS. Whilst the flows of Manchester increased to 0.35% of all manufactured cigarettes in 2017 from 0.25% in 2016, the flows of a number of Illicit White brands decreased resulting in the above mentioned decline.

In 2017 Manchester brand flows were identified in 14 out of 16 population centres, while in 2016 it was present in 12 population centres. The Manchester brand has no record of legal sales within Australia but appeared to be available throughout the country given that it was collected across Australia through the EPS.(h)

Figure 6.2.7b: Flows of Illicit White brands as a percentage of total manufactured cigarette consumption 2017^{(1)(a)(b)(c)(d)(e)(g)}



There were a few new brands identified as Domestic Illicit Plain flows in 2017, as compared to 2016.

Despite this, the analysis showed that flows of Domestic Illicit Plains increased from 0.56% of all manufactured cigarettes consumed in 2016 to 1.93% of manufactured cigarette consumption in 2017.

Our definition of Illicit Whites (see the glossary) was updated in 2014. Notes (a)

- The selected Illicit Whites brand flows reported in the Q4 2017 EPS are different from the ones reported in the FY 2013 report due to the refinement of the (b) Illicit Whites flows methodology and changes in the magnitude of brand flows over time
- The share of Illicit Whites flows is calculated based on the number of sticks, however, in the H1 2013 report the share of Illicit Whites brand flows was (c) calculated based on weighted packs. The share of Illicit Whites flows when calculated based on weighted packs would have been: 0.3% in Q4 2009, 0.8% in Q4 2010, 1.4% in Q2 2012, 1.6% in Q2 2013, 2.3% in Q4 2013, 0.5% in Q2 2014, 0.6% in Q4 2014, 1.1% in Q2 2015, 1.4% in Q4 2015, 1.0% in Q2 2016, 2.2% in Q4 2016, 4.3% in Q2 2017 and 1.5% in Q4 2017. The overall year figures are based on the blended result of the Q2 and the Q4 EPS (d)

(e) (f) Numbers in the above charts may not sum due to rounding. This analysis was undertaken by KPMG in conjunction with the main industry participants (ITA and PML as well as BATA). From 2016, KPMG started making a distinction between Domestic Illicit Plains and Illicit Whites (non -domestic) brand flows whilst only non - domestic flows were taken into account in previous reports. Retrospectively, Domestic Illicit Plain flows in 2015 were analysed as well.

- Other Illicit Whites (non-domestic) brand flows include 888, Bike, Business Royals, Director's Choice, Figure, Otto and Yee Yee, amongst others. (g) Manchester brand did not have any legal sales within data sourced from IRI and Retail Tobacconist (h)
- MSIntelligence Research, Empty Pack Survey, Q2 2013, Q4 2013, Q2 2014, Q4 2014, Q2 2015, Q4 2015, Q2 2016, Q4 2016, Q2 2017 and Q4 2017. Sources: (1) AC Nielsen, Empty Pack Survey, 2009, 2010, 2012.





7. Conclusion

Conclusion

Whilst the volume of overall tobacco consumption declined, the proportion of illicit tobacco consumption increased from 14.3% to 15.0%

2016 and 2017 results (kg '000)				
		2016	2017	% change (2016 – 2017)
	Contraband ^(a)	913	1,201	31.5%
Illicit manufactured cigarettes	Counterfeit	50	47	(4.5%)
	Total	963	1,248	29.6%
Unbranded tobacco		1,408	1,100	(21.9%)
Total illicit tobacco		2,371	2,348	(1.0%)
Illicit tobacco consumption as % of total consumption		14.3%	15.0%	n/a
Equivalent excise value (AUDm)		AUD1,662	AUD1,910	14.9%

The illicit tobacco market in Australia

Our study indicates that the consumption of illicit tobacco in Australia has slightly declined. However, as a proportion of total consumption, it has increased to 15.0% from 14.3% between full year 2016 and 2017.

Illicit manufactured cigarette consumption increased in 2017. China (including China duty free) continues to be the largest country of origin of non-domestic flows in 2017, accounting for over 27% of total non-domestic inflows.

Over the last twelve months, whilst the consumption of both unbranded tobacco and counterfeit has decreased, it has increased for contraband tobacco. This increase in consumption of contraband tobacco follows from the increase in non-domestic incidence levels from 7.2% in 2016 to 8.7% in 2017 as well as the increase in the flows of Domestic Illicit Plains, from 0.6% of all manufactured cigarette consumption in 2016 to 1.9% in 2017. This increase resulted in mix of illicit tobacco consumption moving away from unbranded tobacco, in favour of contraband cigarettes. The share of contraband cigarettes in the total illicit tobacco consumption increased from 39% to 51% over the twelve month period.

The 21.9% decline in the consumption of unbranded tobacco between 2016 and 2017 can be partly explained by the large price increase of loose chop-chop during the same period. The drop in consumption of unbranded tobacco occurred during a period of increased crop seizures by the ATO.

If all of this tobacco had been consumed in the legitimate market, we estimate it would have represented an excise amount of AUD 1.91 billion at the average excise rate for $2017^{(1)}$.

The legal tobacco market in Australia

Legal domestic sales in Australia declined substantially in 2017 (a 6.9% decline); driven by a 9.2% reduction in manufactured cigarette consumption. This decline in legal domestic sales contributed to the overall decline in total consumption (6.1%).

The Australian market remains the most expensive market in the region. A packet of Marlboro 20s is 12.3% more expensive than in New Zealand; the second most expensive market. However, a packet in Australia is over 50% more expensive than the third most expensive market (New Caledonia).

Flows from China and Indonesia represent the largest nondomestic inflows in 2017 and a packet of Australian Marlboro 20s is over six times the domestic price of both countries. This wide price difference creates an economic incentive for smugglers and other individuals to import and sell tobacco outside of Australian legislation.

Notes: (a) Contraband includes non-domestic contraband as well as volumes of Illicit Whites (non-domestic) and Domestic Illicit Plains. Sources: (1) Based upon the average excise rate over the past 12 months for both loose and manufactured cigarettes.





Appendices

- A1 Consumption model
- A2 Use of smoking prevalence data and updated results
- A3 Rolling papers analysis
- A4 EPS Analysis
- A5 Recent regulatory changes
- A6 Non-domestic legal calculation
- A7 Illicit Whites flows analysis
- A8 Notes to this report
- A9 Alternative illicit tobacco estimates
- A10 Scope of work
- A11 Roy Morgan Research questionnaire
- A12 Bibliography

KPMG has used a consumption based approach to estimate the unbranded tobacco market in Australia

A1 Consumption model

Introduction

The primary methodology we have used to estimate the unbranded tobacco market in Australia is the consumption model approach. The approach adopted by KPMG is similar to that used in previous reports on the illicit tobacco market in Australia.

The consumption model uses the results of the Roy Morgan Research (RMR) consumer survey to determine the core inputs to the model, combined with publicly available information on the legal tobacco market and smoking population.

For the purpose of this report, the consumption model number for unbranded volumes for 2017 is based on the average of the H1 2017 and H2 2017 consumer survey results. Since consumers are likely to give a more accurate estimate of their purchase behaviour over a shorter time period, using an average of the H1 2017 and H2 2017, consumer survey results will provide a more accurate number for 2017 consumption.

The consumer survey

The consumption model was based on the responses of 2,101 smokers in Australia to a CAWI web based consumer survey in H2 2017 and a further 2,102 in H1 2017. Respondents are sampled from RMR existing consumer panel from both metropolitan and non-metropolitan areas. The sample for the tobacco questionnaire is weighted by location, age and gender using RMR Single Source data in order to be representative of the national population. The Single Source^(a) distribution of income, occupation, and work status of smokers is then used to rim weight^(b) the data. The sampling plan is consistent with the surveys carried out by RMR in 2013, 2014, 2015 and 2016.

The surveys were conducted in June-July and October 2017 and took on average of 6.6 minutes to complete^(c). Consumers were asked about their consumption and purchase of legal and illicit tobacco products; namely Chop Chop (unbranded loose tobacco sold in bags), pre-filled unbranded tobacco, as well as counterfeit and contraband manufactured cigarette products. The consumer survey is provided in Appendix A11. This lists the entire set of questions and is not a representation of how respondents view the online survey. Respondents are asked questions based on their answers in earlier filtering questions and their navigation through the survey is determined by programmed skip patterns.

The consumer survey is used as one tool to form a view on the loose tobacco illicit market

RMR collects and compiles the consumer survey responses and provides a consolidated data sheet for KPMG analysis. The data sheet lists question responses on an individual respondent basis and is accompanied by a question and answer reference mapping.

The consumer survey responses are used to obtain several core inputs for the consumption model process. These core inputs are based on consumer responses and include:

- How many smokers purchase the different types of illicit tobacco,
- How often these illicit purchasers purchase illicit tobacco, and
- How much illicit tobacco these illicit purchasers purchase on each purchase occasion.

These responses generate the core assumptions which are used in the consumption model and are illustrated on table A1 overleaf.

Additional assumptions

In addition to the results generated by the consumer survey, further assumptions and data-points are used:

 Total adult smoking population – we assumed that the total smoking population was 2.38 million. This assumption is based on AIHW data⁽¹⁾ updated for the decline in smoking population numbers since the last official estimate^(d).

Notes:

(a) Single Source is RMR's database collected through their Establishment Survey which focuses on demographic and behavioural factors and closely matches the ABS Census. It is used to establish quotas for other surveys.

- (b) Rim weighting uses mathematical algorithms to provide an even distribution of results across a dataset while balancing certain categories such as age to pre-determined totals. It weights specified characteristics simultaneously and disturbs each variable as little as possible.
- (c) The median survey completion time was 6.6 minutes.
 - (d) KPMC's estimate of the adult smoking population is based on applying a historical CAGR for AIHW prevalence estimates to the latest AIHW prevalence figure (2016) and multiplying this by the adult population per the Australian Bureau of Statistics.

Sources: (1) Australian Institute of Health and Welfare, National Drug Strategy Household Survey, 2016.



The consumption modelling calculation relies on the results of the Roy Morgan Research consumer survey and publicly available data

A1 Consumption model (cont.)

The core inputs from the consumer survey and publicly available information are used in the consumption model, illustrated in table A1. These core inputs are factored together to produce an estimate of the amount of illicit tobacco products consumed by the representative population sampled in the RMR consumer survey covering the steps outlined:

- a. Steps 1 and 2 are used to calculate the average annual volume of illicit consumption per consumer in step 3.
- b. The number of illicit tobacco users is calculated by multiplying the total adult smoking population in step 4 by the percentage of illicit tobacco users noted in the consumer survey in step 5.

As the consumption model uses consumer survey responses, it is not possible to accurately break down illicit consumption into loose unbranded and illicit branded loose tobacco as consumers may be unable to tell the difference in the way the tobacco is sold.

The 2017 consumption model process and relevant data sources are shown in detail overleaf.

Table A1.1 Consumption model data sources and process

Consumption model inputs		
Quantity of illicit tobacco purchased per occasion (g)	1	RMR consumer survey
Frequency of illicit tobacco purchased per annum	2	RMR consumer survey
Quantity of illicit tobacco purchased per annum (g)	3	$(1) \times (2) = (3)$
Total adult smoking population ('000)	4	Extrapolated Australian Institute of Health and Welfare smoking prevalence data and Australian Bureau of Statistics adult population data ^(a)
Illicit tobacco users as % of Australia tobacco users	5	RMR consumer survey
Number of illicit tobacco users, Australia ('000)	6	$(4) \times (5) = (6)$
Quantity of illicit tobacco purchased in Australia (tonnes)	7	(3) X (6) = (7)

Notes: (a) Please see appendix A4 for details of the estimation of the smoking population.

(b) Annualised volume of illicit tobacco is based on average of H1 2016 and H2 2016 quantity of unbranded tobacco.



Total consumption of unbranded tobacco decreased by an estimated 22% from 2016 to 2017, with only a marginal increase from Q2 to Q4 2017

A1 Consumption model (cont.)

Figure A1.2: Consumption model results, Full Year 2017^{(1)(2)(a)}

		Q2 2017	Q4 2017	Blended
1 Quantity of illicit tobacco purchased per occasion (g)		175	203	
2 Frequency of illicit tobacco purchased per annum		13	11	
3 Quantity of illicit tobacco purchased per annum (g)	(1) x (2)	2,350	2,256	
4 Total adult smoking population ('000)	0 0	2,383	2,387	
5 Illicit tobacco users as % of Australian tobacco users		19.5%	20.5%	
6 Number of illicit tobacco users, Australia ('000)	4 x 5	465	490	
Quantity of illicit tobacco purchased in Australia (tonnes)	3 x 6	1,094	1,106	1,100

The consumption model is used to estimate the size of the unbranded tobacco market.

For the purpose of this report, the Full Year 2017 estimate of unbranded consumption volume is based on the average of the H1 2017 and H2 2017 consumer surveys. The net result of this approach is 1,100 tonnes for the Full Year 2017.

We believe that consumers are likely to give a more accurate estimate of their recent purchase behaviour rather than that of the entire last twelve months. Therefore, using an average of the H1 2017 and H2 2017 consumption model results should provide a more robust number for the Full Year 2017.

The total consumption of unbranded tobacco decreased by an estimated 22% in 2017, from approximately 1,408 tonnes in 2016 to 1,100 tonnes in 2017. This decrease is driven largely by a lower average frequency of purchase, as well as many respondents reporting it is more difficult to purchase unbranded tobacco when compared to 2016.

Notes: (a) Numbers in the above table may not sum due to rounding. Sources: (1) Roy Morgan Research, Consumer survey, H1 and H2 2017.

Sources: (1) Roy Morgan Re (2) KPMG analysis



The release of updated AIHW statistics requires us to make a number of small restatements

A1 Consumption model (cont.)

Re-statement of illicit estimate, 2014-2017

As discussed, the consumption model uses an estimate of the number of adult daily smokers in Australia. This number is used to extrapolate the consumption model results to arrive at an illicit estimate for the entire population. This method is used to calculate both the unbranded and non-domestic legal volumes.

There is no robust, pan-Australian, yearly estimate of smoking incidence available. The most widely accepted estimate of adult smoking incidence available is obtained from the AIHW National Drug Strategy Household Survey, published every three years. The results of the 2016 AIHW survey became available in 2017. For the 2016 report KPMG used the long-term trend of smoking prevalence per AIHW (3.4% CAGR decline, 2004-2013) to calculate the smoking population. The 2016 results showed a slower decline. The data-points and methodology used to calculate the smoking population are discussed in Appendix A4.

The impact of this adjustment on illicit tobacco as a percentage of overall consumption is shown below.

Figure A1.3: Illicit tobacco consumption as a proportion of total consumption, 2014 – 2017⁽¹⁾⁽²⁾



KPMG results based on 2013 AIHW data						
	2014	2015	2016	2017		
Smoking prevalence (Daily smokers aged 14 and over)	12.4%	11.9%	11.5%	11.1%		
Unbranded loose	1,375	1,314	1,331	1,039		
Non-domestic legal	25.9	34.1	37.2	27.7		

KPMG results based on 2016 AIHW data						
	2014	2015	2016	2017		
Smoking prevalence (Daily smokers aged 14 and over)	12.6%	12.4%	12.2%	11.8%		
Unbranded loose	1,401	1,364	1,408	1,100		
Non-domestic legal	26.1	34.6	38.0	28.2		

Notes: (a) The smoking prevalence figures used for 2017 are forecasted by KPMG assuming the same downward trend seen between the 2013 and 2016 AIHW surveys.

Sources: (1) KPMG Analysis

(2) Australian Institute of Health and Welfare, National Drug Strategy Household Survey, 2013, 2016.



As with prevalence, KPMG believes it is prudent to use the lowest estimates of smoking population to calculate illicit consumption

A2 Use of smoking prevalence data and updated results

Figure A2.1: Total number of smokers, 2008- 2017^{(1)(2)(a)(b)(c)(d)}



CAGR (%)	2008-12	2010-13	2013-16	2008-17
- Euromonitor	0.6%	(0.4)%	(3.5)%	(1.5)%
→ Australian Institute of Health and Welfare		(3.9)%	(0.1)%	
 Australian Bureau of Statistics 	(2.4)%			
← KPMG Estimate	(2.6)%	(3.9)%	(0.1)%	(1.9)%

The number of adult daily smokers in Australia is used to extrapolate the consumer survey results up to an illicit estimate for the entire population.

For the 2014, 2015 and 2016 reports, KPMG extrapolated the prevalence figures based on the 2013 AIHW survey. However, as the 2016 data for smokers has since become

available from AIHW, KPMG restated the smoker population numbers for 2016. We have used the decline in smokers recorded in the AIHW data between 2013 and 2016 to estimate the number of smokers in 2017.

Notes: (a) The Australian Institute of Health and Welfare considers population aged 14 years or older.

- (b) Figures for the Australian Institute of Health and Welfare they are taken from the National Drug Strategy Household Survey, 2007, 2010, 2013 and 2016. (c) Figures for 2017 are based on full year estimates.
- (d) Historical Euromonitor estimates of smoking prevalence for 2015 and 2016 have been updated and reflected in the above estimates for total number of smokers.
 (d) Australia Institute and Walfare National David Statemy (Superscripts) 2007, 2010, 2012, and 2010.
- Sources: (1) Australian Institute of Health and Welfare, *National Drug Strategy Household Survey*, 2007, 2010, 2013 and 2016. (2) Australia Bureau of Statistics.



Several estimates of Australian smoking prevalence are publicly available, but annual data is not available from Australian government estimates

A2 Use of smoking prevalence data and updated results(cont.)

Figure A2.2: Smokers as a percentage of population, 2008- 2017^{(1)(2)(3)(a)(b)(c)(d)(e)}



Official Australian Government estimates of smoking prevalence are available from both the AIHW and the Australian Bureau of Statistics (ABS). Euromonitor also provide estimates of smoking prevalence.

Australian Institute of Health and Welfare

Australian Bureau of Statistics

Each of the surveys reflects specific age groups. The AIHW and ABS estimates reflect prevalence for 14 year olds and above, whilst Euromonitor figures estimate prevalence among those aged over 18. This age prevalence in part explains the higher Euromonitor estimate.

Timing of estimates also varies. The National Drug Strategy Household Survey is conducted by the AIHW every three years and includes questions on smoking prevalence. AIHW has produced smoking prevalence estimates since 1991. The last three surveys were conducted in 2010, 2013 and 2016. On the release of updated AIHW figures the trend line is recalculated and prior period's unbranded consumption and non-domestic legal estimates restated. The historic estimates for 2014, 2015 and 2016 have been restated in this report based on the 2016 AIHW survey.

(3.5)%

n/a

ABS figures are taken from Australian Health Surveys carried out in 2008 and 2012, whilst Euromonitor compiles its estimates annually.

All smoking prevalence surveys encounter issues with respondents under reporting. The AIHW survey highlights the possibility of under-reporting as some respondents did not answer smoking related questions. Potential under-reporting was identified in the ABS report⁽³⁾, primarily due to social pressures, especially where other household members/parents were present at the interviews for respondents.

Where KPMG require prevalence data for our modelling process, we have used the AIHW results to ensure that our estimate for the number of Australian smokers is not overstated. Overstating the number of smokers would lead to an incorrectly inflated estimate of the size of the illicit trade.

Notes: (a) Euromonitor, percentage of population that are smokers refers to daily smokers > 18 years

- (b) Australian Institute of Health and Welfare and ABS percentage of population that are smokers refers to daily smokers >14 years.
- (c) Euromonitor figures for 2017 are based on full year estimates.
- (d) Historical Euromonitor estimates of smoking prevalence for 2012,2015,2016 have been updated.
- (e) KPMG's estimate of smoking prevalence is based on applying a historical CAGR for AIHW prevalence estimates to the latest AIHW prevalence figure (2016).
- Sources: (1) Euromonitor, smoking prevalence, accessed January 2018.
 - (2) Australian Institute of Health and Welfare, National Drug Strategy Household Survey, 2007, 2010, 2013 and 2016.
 - (3) Australian Bureau of Statistics, Profiles of Health, Australia, 2011-13 Tobacco Smoking, June 2013.



The illicit tobacco volumes generated by the consumption model fall outside the range provided by the rolling papers analysis

A3 Rolling papers analysis

Figure A3.1: Rolling papers calculation for unbranded tobacco



Figure A3.1 highlights our approach to the rolling papers analysis used to calculate the total volume of unbranded tobacco. Each step of the calculation involves the following assumptions and data-points:

- 1. Total volume of rolling papers and tubes The volume used comes from retail sales data provided by Aztec IRI and cannot be published due to contractual obligations with the data provider.
- Wastage rate The wastage rate is the percentage of rolling papers used and excludes any discarded or spoilt papers. This data has been sourced through consumer research undertaken by the industry and is commercially sensitive and cannot be published.
- Legal domestic sales of loose tobacco Volumes equated to 2,314 tonnes in 2017.
- 4. Conversion rate is the number of grams of tobacco used in a rolled cigarette. Consumer surveys and estimations by the industry have produced a range of values. As a sensitivity, we use an upper and lower limit of 0.75 and 0.60 respectively. We believe that a lower limit of 0.60g is reflective of the Australian market – this limit may be lower or higher than other markets.
- 5. Cannabis consumption Rolling papers are also used in the consumption of cannabis. The conversion rate for use of papers and tubes is assumed to be the same as the conversion rate for cigarettes. Total cannabis consumption is estimated on the basis of the Australian Department of Health and Ageing survey at a total volume of 22,712 kg⁽²⁾⁽³⁾. We note from the recent AIHW data that the incidence of use of cannabis has increased slightly (i.e. from 10.2% to 10.4%)⁽³⁾. We have adjusted the consumption based on these figures.

Figure A3.2 Volume of illicit unbranded tobacco generated by the rolling papers analysis, 2012 – 2017⁽¹⁾



The chart above illustrates a sensitised range for the rolling papers analysis. The sensitivity is based around the value for the conversion rate that is the most uncertain variable in the analysis. By flexing this value between a high value of 0.75g per rolled cigarette and a low value of 0.60g per rolled cigarette, we can determine a range of potential market sizes.

We have historically believed that this approach is appropriate to validate the unbranded tobacco market. However, the volume of illicit unbranded tobacco generated by the consumption model output is outside the range of the rolling papers analysis in 2017 for the third year in a row. This suggests we need to revisit our assumptions in this regard or identify alternative approaches in the future, to both ensure the size of the issue is not being underestimated and that it remains a robust means of validation.

Notes: (a) Historical estimates of consumption model output for 2014, 2015 and 2016 have been updated.

- Sources: (1) Size of rolling papers market obtained from the industry.
 - (2) National Drug and Alcohol Centre NSW, Cannabis in Australia, June 2007.
 - (3) AIHW, National Drug Strategy Household Survey, Use of Illicit Drugs in Australia, September 2017.



The Q4 2017 Empty Pack Survey found that 8.6% of manufactured cigarette flows originated outside Australia

A4 EPS Analysis

Thirteen Empty Pack Surveys (EPS) have been carried out in Australia in the last seven years.

AC Nielsen carried out surveys commissioned by PML in Q4 2009 and Q4 2010. The 2009 survey consisted of 9,343 collected packs and the 2010 survey 6,000 packs. These surveys are believed to be broadly comparable to the 2012 and 2013 EPS.

AC Nielsen also carried out the 2012 Q2 survey, which was commissioned by all three industry parties; BATA, PML and ITA. The 2012 survey was conducted in May, June and July and consisted of 12,000 packs collected across 16 population centres.

In 2013, the EPS provider changed from AC Nielsen to MSIntelligence (MSI). MSI was selected after a tender process. MSI was commissioned to replicate the survey using an identical methodology to AC Nielsen. MSI has been commissioned by the industry (BATA, PML and ITA) to undertake surveys every six months. These surveys collect 12,000 packs across the same 16 population centres in Australia.

Figure A4.1 Total non-domestic incidence, Q4 2009 – Q4 2017^{(1)(2)(a)(b)}

The EPS records the pack size of each pack collected. This approach enables us to report using the number of cigarettes rather than the number of packs. As there can be considerable variation in pack sizes, using a measurement based on the number of cigarettes provides a more accurate representation of consumption patterns.

MSI uses the EPS analysis in order to take the proportion of cigarettes that are not Australian (no health warnings or nondomestic health warning, brands not sold in Australia, packs with identifying marks from other markets such as tax stamps) and class these cigarettes as 'non-domestic'. The proportion of non-domestic cigarettes recorded by the EPS is called the non-domestic incidence. The non-domestic incidence of the EPS is shown in the chart, below left.

The total non-domestic incidence in Australia for Q4 2017 was 8.6% (on the basis of number of cigarettes) and 10.3% (on the basis of number of packs). These results are slightly lower than the non-domestic incidence recorded in the Q2 2017 survey. On the basis of number of cigarettes, non-domestic incidence increased by approximately 1.5 percentage points between 2017 and 2016 (8.7% vs 7.2%)

Whilst a proportion of non-domestic cigarettes will be legally brought into Australia by both inbound (foreign nationals travelling to Australia) and outbound travellers (Australians returning from abroad), this legal proportion is relatively small, with the majority of non-domestic cigarettes being illicit. A calculation of the legal volume of non-domestic cigarettes is shown in Appendix A6.



Notes: (a) No survey was conducted in 2011, trend line is for information only.

- (b) Non-domestic incidence based on the number of packs is higher than the non-domestic incidence based on the number of sticks due to the average Australian pack of cigarettes being larger than an international pack, i.e. the most commonly sold pack size in Australia is 25 cigarettes compared to the standard 20 cigarettes packs available internationally.
- Sources: (1) MSIntelligence Research, *Empty Pack Survey*, Q2 2013, Q4 2013, Q2 2014, Q4 2014, Q2 2015, Q4 2015, Q2 2016, Q4 2016, Q2 2017 and Q4 2017.
 - (2) AC Nielsen, Empty Pack Survey, 2009, 2010, 2012.



Appendix EPS Methodology

A4 EPS Analysis (cont.)

Figure A4.2: EPS Methodology

1. Population centre selection

2. Pack collection

Empty Pack Survey methodology

The EPS is conducted in a consistent way in each time period to provide a clear comparison of results and follow trends. It follows a four step process:

1. Population centre selection

To achieve a sample of cigarette packs that is representative of the cigarette smoking population of Australia,16 population centres are chosen based, on parameters such as population, size and geographical location. The population centres chosen represent the 16 largest population centres in Australia and cover 75% of Australia's population. MSI inform us that this provides a margin of error of 0.89% with a confidence interval of 95%.

Each population centre is divided into five sectors (north, south, east, west and centre). Each sector is subdivided into neighborhoods of the same size (250 metre radius).

2. Pack collection

The neighbourhoods sampled include residential, commercial and industrial areas. The EPS collection routes specifically exclude tourist areas, sports stadia, shopping malls and stations, or any other locations where non-domestic incidence is likely to be higher as a result of a skewed population visiting these areas. The EPS is therefore representative of the Australian population. Each neighbourhood is assigned a number of discarded packs for collection based on the size of the overall population centre in comparison with the national population. For example, the centre of Sydney includes eight neighbourhoods representative of the population of Sydney, whilst the centre of Cairns only includes two representative neighbourhoods. In total, 281 neighbourhoods are sampled across Australia.

A minimum of 30 empty packs are collected from each neighbourhood (higher thresholds are applied in larger neighbourhoods) to fulfil statistical requirements and support reliable confidence level. These packs can be collected by any number of collectors, each of whom has no target number of packs to collect and no knowledge of the clients' names or purpose of the survey. Each neighbourhood has a specific starting point and a fixed route. The collectors accumulate as many empty packs as possible within each neighbourhood regardless of the quota requested in the sampling plan. Packs collected may be from any manufacturer regardless of whether they participate in the 3. Pack processing

4. Pack analysis

survey. Indeed, collectors are unaware of the final client. Collectors revisit the neighbourhood as many times as necessary in order to achieve the required quotas.

The training of MSI collectors includes an explanation of the methodology and running of pilots prior to the collection. Each team of collectors is supervised by a team leader.

An additional 5% extra packs ('the buffer') are collected across neighbourhoods in case there are issues with the existing sample, such as spoiled packs. Any such packs are replaced by an identical 'buffer' pack collected from the same neighbourhood. If no identical pack is available, the pack is replaced randomly from the 'buffer' collected in that neighbourhood.

3. Pack processing

The empty packs are placed into bags and stored at a safe collection point. Packs are discarded if they do not meet the survey quality requirements (e.g. torn, unreadable, rotten). Each survey qualified pack is cleaned and placed in a transparent nylon bag with a zipper that carries a unique barcode label indicating the serial number attributed to the pack (corresponding to the datasheet). MSI identifies whether the packs are domestic or non-domestic. The details are then entered into the survey 'Data Sheet' provided by MSI. The packs are delivered to the participating manufacturer(s) in a way that enables easy processing and identification.

Those brand names that are unknown are sent to the participating manufacturers to assess whether they are Illicit White flows.

4. Pack analysis

The participating manufacturers check their packs only to identify counterfeit and inform the agency, which collates and updates the data-sheets. The collected packs are weighted according to the population of each settlement with results then calculated based on the number of cigarettes per pack. Reporting is done on the basis of cigarette sticks (as opposed to packs) to provide a more accurate estimation of total consumption).

These data-sheets are finally provided to KPMG and analysed to calculate the non-domestic incidence and contraband and counterfeit volumes.



Appendix EPS Methodology (cont.)

A4 EPS Analysis (cont.)

Validation of EPS Analysis

A criticism of the EPS is that it samples discarded cigarette packs rather than household waste and therefore significantly overstates non-domestic incidence. Sampling for household waste is impractical in most countries. It is, however, it is available in Germany. The household waste survey, known as a Yellow Bag Survey (YBS), is possible in Germany because household waste is sorted, mainly for the purposes of recycling, which makes it possible to separate cigarette packs from other waste.

The Yellow Bag Survey collects 500 packs a month from 24 waste disposal centres throughout Germany. As a result, over 120,000 weighted packs collected throughout the year, typically a larger sample than an EPS. A comparison was undertaken by KPMG between different methodologies in 2008 and 2009.

In addition to the benefits of the higher sample size, collections from waste disposal centres resulted in packs coming from both household waste and public bins, demonstrating that consumption of illicit tobacco in the home is unlikely to be significantly different than consumption in public place. This comparison helps to address a common criticism of the EPS.

This analysis enables us to compare the results of the Yellow Bag Survey with the EPS to understand differences in the amount of non-domestic product that is captured.

In 2008 and 2009, EPS were also undertaken in Germany. Four quarterly waves were undertaken in 2008 with waves undertaken in Q1 and Q3 in 2009. Each wave collected 10,000 packs. Each survey was conducted across 52 cities population centres in Germany, representing 27% of the total German population.

Figure A4.3: YBS and EPS results, Germany 2008-2009^{(1)(2)(a)}



The non-domestic incidence measured by the EPS was 1.2 percentage points higher in 2008 and 0.4 points higher in 2009. Whilst the EPS results are slightly higher, the overall non-domestic incidence is very close. These differences may be due to the following reasons:

- 1. **Timings of EPS** the EPS takes place at one point in time during the quarter whereas the yellow bag survey takes place monthly.
- Urban/Rural differences the EPS covers a lower sample of the total population which excludes smaller population centres.
- Number of packs given the number of packs collected by the yellow bag survey, it is likely to generate slightly more accurate results.

We recognise this approach is a single point of comparison in one market but it provides us with confidence that the results of EPS are a reliable measure of non-domestic incidence.

Notes: (a) The comparison between methodologies is made on a 'sticks basis' in 2008 and 2009 rather than on a packs basis reported in Project SUN. Sources: (1) MSIntelligence Research, Germany Empty Pack Survey report, Q2 2009.

(2) Ipsos, Yellow Bag Survey, 2008-2009.



The results of the EPS analysis indicate an illicit volume of 0.9 million kilograms of non-domestic manufactured cigarettes

A4 EPS Analysis (cont.)

EPS as the basis of estimates for the volumes of counterfeit and non - domestic contraband consumption in Australia (excluding Domestic Illicit Plains).

We have used the non-domestic incidence obtained from the The 8.7% non-domestic incidence is combined with estimates for legal domestic sales volumes from the industry to create a volume estimate for illicit manufactured cigarettes. This estimate can then be broken down into volume estimates for non-domestic legal, counterfeit, and contraband.

Figure: A4.4: Australian EPS non-domestic consumption and illicit estimate^{(1)(2)(3)(a)(b)(c)}

			2010	2011	2012	2013	2014	2015	2016	2017
Legal sales of manufactured cigarettes (kg'000s)	1		14,598	13,908	13,468	13,321	12,942	12,811	12,033	10,928
EPS non-domestic incidence	(2)		1.7%	-	4.3%	9.8%	8.5%	8.3%	7.2%	8.7%
Total consumption of manufactured cigarettes (kg'000s)	3	= (1)/(100%-(2))	14,857	-	14,068	14,762	14,142	13,972	12,962	11,969
Non-domestic consumption (kg'000s)	4	= (3)-(1)	258	-	600	1,441	1,201	1,161	928	1,041
Non-domestic (legal) volume estimate (kg'000s)	5		33.7	-	35.6	21.3	26.1	34.6	38	28.2
Illicit non-domestic consumption (kg'000s)	6	= (4)-(5)	224.3	-	564	1,419	1,175	1,126	890	1,013
EPS counterfeit incidence	(7)		-	-	0.4%	1.0%	0.1%	0.2%	0.4%	0.4%
Counterfeit consumption (kg'000s)	8	= (4) * ((7)/(2))	-	-	50	143	8	34	50	47
Contraband consumption (kg'000s)	9	= (6)-(8)	-	-	515	1,276	1,166	1, 092	840	965

Figure A2.5 shows the calculation used to estimate the total volume of illicit manufactured cigarettes consumed in Australia. consumption has increased in 2017. As non-domestic legal The percentage of non-domestic cigarettes is added to legal domestic consumption in order to calculate total consumption in step 3. Total illicit consumption is calculated by removing the non-domestic legal volume estimate in step 6.

The EPS also records the counterfeit incidence as a percentage in step 7. This counterfeit incidence is taken as a percentage of total non-domestic consumption and multiplied by the illicit consumption estimate in step 8, with the remainder contraband in step 9. The counterfeit volumes are reported from the manufacturers participating in the EPS (BATA, ITA and PML). No other counterfeit is included in the volumes reported due to a lack of information.

The results of the EPS analysis show non-domestic volumes declined, the combination of these factors translated into higher volumes of illicit consumption of manufactured cigarettes.

Volumes attributable to counterfeit manufactured remained small, whilst contraband flows accounted for over 95% of the total illicit consumption of manufactured cigarettes, as indicated by the EPS analysis.

- Notes (a) Counterfeit incidence is not available for 2009, 2010 and 2011.
 - (b) Numbers in the above table may not sum due to rounding.
 - Contraband consumption excludes Domestic Illicit Plains. However, the volume includes Illicit Whites (non-domestic). MSIntelligence Research, Empty Pack Survey, Q2 2013, Q4 2013, Q2 2014, Q4 2014, Q2 2015, Q4 2015, Q2 2016, Q4 2016, Q2 2017 and Q4 2017. (c)
- Sources: (1) AC Nielsen, Empty Pack Survey, 2009, 2010, 2012. (2)
 - KPMG analysis



The Commonwealth government implemented the Tobacco Plain Packaging Act and other tobacco control measures in 2012

A5 Recent regulatory changes

Table A5.1: Recent regulatory changes 2012/13/14/15/16/17

Jurisdiction	Legislation title	Regulation type	Effective date	Brief description
Australia	Tobacco Plain Packaging Act 2011 (Cth) Trade Marks Amendment (Tobacco Plain Packaging) Act 2011 (Cth) Tobacco Plain Packaging Regulations 2011 (Cth)	Plain packaging of tobacco	Depending on the section, 1 December 2011, 1 October 2012 and 1 December 2012 Royal Assent on 1 December 2011 (Some sections commenced on 1 October 2012)	Required plain packaging for all tobacco products sold by retail.
	Competition and Consumer (Tobacco) Information Standard 2011 (Cth)	Health warnings	1 January 2012	Updated and expanded health warning requirements for tobacco products. Required health warnings to cover at least 75% of the front of most tobacco packaging, 90 % of the back of cigarette packaging, and 75 % of the back of most other tobacco product packaging.
	Tobacco Advertising Prohibition Amendment Act 2012 (Cth)	Internet advertising	6 September 2012	Required that online tobacco retailers display health warnings and comply with restrictions on advertisement wording.
	Customs Amendment (Smuggled Tobacco) Act 2012 (Cth)	Illicit tobacco	7 November 2012	Amended the <i>Customs Act 1901</i> (Cth) and imposed tougher penalties (including imprisonment) for smuggling tobacco or possessing illicit tobacco.
	Customs by-law no. 1700053 (Cth), Customs Act 1901 (Cth), Customs Tariff Act 1995 (Cth)	Duty free tobacco restrictions	1 July 2017	Duty-free allowance limited to 25 or less cigarettes or 25 grams of tobacco products (excluding cigarettes) per person.



The Commonwealth government implemented the Plain Packaging Act and other tobacco control measures in 2012 (cont.)

A5 Recent regulatory changes (cont.)

Table A5.1: Recent regulatory changes 2012/13/14/15/16/17

Jurisdiction	Legislation title	Regulation type	Effective date	Brief description
Australia (cont.)	Excise Tariff Amendment (Tobacco) Act 2014 (Cth) and Customs Tariff Amendment (Tobacco) Act 2014 (Cth) Customs Tariff Amendment (Tobacco) Act 2016 (Cth) and Excise Tariff Amendment (Tobacco) Act 2016 (Cth) Customs Tariff Amendment (Tobacco Duty Harmonisation) Act 2017 (Cth) and Excise Tariff Amendment (Tobacco Duty Harmonisation) Act 2017 (Cth)	Customs and excise	2013, 2014, 2015, 2016, 2017, 2018, 2019 and 2020 for customs and excise duty increases 1 March 2014 AWOTE change effective 31 August 2017 for harmonisation of tobacco duty amendments.	Increased customs and excise duty for tobacco products by an additional 12.5% annually between 2013 and 2020 inclusive in addition to the switch to AWOTE. The first of these increases was implemented on 1 December 2013. The increases then occur on 1 September for each following year, with the final currently legislated increase to occur on 1 September 2020. The 2017 tobacco duty harmonisation amendments increase the currently lower duty rates for loose tobacco over four years so that by 1 September 2020 loose tobacco will have the same duty rate per kilogram as cigarettes containing the average tobacco content rate per stick.



States introduced additional regulations to further restrict smoking

A5 Recent regulatory changes (cont.)

Jurisdiction	Legislation title	Regulation type	Effective date	Brief description
New South Wales	Public Health (Tobacco) Act 2008 (NSW)	Retailer regulation	1 July 2013	Exemption for specialist tobacconists under the ban on the display of tobacco products at point- of-sale ends.
	Tobacco Legislation Amendment Act 2012 (NSW)	Smokefree environment	7 January 2013	Ban on smoking in enclosed public places extended to within 10 metres of children's play equipment, swimming pool complexes, certain public transport stops, spectator areas at sports grounds and venues, commercial outdoor dining areas (with effect from 6 July 2015) and within 4 metres of pedestrian access to a building (with effect from 6 July 2015 for licensed premises and restaurants).
	Smoke-free Environment Amendment (Signage Requirements) Regulation 2015 (NSW)	Smoke-free environment	27 February 2015	Required the display of signs in areas designated as not being for the consumption of food.
	Crimes (Administration of Sentences) Amendment (Smoke- free Prisons) Regulation 2015	Smoke-free environment	10 August 2015	Banned smoking and use of e-cigarettes by inmates in all correctional centres in New South Wales.
	(NSW) Crimes (Administration of Sentences) Further Amendment (Smoke- free Prisons) Regulation 2015 (NSW)			
	Public Health (Tobacco) Amendment (E-cigarettes) Act 2015 (NSW)	Retailer Regulation	1 September 2015	Amendments to regulate the sale, packaging, advertising and display of e-cigarettes and to prohibit the sale of e-cigarettes and e-cigarette accessories to persons who are under 18 years of age. The Act inserts new definitions so that the <i>Public Health (Tobacco) Act 2008</i> (NSW) applies to e-cigarettes and their accessories as it already applies to tobacco products and smoking accessories.



States introduced additional regulations to further restrict smoking (cont.)

A5 Recent regulatory changes (cont.)

Table A5.1: Recent regulatory changes 2012/13/14/15/16/17 - State specific

Jurisdiction	Legislation title	Regulation type	Effective date	Brief description
New South Wales (cont.)	Health Legislation Amendment Act 2015 (NSW)	Retailer (and wholesaler) regulation	1 February 2016	Addressed difficulties associated with prosecuting retailers found with illegal tobacco- by creating rebuttable presumptions regarding the quantity of tobacco for sale and enabling seizure of excess quantities of tobacco not in the correct packaging. The amendments also made it a criminal offence to sell tobacco to retailers operating without a tobacco retailer notification scheme (TRN).
	Public Health (Tobacco) Amendment (Prescribed Quantities) Regulation 2016 (NSW)	Retailer regulation	1 February 2016	Prescribed the quantities of tobacco product that are presumed to be for the purposes of sale.
	Smoke-free Environment Regulation 2016 (NSW)	Smoke-free environment	1 September 2016	Made footpaths, streets and public thoroughfares smoke-free areas if within 4 metres of applicable courtyards or gardens. Prescribed signs required for display in smoke- free areas and their manner of display. Provided that smoking in a smoke-free area is a penalty notice offence carrying a \$300 penalty.
	Public Health (Tobacco) Regulation 2016 (NSW)	Retailer regulation	1 September 2016	Introduced regulations for e-cigarettes by banning e-cigarette-advertising, imposing on e- cigarettes and their accessories the same price display restrictions that apply to tobacco products and mandating a sale to minors sign on e-cigarette vending machines.
				Made changes to the prescribed health warning signs. Introduced penalty notice offences for tobacco product and smoking accessory displays, sales from more than one point of sale, breaches of product display requirements for tobacco and e- cigarette vending machines, failures to conspicuously display compliant health warnings and sales to minor notices at points of sale.
				Increased certain penalty notice offence amounts to \$360 for individuals and \$1,800 for corporations.
	Public Health (Tobacco) Amendment (E-Cigarettes) Regulation 2017	Retailer regulation	1 May 2017	Required retailers to display a notice regarding sales of e-cigarettes or their accessories to minors at the point of sale.
	(NSW)			Also restricted price displays to using one font only.



States introduced additional regulations to further restrict smoking (cont.)

A5 Recent regulatory changes (cont.)

Table A5.1: Recent regulatory changes 2012/13/14/15/16/17 - State specific

Jurisdiction	Legislation title	Regulation type	Effective date	Brief description
Victoria	Tobacco Amendment (Smoking at Patrolled Beaches) Act 2012 (Vic)	Smoke-free environment	1 December 2012	Banned smoking at all of Victoria's patrolled beaches in the area between the red-and- yellow lifesaving flags and within a 50 metre radius of a red and yellow flag.
	Tobacco Amendment Act 2013 (Vic)	Smoke-free environment and retailer regulation	1 April 2014	Introduced smoke-free children's playgrounds and related recreational areas. Banned smoking outdoors within 10 meters of playgrounds and skate parks, sporting venues during under 18s events and within public swimming pool grounds.
				Applications for specialist tobacconist certification not permitted on and from 1 April 2014.
	Tobacco Amendment Act 2014 (Vic)	Smoke-free environment, retailer regulation and illicit tobacco	13 April 2015	Smoking banned in outdoor areas and in vicinity of education, school, care service, and Victorian public premises (e.g. hospitals, Courts and Government departments) as well as children's indoor play centres and from within four metres of pedestrian access points to such areas.
				Required display of no smoking signs at pedestrian access points at schools, children's indoor play centres and public premises.
				Fines of as much as AUD35,000 for individuals and AUD177,000 for businesses caught selling smuggled or prohibited tobacco products and tobacco products where no excise has been paid.



States introduced additional regulations to further restrict smoking (cont.)

A5 Recent regulatory changes (cont.)

Jurisdiction	Legislation title	Regulation type	Effective date	Brief description
Victoria (cont.)	Corrections Amendment (Smoke- Free Prisons and Other Matters) Regulations 2014 (Vic)	Smoke-free Environment	1 July 2015	Banned prisoners from smoking or using a tobacco product.
	Tobacco Amendment Act 2016 (Vic) Tobacco Regulations 2017 (Vic)	Smoke-free environment and e-cigarette regulation	1 August 2017	Banned smoking at outdoor dining areas, food fairs and within 10 metres of outdoor areas at which food is provided on a commercial basis at community and street festivals. Banned smoking in outdoor drinking areas if
				any part of the outdoor drinking area is within 4 metres of an outdoor dining area and the outdoor drinking area and the outdoor dining area are not separated by a wall that is at least 2.1 metres high.
				Extended to e-cigarette products laws similar to those applying to tobacco products including an advertising prohibition; a prohibition on displays at general retailers; restrictions on displays for wholesalers, specialist tobacconists, specialist e-cigarette retailing premises and on airport duty free shops; prescribed price display rules; a prescribed e-cigarette availability notice; a ban on competitions, rewards and shopper loyalty schemes connected with the sale or promotion of e-cigarette products a ban on free samples of e-cigarette products and products advertising e-cigarette products; a prohibition on sponsorships promoting e-cigarette products; a ban on the supply of e-cigarette products to persons under the age of 18 years; a full ban on the sale of e-cigarette products from vending machines; a prohibition on mobile
				sales of e-cigarette products; a ban on e- cigarette product supplies at underage music/dance events; and a requirement that specialist e-cigarette retailers obtain and display certification.



States introduced additional regulations to further restrict smoking (cont.)

A5 Recent regulatory changes (cont.)

Jurisdiction	Legislation title	Regulation type	Effective date	Brief description
South Australia	Tobacco Products Variation Regulations 2011 (SA)	Retailer regulation	1 January 2012	Regulated all tobacco product advertisements at points of sale, prohibited price displays and actual displays of fruit or confectionary flavoured cigarettes in retailers and vending machines.
	Tobacco Products Regulation (Further Restrictions) Amendment Act 2012 (SA)	Smoke-free environment	31 May 2012	Amendments to <i>Tobacco Products Regulation</i> <i>Act 1997</i> (SA) banned smoking in certain public transport areas and near certain playground equipment, and empowered the Minister to enforce short term and long term smoking bans in public areas.
	Tobacco Products (Smoking Bans in Public Areas – Longer Term) Regulations 2012 (SA)	Smoke-free environment	30 August 2012 for the initial Royal Adelaide Show ban	Banned smoking at Adelaide show grounds when the Royal Adelaide Show is being held.
	Tobacco Products (Smoking Bans in Public Areas – Longer Term) Variation Regulations 2014 (No. 202 of 2014) (SA)			
	Tobacco Products Variation Regulations 2012 (SA)	Retailer regulation	22 March 2013	Capsule cigarettes may not be displayed for retail sale (including in vending machines) and their prices must not appear on prescribed price boards, price tickets or vending machines.
	Tobacco Products (Smoking Bans in Public Areas – Longer Term) Variation Regulations 2013 (SA)	Smoke-free Environment	5 September 2013 for the initial Mosley Square ban	Ban on smoking in Moseley Square Glenelg.
	Tobacco Products (Smoking Bans in Public Areas – Longer Term) Variation Regulations 2014 (no. 238 of 2014) (SA)			
	Tobacco Products (Smoking Bans in Public Areas – Longer Term) Variation Regulations 2015 (SA)	Smoke-free environment	1 July 2016	Smoking banned in public outdoor dining areas when food is being provided.



States introduced additional regulations to further restrict smoking (cont.)

A5 Recent regulatory changes (cont.)

Table A5.1: Recent regulatory changes 2012/13/14/15/16/17 - State specific

Jurisdiction	Legislation title	Regulation type	Effective date	Brief description
South Australia (cont.)	Tobacco Products (Smoking Bans in Public Areas – Longer Term) Variation Regulations 2016 (SA)	Smoke-free environment	12 September 2016	Banned all smoking in all public areas in Henley Square.
	Tobacco Products (Fees) Variation Regulations 2017 (SA)	Tobacco licensing	1 July 2017	Increase in tobacco licence fee.
	Tobacco Products Regulation (E- Cigarette Regulation) Amendment Bill 2017	E-cigarette regulation	ТВА	Will require retailers to obtain a licence in order to sell e-cigarette products and will prohibit the sale of e-cigarette products to children; e- cigarette product sales by mail, telephone fax or internet; e-cigarette product sales from temporary outlets, carrying trays and vending machines; using e-cigarettes in smoke-free areas; and e-cigarette product advertising.



States introduced additional regulations to further restrict smoking (cont.)

A5 Recent regulatory changes (cont.)

Jurisdiction	Legislation title	Regulation type	Effective date	Brief description
Tasmania	Public Health Amendment Act 2011 (Tas) Public Health Act 1997 (Tas)	Smokefree environment	1 March 2012	Extension of smoke free areas to include public swimming pools, between flags at beaches, pedestrian malls, within 3 metres of bus shelters, within 10 meters of children's playgrounds, outdoor dining areas and within three metres of outdoor dining areas not surrounded by a screen.
	Public Health Amendment Act 2011 (Tas) Public Health Act 1997	Retailer regulation	1 March 2012	Specialist tobacconists included in retail display ban, removing earlier exemption.
	(Tas)	Retailer regulation	1 March 2012	Tobacco products must not be offered as an inducement or reward in a business loyalty program.
		Tobacco licensing	1 March 2012	Licences must be obtained prior to selling tobacco products from additional venues. Licenses are not transferable to new business owners. Display of licenses is subject to the licence conditions.
		Retailer regulation	1 March 2012	Tobacco vending machines now restricted to one machine per site within licensed premises and not permitted at all in unlicensed premises.
	Public Health (Smoke- free Areas) Regulations 2014 (Tas)	Smoke-free environment	12 February 2014	Certain public streets designated 'pedestrian malls' which renders them 'smoke-free' areas under the <i>Public Health Act 1997</i> (Tas).
	<i>Corrections Act 1997</i> (Tas) (effective through prison service standing orders)	Smoke-free environment	30 January 2015	Ban on smoking in Tasmanian jails.



States introduced additional regulations to further restrict smoking (cont.)

A5 Recent regulatory changes (cont.)

Jurisdiction	Legislation title	Regulation type	Effective date	Brief description
Tasmania (cont.)	Public Health (Miscellaneous Amendments) Act 2015 (Tas)	Smoke-free Environment	1 July 2015	Any area within private premises can be designated as smoke-free by the occupier Public streets may be designated as 'smoke-free'.
		Smoke-free Environment	1 July 2015	Regulators can conditionally approve designated smoking areas at public events that have been previously declared as smoke-free.
		Retailer Regulation	1 July 2015	Permits tobacco advertising on packaging if it is in accordance with relevant prescribed guidelines.
		Retailer Regulation	1 July 2015	A tobacco seller's licence cannot be issued in connection with a public event.
	Public Health (Tobacco Seller's Licence) Amendment Regulations 2016 (Tas)	Tobacco licensing	1 January 2017	Increased the licence fee to AUD \$740.90 per annum for licence applications between 1 July 2017 and 31 December 2017 and to \$1,111.35 from 1 January 2018.
	Public Health Amendment (Healthy Tasmania) Act 2017 (Tas) Guidelines for the Sale	Retailer regulation and smoke-free environment	29 November 2017	Imposed on e-cigarettes and their accessories substantially the same sale, supply, promotion, physical display and price display restrictions that apply to tobacco products. Banned the sale of e-cigarettes and their accessories in specialist tobacconist stores. Also prohibited
	of Smoking Products 2017 (Tas)			the use of e-cigarettes in smoke-free areas.
	Public Health (Tobacco Seller's Licence) Amendment Regulations 2017 (Tas)	Tobacco licensing	29 November 2017	Sets the licence fees for selling e-cigarettes and their accessories.



States introduced additional regulations to further restrict smoking (cont.)

A5 Recent regulatory changes (cont.)

Jurisdiction	Legislation title	Regulation type	Effective date	Brief description
Queensland	Health Legislation Amendment Act 2011 (Qld)	Retailer regulation	25 November 2012	Banned the sale of fruit and confectionery flavoured cigarettes and f rom 25 November 2013, the sale of 'novelty items' (such as toys) that resemble smoking products.
	Corrective Services Amendment Regulation (No.1) 2014 (Qld)	Smoke-free environment	5 May 2014	Banned possessing or consuming smoking products in corrective services facilities.
	Health Legislation Amendment Regulation (No.3) 2014 (Qld)	Retailer regulation	5 September 2014	Wording of mandatory signs attached to vending machines and displayed at points of sale changed from 'Maximum Penalty \$42,000' to 'Penalties apply'.
	Health and Other Legislation Amendment Act 2014 (Qld)	E-cigarette regulation, retailer regulation and smoke-free environment	1 January 2015	Extended the definition of 'smoking product' to personal vaporisers and personal vaporiser related products resulting in personal vaporisers having the same restrictions on their sale, supply, promotion, use and enforcement as cigarettes and other tobacco products.
				Prohibited the use of vending machines to supply personal vaporisers and related products. Banned smoking at health facilities and school land.
	Tobacco and Other Smoking Products (Smoke-free Places) Amendment Act 2016 (Qld)	Smoke-free environment and retail regulation	1 September 2016	 Banned the sale of tobacco products at temporary retail outlets (such as pop up stores and from motor vehicles). Smoking bans extended to major sports facilities, major event facilities, health facilities, school facilities, public swimming facilities, early childhood education and care facilities, residential aged care facilities, government precincts, outdoor pedestrian malls, public transport waiting points, skate parks and sporting grounds and spectator areas during organised under-age sporting events. Enabled the Regulator to ban smoking at prescribed national parks. Empowered local governments to make laws banning smoking at any outdoor public places not covered by QLD's smoking laws.


States introduced additional regulations to further restrict smoking (cont.)

A5 Recent regulatory changes (cont.)

Table A5.1: Recent regulatory changes 2012/13/14/15/16/17 - State specific

Jurisdiction	Legislation title	Regulation type	Effective date	Brief description
Queensland (cont.)	Tobacco and Other Smoking Products Amendment Regulation (No. 1) 2016 (Qld)	Smoke-free environment	Most provisions on 1 September 2016	From 1 September 2016, smoking banned at the QLD government precinct 1 William Street. Since 1 February 2017, banned smoking in most National Parks at camp sites and public facilities (such as barbeques, boat ramps, picnic tables, roofed shelters, toilets and visitor information centers).
	Tobacco and Other Smoking Products (Government Precincts) Amendment Regulation 2017 (Qld)	Smoke-free environment	28 April 2017	Prescribed further land that is a 'government precinct' where smoking is banned.
Northern Territory	Tobacco Control Amendment Regulations 2014 (NT)	Smoke-free environment	11 June 2014	Patrons allowed to consume meals in designated smoking areas. However, staff service from staff in or to patrons in the outdoor smoking areas is prohibited.
	Correctional Services Act 2014 (NT) and Correctional Services Regulations 2014 (NT)	Smoke-free environment	9 September 2014	Banned prisoners (including immigration detainees) from consuming tobacco in custody, correctional facilities and immigration detention centres.
	Tobacco Control Legislation Amendment Act 2014 (NT)	Smoke-free environment Wholesaler and retailer regulation	1 December 2014	Banned smoking in motor vehicles where children under 16 are present. Required tobacco wholesalers to comply with requests by the Chief Health Officer for information about the quantity of tobacco products sold to retailers.
	Red Tape Reduction (Miscellaneous Amendments) Act 2016 (NT)	Tobacco licensing	1 July 2016	Required applications for the grant of a tobacco retail licence to specify a licence period of 1 year, 3 years or 5 years. The licence ends at the 'end of the licence
				period' (instead of the expiry of 12 months). The licence period determines the licence fee payable.



States introduced additional regulations to further restrict smoking (cont.)

A5 Recent regulatory changes (cont.)

Table A5.1: Recent regulatory changes 2012/13/14/15/16/17 - State specific

Jurisdiction	Legislation title	Regulation type	Effective date	Brief description
Western Australia	Tobacco Products Control Amendment Regulations (No. 4) 2015 (WA)	Illicit tobacco	26 August 2015	Persons may record, disclose, or make use of any information obtained in the administration of the <i>Tobacco Products Control Act 2006</i> (WA) to assist investigations under Commonwealth law or enforcement of a Customs Act, Excise Act or taxation law, relating to a tobacco product.
	Tobacco Products Control Act 2006 (WA) s 106 Van Heerden v Hawkins [2016] WASCA 42 (10 March 2016)	E-cigarette regulation	10 March 2016	The Supreme Court of Western Australia Court of Appeal held that the sale of e-cigarettes is illegal in Western Australia because they are designed to resemble a tobacco product.
	Health Regulations Amendment (Fees and Charges) Regulations 2017 (WA)	Tobacco licensing	1 July 2017	Increased tobacco licence fees.
	Tobacco Products Control Amendment Bill 2017 (WA)	Retailer regulation	IBA	Prohibits persons under 18 years from being supplied tobacco, will ban fruit and confectionery flavoured cigarettes and packaging that enables cigarettes to be split into portions smaller than 20 sticks. The Bill will provide for a blanket ban on displays of all tobacco products, packages and
				smoking implements, with specialist tobacconist displays being phased out over 2 years. The Bill will also tighten the class of person who
				is a 'specialist tobacconist' and ban loyalty programs that include tobacco products. The Bill also prohibits retail sales by persons
Australian Capital Territory	Smoke-Free Public Places Amendment Act 2016 (ACT)	Smoke-free Environment	18 March 2016	under 18 years. Enabled the Government to declare smoke- free public places or events.
	Smoke-Free Legislation Amendment Act 2016 (ACT)	Smoke-free environment and e-cigarette regulation	1 August 2016	Banned the vaping of e-cigarettes in smoke- free public places and cars with children travelling in them. Imposed on e-cigarettes the same sale, supply, promotion, display and price display restrictions that apply to tobacco products.
	Smoke-Free Public Places (Play Spaces) Declaration 2016 (No1) (ACT)	Smoke-free environment	7 September 2016	Children play spaces managed by ACT Government were declared smoke-free public places.



Outbound trips to non-domestic source countries have increased

A6 Non-domestic legal calculation

Figure A6.1 Overseas travel of Australian residents, 2008 – 2017^{(1)(a)(b)}



CAGR (%)	2008-2011	2011-2014	2014-2017	2016-2017
Key 2017 ND source countries	12.0%	6.1%	6.5%	7.2%
Total overseas trips	10.1%	5.5%	5.1%	7.0%

Travel trend data is used by KPMG to estimate non-domestic legal volumes, i.e. tobacco products that are brought into the country legally by consumers, such as during an overseas trip.

The 2017 EPS results showed larger inflows from Vietnam. We have therefore included these flows in the non-domestic legal calculation whilst removing Thailand as the inflows had declined in 2017.

Trips made to key non-domestic source countries of manufactured cigarettes continued to increase at a faster rate than overall visits; 7.2% to 7.0% between 2016 and 2017.

Later in the report, this data is used to estimate legal nondomestic sales which, it will be shown, is immaterial in size. For that calculation, travel volumes for New Zealand have been capped as a share of total travel to and from the main source countries. This approach is driven by the fact that the total recorded travel to and from New Zealand is significantly greater than that which would account for New Zealand's relatively small share of non-domestic cigarette inflows. This capping is based on New Zealand's share of non-domestic packs per the 2017 EPS results.





Visits to key non-domestic source countries reached a total of 4.6 million in 2017, accounting for approximately 44% of all trips made overseas by Australian residents.

However, low inbound traveller allowances will likely have tempered growth of legal non-domestic consumption and the same is examined in more detail overleaf.

Notes: (a) Key non-domestic source countries have been selected from the EPS carried out in 2017, the countries shown in the graph above accounted for over 75% of the non-domestic cigarette packs found in Australia (excluding packs that come from unspecified countries).

(b) ND(L) volumes are estimated using actual travel data from January 2017 to December 2017.

(c) Some of the labels with value less than 4% have been removed for clarity.

Sources: (1) Australian Bureau of Statistics, Short-term movement, Resident Departures - Selected Destinations: Trend, 2014, 2015, 2016, 2017.



Non-domestic legal volumes due to outbound trips to key source countries remain low as a proportion of total consumption

A6 Non-domestic legal calculation (cont.)

Figure A6.3 Example r	non-domest	ic legal c	alculatio	on (outb	ound)					
Overseas visits	ND u	plift	% popula smoke		Propensi purcha		Amou per tri		otal (tor	nnes)
Full year 2017 3.26m	x 109	% x	11.89	⁄₀ x	57%	x	25/50g	(^{a)} =	9.1	
KPMG non-domestic lega	l calculation ^{(†}	I)(2)(3)(b)(c)(d)(e)(f)(g)(h)							
	Source	2009	2010	2011	2012	2013	2014	2015	2016	2017
Overseas trips to non- domestic source countries in the year (m)	Australian Bureau of statistics	2.61	2.99	3.22	3.34	3.57	3.84	4.03	4.33	4.64
Overseas trips (with New Zealand capping) for ND(L) calculation (m) ^(a)	Australian Bureau of statistics	1.53	1.53	2.20	2.35	2.44	2.55	3.42	3.55	3.26
Non-domestic source uplift	EPS	10%	10%	10%	10%	10%	10%	10%	10%	10%
% of population that are smokers	AIHW (and extra- polated)	15.5%	15.1%	14.4%	13.6%	12.8%	12.6%	12.4%	12.2%	11.8%
% of smokers that buy tobacco	RMR consumer survey	53%	53%	53%	53%	59%	59%	60%	58%	57%
Number of smokers purchasing overseas (m)		0.14	0.13	0.18	0.19	0.20	0.21	0.28	0.28	0.24
Amount purchased	Inbound traveller allowance	250	250	250	183	50	50	50	50	25/50 ^(a)
Total (kg)		34,565	33,673	46,046	34,054	10,124	10,497	13,953	13,831	9,079
Non-domestic legal as % of total consumption		0.2%	0.2%	0.3%	0.2%	0.1%	0.1%	0.2%	0.2%	0.2%

Estimates of non-domestic legal flows show that total volumes account for a small proportion of total consumption.

resulted in a further decline in the estimate of non-domestic legal volume.

The change to inbound traveller allowances made in September 2012 has a considerable impact on the amount of tobacco consumers can bring back into the country legally, reducing the estimate of legal non-domestic volumes further from 2013. A further change in allowance was enforced in 2017 bringing the legal limit down to 25 grams. This has

The 2017 consumer survey suggested that 57% of smokers bought cigarettes overseas. While this proportion has decreased from last year, it has risen slightly in recent years, possibly a result of increasing price differentials between Australia and the rest of the region.

Notes: (a) The allowance limit was changed to 25g applicable from 1st July 2017. For calculations, we have taken allowance to be 50g until June 2017.

- (b) The figures for overseas trips have been updated due to the change in key ND countries
- (c) Travel volumes for New Zealand have been capped as a share of total travel to and from the main source countries. This capping is based on New Zealand's share of non-domestic packs per the blended Q2 2017 and Q4 2017 EPS.
- (d) Figures for outbound trips have been restated for 2014, 2015 and 2016 as the smoking prevalence numbers have been updated based on the latest AIHW survey.
- (e) Respondents were asked 'Q51. Have you travelled outside of Australia in the last 6 months?'
- (f) Respondents were then asked 'Q52. Did you buy any manufactured cigarettes or any other tobacco products to bring back to Australia on any of your trips to other countries in the past 6 months?'
- (g) The inbound traveller allowance for 2012 has been calculated using the 250g limit for 8 months and the 50g limit for 4 months to reflect the change in inbound traveller allowances made in September 2012.
- (h) ND(L) volumes are estimated using actual travel data from January 2017 to December 2017.
- Sources: (1) Roy Morgan Research, Consumer survey, H1 2013, H2 2013, H1 2014, H2 2014, H1 2015, H2 2015, H1 2016, H2 2016, H1 2017, H2 2017.

(2) Australian Institute of Health and Welfare, National Drug Strategy Household Survey, 2010, 2013, 2016.

(3) Australian Bureau of Statistics, Short-term movement, Resident Departures - Selected Destinations: Trend, 2013, 2014, 2015, 2016.

(4) Australian Bureau of Statistics, Short-term movement, Residents Returning - Selected Destinations: Trend, 2017.



Visitors from countries indicated by the EPS also serve as contributors to non-domestic packs found in Australia

A6 Non-domestic legal calculation (cont.)

Overseas visitors arrivals from key non-domestic countries include both short term arrivals and permanent settlers.

As discussed on page 74, the key source countries have been updated based on the key inflows from each market in the 2017 EPS.

Visitors (short-term arrivals and settlers) from the key nondomestic source countries identified by the EPS have increased since 2008.

Due to changes in ABS data, a five-year average uplift has been used to calculate permanent movement settlers' numbers for July-December 2017 to ensure prudency and consistency. For the calculation, travel volumes for New Zealand have been capped as a share of total travel to and from the main source countries. This approach is driven by the fact that the recorded travel to and from New Zealand is significantly greater than that which would account for New Zealand's relatively small share of non-domestic cigarette inflows. This capping is based on New Zealand's share of non-domestic packs as per the blended Q2 2017 and Q4 2017 EPS results.

In the absence of data, KPMG has made a prudent assumption that all visitors who are calculated to be smokers bring maximum cigarettes as per the duty free limit.



CAGR (%)	2008- 2011	2011- 2014	2014- 2017	2016- 2017
Key 2017 ND source countries	3.2%	6.3%	10.2%	8.1%
Total arrivals	1.7%	5.8%	8.8%	7.2%

Figure A6.5 Overseas visitors arrivals from key 2017 non-domestic source countries, 2008 – 2017^{(1)(2)(a)(b)(c)(d)}



Notes: (a) Key non-domestic source countries have been selected from the EPS carried out in Q2 2017 and Q4 2017, the countries shown in the graph above accounted for over 75% of the non-domestic cigarette packs found in Australia excluding packs that come from unspecified countries.

(b) ND(L) volumes are estimated using actual travel data from January 2017 to December 2017.

(c) A five-year average uplift has been used to calculate permanent movement settlers' numbers for July-December 2017.

(d) Some of the labels with value less than 4% have been removed for clarity.

Sources: (1) Australian Bureau of Statistics, Short-term Movement, Visitor Arrivals - Selected Countries of Residence: Trend, 2013, 2014, 2015, 2016, 2017.
 (2) Australian Bureau of Statistics, Permanent Movement, Settlers - Country of Birth, Major Groups and Selected Source Countries: Original, 2013, 2014, 2015, 2016, 2017.



Non-domestic legal estimates calculated on the basis of inbound visitor arrivals indicate that non-domestic legal remains a small proportion of total consumption

A6 Non-domestic legal calculation (cont.)



Example of KPMG non-domestic legal calculation based on overseas visitor arrivals to Australia^{(1)(2)(3)(4)(b)(c)(d)(e)(f)} Number of **Inbound visitor** % population % population visitors bringing Amount 2017 above 18^(e) purchased (kg) arrivals (m)^(d) smokers tobacco (m) Source Australian Bureau Euromonitor Euromonitor of Statistics China 1.41 68% 28% 0.268 9,904 Korea 0.30 69% 21% 0.045 1,660 1,672 Indonesia 0.20 62% 36% 0.045 Taiwan 0.18 70% 17% 0.021 793 Vietnam 0.10 66% 22% 0.014 518 Japan 0.44 57% 19% 0.047 1,760 India 0.33 61% 7% 0.013 480 2,076 Malaysia 0.41 64% 21% 0.056 New Zealand^(g) 1.36 (0.05^(f)) 200 61% 17% 0.005 Total 4.72 (3.41^(f)) 19,077

Total amount brought into Australia by inbound tourists

Estimation of non-domestic legal volumes shows that total volumes account for a small proportion of total consumption.

This proportion remains insignificant even if arrivals data is included in the non-domestic legal calculation. This analysis has been shown in detail on the next page.

Notes: (a) The legal allowance limit was changed to 25 grams applicable from 1st July 2017. For the purpose of calculations, we have taken allowance to be 50 grams until June.

(b) KPMG has used a prudent approach and assumed that 100% of visitors arriving in Australia purchase the maximum inbound traveller allowance.

(c) A five-year average uplift has been used to calculate permanent movement settlers' numbers for July-December 2017.

- (d) Inbound visitor arrivals to include arrivals of short term overseas visitors and permanent settlers
- (e) Population within the age group 18-64 years.

(f) The total of amount purchased by travelers from individual source countries may slightly differ from the total amount brought into Australia by inbound tourists due to minor differences in the five-year average uplift used to calculate permanent movement settlers' numbers.

(g) Travel volumes for New Zealand have been capped as a share of total travel to and from the main source countries. This capping is based on New Zealand's share of non-domestic packs per the blended Q2 2017 and Q4 2017 EPS.

Sources: (1) Australian Bureau of Statistics, Short-term Movement, Visitor Arrivals - Selected Countries of Residence: Trend, 2013, 2014, 2015, 2016, 2017.
 (2) Australian Bureau of Statistics, Permanent Movement, Settlers - Country of Birth, Major Groups and Selected Source Countries: Original, 2013, 2014, 2015, 2016, 2017.

- (3) Euromonitor, Population: National Estimates, accessed January 2018.
- (4) Euromonitor, Smoking Prevalence Among Total Adult Population, accessed January 2018.



Total non-domestic legal consumption represents 0.2% of total consumption in Australia

A6 Non-domestic legal calculation (cont.)

KPMG Total non-domestic legal calculation ^{(4)(5)(6)(7)(8)(a)(b)}										
	2007	2009	2010	2011	2012	2013	2014	2015	2016	2017
Outbound trips ('000 kg)	28.6	34.6	33.7	46.0	34.1	10.1	10.5	14.0	13.8	9.1
Inbound trips ('000 kg)						11.2	15.6	20.6	24.2	19.1
Total ND(L) ('000 kg)	28.6	34.6	33.7	46.0	34.1	21.3	26.1	34.6	38.0	28.2
Non-domestic legal as % of total consumption	0.1%	0.2%	0.2%	0.3%	0.2%	0.1%	0.1%	0.2%	0.2%	0.2%

The estimate of non-domestic legal volumes above comprises the legitimate flows from the main source countries as per the EPS and represents 0.2% of total consumption. If we were to assume that all travellers from the source markets indicated by the EPS purchased their allowance, we would derive an ND(L) volume of approximately 54.4 tonnes or 0.4% of total consumption.

One limitation of this methodology is that it does not include cigarettes purchased through mail order and imported legally into Australia. Given the limited financial gain associated with paying Australian excise duty on cigarettes purchased abroad, compared to those purchased in Australia, we feel that the volume consumed is unlikely to be significant.

We have tracked the trends of mail order purchase from abroad in terms of average quantity purchased per occasion and the average frequency of purchase per occasion and we are starting to see some consistency in results. The recent consumer surveys indicate a rise in mail order as a channel used to purchase tobacco a trend consistent with observations by the ABF⁽¹⁾. Anecdotally, we understand that there are volumes of tobacco that have arrived in Australia but have not been claimed. We await official publications from the ABF for any data related to excise paid on mail order purchases.

Internet retailing continued to be a significant distribution channel, attracting customers competitive unit prices, extensive product range and convenience⁽²⁾. although the traditional retailing channels continue to dominate tobacco sales. The RMR consumer survey results indicated that in 2013, 1.8% of purchasers of unbranded tobacco did so via the internet, whilst this has increased to 3.0% in H2 2017^{(a)(3)}.

Notes: (c) These purchases are included in our measure of illicit consumption.

- (a) Overseas travel data from Australian Bureau of Statistics has been extrapolated for December 2017.
- (b) Figures for outbound trips have been restated for 2014, 2015, 2016 as we have updated the smoking prevalence numbers as per the new AIHW survey.

Sources: (1) ABF 2014-15 Annual Report.

- (2) Euromonitor, Tobacco in Australia, August 2016, July 2017
- (3) Roy Morgan Research, Consumer survey, H1 2013, H2 2013, H1 2014, H2 2014, H1 2015, H2 2015, H1 2016, H2 2016, H1 2017, H2 2017.
- (4) Australian Bureau of Statistics, Short-term movement, Resident Departures Selected Destinations: Trend, 2013, 2014, 2015, 2016, 2017.
- (5) Australian Bureau of Statistics, Short-term movement, Residents Returning Selected Destinations: Trend, 2017.
- (6) Australian Bureau of Statistics, Short-term Movement, Visitor Arrivals Selected Countries of Residence: Trend, 2013, 2014, 2015, 2016, 2017.

(7) Australian Bureau of Statistics, Permanent Movement, Settlers - Country of Birth, Major Groups and Selected Source Countries: Original, 2013, 2014, 2015, 2016, 2017.

(8) KPMG Analysis



Appendix Illicit Whites flows methodology

A7 Illicit Whites flows analysis

Illicit Whites are defined as Manufactured cigarettes that are usually manufactured legally in one country/market but which the evidence suggests have been smuggled across borders during their transit to Australia, where they have limited or no legal distribution and are sold without the payment of tax.

Feedback on our approach to Illicit Whites definitions had suggested that we did not capture flows of Illicit White brands that have packaging designed for the domestic Australian market. In 2016, we adapted our approach in an attempt to assess these flows. Therefore, our analysis now includes both branded cigarette packs as well as the packs which are in plain packaging.

Domestic Illicit Plains

To identify which brands made up Domestic Illicit Plains brand flows, KPMG undertook the following analysis:

- All domestic cigarette brands in the EPS data were compiled for analysis. The list was corroborated through an analysis of Aztec IRI scan sales data^(a) (and pack labelling as per EPS). EPS determined volumes were compared to legally reported sales of these brands to determine an estimated share of total consumption.
- Brand flows were also compared with the brand lists published in The Retail Tobacconist trade magazine⁽³⁾, which has a comprehensive list of legitimate brands. Brands included in this publication were then eliminated.
- Consistent with our approach in Project SUN, KPMG has conservatively assumed that, where consumption implied by the EPS volumes represented > 99% of total legal consumption, the brand is considered a Domestic Illicit Plain.

Illicit Tobacco in Australia – Illicit Whites identification process, 2017 ⁽¹⁾⁽²⁾⁽³⁾						
	Domestic volume (bn sticks)	LDS volume (bn sticks)	ND volumes as a share of total consumption	Illicit White volumes by brand		
Brand A	0.01	-	100%	0.01		
Brand B	0.24	0.00	100%	0.24		
Brand C	0.01	-	100%	0.01		
Brand D	0.01	0.01	38%	-		

Table A7a Domestic Illicit Plains identification process, Illicit Tobacco in Australia - worked example

Brands A, B and C are classified as a Domestic Illicit Plain since there is no evidence of legal distribution and all flows are unspecified origin. Brand D is not classified as a Domestic Illicit Plain where the domestic volumes are 38% of the consumption

Notes: (a) The Aztec IRI scan sales data reflect the sales made to consumers only.

- Sources: (1) MSIntelligence Research, Empty Pack Surveys, Q2 2013, Q4 2013, Q2 2014, Q4 2014, Q2 2015, Q4 2015, Q2 2016, Q4 2016, Q2 2017 and Q4 2017.
 - (2) Aztec IRI monthly scan data, Jan 2017 December 2017.
 - (3) Australian Retail Tobacconist, Q4 2017.



Appendix Illicit Whites flows methodology (contd.)

A7 Illicit Whites flows analysis

Illicit Whites (non-domestic)

To identify which non-domestic brands made up Illicit Whites brand flows, KPMG undertook the following analysis :

- All non-domestic labelled cigarette brands were compiled to form an initial list of brands.
- These brands were then compared with the Aztec IRI scan data⁽²⁾ (which records most brands being sold through most legitimate channels). Brands included in the Aztec - IRI data were then eliminated from the list.
- Remaining brand were then compared with the brand lists published in The Retail Tobacconist trade magazine⁽³⁾.
 Brands included in this publication were then also eliminated.
- Further analysis was undertaken by looking at the country of origin and corroborating this with third party sources^(a).
- Remaining brand flows were identified as Illicit Whites.

Given our identification of counterfeit product is limited to the three industry participants, we cannot assess whether or not these flows are counterfeit product.

Illicit Tobacco in Australia – Illicit Whites identification process ⁽¹⁾⁽²⁾⁽³⁾					
	2017 Non-domestic volume (bn sticks)	Aztec - IRI scan data?	Retail tobacconist?	Illicit White brand flow	
Brand A	0.02	Yes	Yes	×	
Brand B	0.15	No	Yes	×	
Brand C	0.06	No	No		
Brand D	0.01	Yes	No	×	
Brand E	0.01	Yes	Yes	×	

Table A7b Illicit Whites (non - domestic) identification process for, Illicit Tobacco in Australia - worked example

Only the brand flows which are not present in both the Aztec -IRI scan data and the retail tobacconist are categorised as Illicit White flows.

Notes: (a) Third party sources include Euromonitor tobacco reports which were used for further verification.

Sources: (1) MSIntelligence Research, Empty Pack Surveys, Q2 2013, Q4 2013, Q2 2014, Q4 2014, Q2 2015, Q4 2015, Q2 2016, Q4 2016, Q2 2017 and Q4 2017.

(2) Aztec - IRI monthly scan data, Jan 2017 – December 2017.

(3) Australian Retail Tobacconist, Q4 2017.



Appendix Notes to this report

A8 Notes to this report

The measurement of illicit consumption is inherently complex as those involved seek to conceal their activities.

We believe that the approach adopted for this report, both in terms of the consumption model methodology and the key data sources, generates an estimate of illicit consumption that is as robust as possible within current research techniques. We also use alternative validation tools, such as the rolling papers analysis, to further increase the level of confidence in this estimate.

Whilst we believe this approach is currently the most appropriate method, we also recognize that we have been required to make a number of data assumptions and scope exclusions.

Further detail on key approaches and methodology limitations is provided in the table below.

Illicit tobacco in	Illicit tobacco in Australia					
Source	Overview					
EPS	 The EPS approach provides an objective and statistically representative estimate of the size of the illicit manufactured cigarette market. The results are not subject to respondent behaviour and are less prone to sampling errors than many other alternative methodologies. 					
	 Whilst the EPS is designed to be representative of the overall population, it is not possible to ensure the sample is fully representative because: 					
	 The sample is more heavily weighted towards populous, urban areas, so in some markets the EPS may not be fully representative of consumption habits in rural areas. The impact in Australia is likely to be minimal as only 10% of the population live in rural areas⁽¹⁾. 					
	 Homes and workplaces are not covered, though analysis of the Yellow Bag Survey results in Germany as discussed on page 59 suggests consumption outside the home is not significantly different. 					
	 Collection routes also specifically exclude sports stadia, shopping malls and stations, or any other locations where non-domestic incidence is likely to be higher as a result of a skewed population visiting these areas. 					
	 Although EPS dates are selected to minimise seasonal factors, there may be specific events that impact the results such as major national events which result in large numbers of overseas visitors. We use a blended result of Q2 and Q4 EPS data to minimise this impact. 					
	 Brand and market variant share can only be extrapolated with a degree of statistical accuracy for brands where a sufficiently large number of packs have been collected. 					
Non-major manufacturer (non-	 EPS results do not identify counterfeit packs that have been made by manufacturers other than BATA, ITA and PML as only the manufacturer / trademark owner can confirm whether their brand pack is genuine. 					
participating) counterfeit	 As a result, for brands not trademark-owned by BATA, ITA or PML, it is not possible to identify counterfeit (non-domestic variants) and contraband product, although the overall volume of illicit would remain unaffected. 					
	 The volume of legal domestic consumption may be overstated where domestic counterfeit variants exist, leading to corresponding understatements of illicit volumes for some brands (although the impact is likely to be minimal and would require any counterfeit pack barcodes to operate correctly and to be scanned by retailers). 					
	Illicit White volumes may include counterfeit. However, the presence of counterfeit is unlikely to have a major impact as counterfeit volumes in 2015 only represented a small proportion (1.4%) ⁽²⁾ of the total sample of the three participating manufacturers brand flows and counterfeit is typically concentrated on the most popular brands only.					

Sources: (1) Australia in 2030: The Future Demographics', Euromonitor, May 2015.

(2) MSIntelligence Research, Empty Pack Surveys, Q2 2016 and Q4 2016.



Appendix Notes to this report (cont.)

A8 Notes to this report (cont.)

Illicit tobacco in a	Australia
Source	Overview
LDS	— There are minor variations in the LDS data provided by Aztec - IRI due to small differences in the way sales data is collected (for example, the way data is collected from tobacconists and timings of data release). For a single view of LDS, KPMG has taken data directly from Aztec - IRI, who provide retail sales data using a combination of inputs from manufacturers and retailers.
	Slight timing variances may arise between the date the product was purchased and actual consumption. However, these variances are not considered significant and the 2017 LDS information we have from Aztec - IRI is considered to be a good representation of the market. In order to ensure these assumptions are reasonable, IRI data movements year-on-year were compared with Exchange of Sales data, which show a similar direction and magnitude of movement.
Consumer surveys	 For the purpose of our analysis, our unbranded volumes are based on the average of the last two consumer surveys as consumers are likely to give a more accurate estimate of their purchase behaviour over a short time period rather than the last twelve months.
	 The sample for the tobacco questionnaire is weighted by location, age and gender using RMR Single Source data in order to be representative of the national population.
	 There are state-by-state regulations that guide the implementation of consumer surveys in Australia and the RMR survey used in this report complies with all such regulations nationally.
	 Although the consumer survey is designed to be nationally representative of the population, there are certain limitations associated with consumer surveys, such as:
	 Information obtained from a consumer survey is based on a sample rather than the entire population and therefore data is subject to sampling variability.
	 In addition, there are limitations to using a consumer survey to estimate tobacco consumption and more specifically illicit tobacco consumption:
	- Consumer surveys have historically under-reported tobacco consumption, especially in countries where it has become increasingly socially less acceptable. For example, AIHW highlights the possibility of under-reporting in smoking related questions as some respondents do not answer smoking related questions ⁽¹⁾ . As such, the RMR consumer survey used in this report asks respondents about purchase behaviour rather than actual consumption habits.
	- Illicit tobacco consumption is likely to be under-reported to an even greater degree ⁽²⁾ .
	 Rolling papers analysis is used in order to validate the unbranded volumes derived through the consumer survey results. There are limitations of this approach, specifically the estimate of cannabis usage and an unclear size of each rolled cigarette (in terms of total grams)
	 Over the past few years, a continued divergence of results suggests either an underestimation from the consumption model or some invalid assumptions in the rolling papers analysis. KPMG will continue to assess the ongoing validity of the underlying assumptions and work to identify alternative approaches.

Sources: (1) National Drug Strategy Household Survey, Australian Institute of Health and Welfare, 2013.

(2) Temporal changes of under-reporting of cigarette consumption in population-based studies, Gallus et al, 2011.



Appendix Notes to this report (cont.)

A8 Notes to this report (cont.)

Illicit tobacco in a	Illicit tobacco in Australia					
Source	Overview					
ND(L)	 We have used inbound and outbound travel data and inbound settler data from the Australian Bureau of Statistics to calculate the number of trips made. 					
	 Inbound settler data was available up to June 2017, after which the Australian Bureau of Statistics stopped publishing these figures. For the purpose of our analysis, we have uplifted the short term arrivals estimates by the last five years average to estimate the number of inbound settlers from July 2017 to December 2017. 					
	 We have calculated the number of cigarettes purchased by assuming smokers purchase the legal allowance. This approach may overweight ND(L) volumes as a share of total non-domestic flows. 					
	 We have not been able to accurately estimate the number of cigarettes purchased through mail order and legally imported into Australia. However, as highlighted on page 79, we feel that the volume consumed is unlikely to be material. 					
Outflows from Australia	 Outflows from Australia are not considered to be material due to the high prices relative to other parts of the world. 					
External data sources	We have used a series of external data sources to estimate illicit tobacco consumption in Australia in 2016. There are a number of limitations associated with these sources such as their infrequent updates (the most recent AIHW National Drug Strategy Household survey was in 2013 whilst the last Australian census conducted by the ABS was in 2011). To update these numbers for the period of study, we make a series of assumptions as required that are detailed throughout the report.					
	 There are also differences between our key data sources and other points of corroboration. For example, the RMR consumer survey focuses on those over 18 years old, whilst the AIHW survey focuses on those over 14 years old. 					



The Roy Morgan Research survey and the AIHW survey differ in focus and methodology, whilst limitations of consumer surveys are recognised

A9 Alternative illicit tobacco estimates

The Australian Institute of Health and Welfare's (AIHW) National Drug Strategy Household Survey (NDSHS) is the only other major consumer survey in Australia that provides an overview on the prevalence of the use of illicit tobacco. There are a number of differences between the RMR and AIHW survey (also conducted by RMR) including the key purpose of each, the frequency of surveys carried out, and both the size and age profile of the sample. The RMR survey is used to estimate the size of the illicit market whereas the AIHW survey is focused more on attitudes and behaviours across a wider range of health and drug related issues. The RMR surveys are now carried out biannually whilst the AIHW survey is conducted every three years.

RMR draws its sample from an Australia-wide database collected through its 'Establishment Survey'. This survey is conducted throughout the year and includes information on demographic and attitudes.

The sample for the tobacco guestionnaire is weighted by location, age and gender in order to be representative of the national population. To meet target responses, RMR then

supplements its sample with samples from a set of qualified third-party suppliers.

AIHW also adopts a sampling plan stratified by region. Weightings are then applied to address any imbalances through sample execution and different response rates.

RMR has used a web-based survey throughout, whilst AIHW moved from a combined CATI and drop-and-collect methodology to a pure drop-and-collect method from 2010. In its data quality statement, AIHW also acknowledges that it "is known from past studies of alcohol and tobacco consumption that respondents tend to underestimate actual consumption levels"(3). In addition, the Australian Bureau of Statistics suggested social pressures are likely to account for such under-reporting⁽⁴⁾. Illicit tobacco consumption is therefore likely to be under-reported to an even greater degree. These are issues we have previously highlighted. During a hearing for the Parliamentary Committee on Law Enforcement - Illicit Tobacco, representatives of the AIHW indicated that the NDSHS is not an appropriate vehicle for measuring the percentage of illicit tobacco consumption⁽⁵⁾.

Comparison of R	MR and AIHW consumer surveys ^{(1)(2)(a)(b)}	
	RMR	AIHW (conducted by RMR)
Survey focus	— Size of the illicit tobacco market	 Knowledge of and attitudes towards drugs, drug consumption histories, related behaviours
Frequency	 At least annually from 2009 and biannually from 2013 	— Every three years
Response period	— Three week period (twice annually)	— 5-6 months (June-November 2016)
Key exclusions	 Non-private dwellings and institutions; non-smokers and occasional smokers 	 Non-private dwellings and institutions
Contacted	— 4,693 qualified smokers	— 46,487 households
Response rates	— 89.5% (4,203 completed surveys)	— 51.1% (23,772 completed surveys)
Sample size	 2015: 4,235 (H1: 1,852 + H2: 2,383) 2016: 4,205 (H1: 2,105+H2: 2,100) 2017: 4,203 (H1: 2,102 + H2: 2,101) 	 Greater than 26,000 people aged 12 years or older participated in the 2010 survey Approximately 24,000 people aged 14 years or older participated in the 2013 and 2016 surveys
Age groups	— Smokers aged 19+	— Smokers aged 14+
Methodology	— Web-based surveys	— Drop and collect/Online survey
Language	— English only	 English only (introduction letter and FAQs in 5 other languages)
Types of tobacco addressed — Unbranded, counterfeit cigarettes, contraband cigarettes		 Unbranded, non-plain packaged tobacco
are based	an Research results for 2013, 2014, 2015, 2016 and 2017 on CAWI responses only. om the 2010 AIHW survey asked questions only about	 (2) Australian Institute of Health and Welfare, <i>The National Drug</i> Strategy Household Survey, 2010, 2013, 2016 (3) National Drug Strategy Household Survey 2016 – Data Quality
unbranded surveys al ources: (1) Roy Morga	d loose tobacco, whereas the 2016, 2013 and 2007 so asked about unbranded cigarettes. an Research, Consumer survey, H1 2013, H2 2013, H1 2014, H1 2015, H2 2015, H1 2016 and H2 2016, H1 2017	 Statement. (4) 'Profiles of Health, Australia, 2011-13 – Tobacco Smoking', Australian Bureau of Statistics, June 2013.
and H2 20		(5) Proof Committee Hansard, Parliamentary Joint Committee on Law Enforcement, March 2016.



The latest AIHW National Drug Strategy Household Survey results suggest reasonably similar movements in consumption

AIHW Consumer Survey approach, 2013 and 2016⁽¹⁾

The 2016 AIHW National Drug Strategy Household Survey was the first in which an online form was able to be used by participants completing the survey. For the 2013 and 2010 surveys, only a self-completion drop-and-collect method was offered. A total of 22% of questionnaires in 2016 were completed via the online method, and this may be a factor when comparisons are made over time.

Unbranded tobacco usage, AIHW and KPMG analysis comparison, 2013-2016 $^{(1)(2)}\,$

AlHW data estimates that approximately 16.5% of smokers have ever used unbranded tobacco. This figure remained constant for both the 2013 and 2016 surveys, indicating a relatively flat appeal of unbranded tobacco. Our survey suggested a 3.9% increase in the same metric from 2013 to 2016. Given the change in data collection methodology used by AlHW it is unclear whether this may have impacted the compatibility of its results over time.

Manufactured cigarette usage, AIHW and KPMG analysis comparison, 2013-2016⁽¹⁾

Purchase of illicit tobacco products				
	2013	2016	Change	
Proportion of smokers who have purchased tobacco without plain packaging	9.6%	5.5%	(4.1%)	
Amount purchased				
Purchased 1 – 2 packets	2.5%	1.3%	(1.2%)	
Purchased 3 – 5 packets	1.7%	1.1%	(0.6%)	
Purchased 6 – 9 packets	0.5%	0.8%	0.3%	
Purchased 10 – 14 packets	0.7%	0.8%	0.1%	
Purchased 15 or more packets	4.3%	1.4%	(2.9%)	
Have not purchased tobacco products without plain packaging	90.4%	94.5%	3.1%	

AIHW data shows a clear fall in the proportion of smokers who have purchased illicit tobacco (i.e. product with no plain packaging). There was a large drop from 9.6% in 2013 to 5.5% in 2013.

	2013-2016
EPS inferred change in consumption of manufactured illicit cigarettes	(32%)
AIHW change in proportion purchasing without Plain Packaging	(43%)

Whilst not directly comparable, the findings of the AIHW survey over a consistent time period suggest a similar order of magnitude of decline in illicit manufactured cigarette consumption as suggested by the EPS.

Sources: (1) Australian Institute of Health and Welfare, National Drug Strategy Household Survey, 2013 and 2016
 (2) Roy Morgan Research, Consumer survey, H1 2016 and H2 2016.



The description of the services set out below comprises the agreed scope of our work

A10 Scope of work

Scope

We will analyse and report on:

- The total level of legal domestic sales of tobacco products and consumption in the market.
- The estimated proportion of the Australian tobacco market accounted for by the illicit trade, across both manufactured products and the unbranded, encompassing contraband, counterfeit, and unbranded products (including 'chop chop').
- An overview of the nature of the illicit trade in the country, including the sources of illicit product.
- Findings on the characteristics and consumption patterns of illicit tobacco users, and how these have changed from the results of surveys previously undertaken in 2013, 2014, 2015 and 2016 based on the consumer research outputs.
- Data on how taxation has evolved over time and comment on tobacco regulation in the Australian market.

Methodology

In order to size the illicit tobacco market, we will use two principal approaches:

Consumer research approach: utilising the full year 2013, full year 2014, full year 2015, full year 2016 and full year 2017 Roy Morgan Research reports, commissioned and provided to us by BATA, PML and ITA; namely:

- Analyse consumer responses to seek to establish the proportion of illicit tobacco consumed.
- Extrapolate the proportion of illicit tobacco consumed on a national level.
- Express the findings as a proportion of total tobacco consumption.

Empty Pack Survey (EPS) approach: using EPS data commissioned and provided to us by BATA, PML and ITA; namely:

- Analyse the data output from MSI to seek to establish the proportion of market accounted for by non-domestic manufactured cigarettes.
- Extrapolate the non-domestic and counterfeit incidence estimates identified in the EPS against the level of legal domestic sales in Australia.
- Express findings on the estimates of both non-domestic consumption of manufactured cigarettes and consumption of counterfeit product as a proportion of consumption.

The overall results from the two approaches will then be compared and combined in order to build up our overall estimate of the size and composition of the illicit market as a proportion of total tobacco consumption.

These results will be compared to our analysis of rolling papers data, seizures data, and historical consumption trends to help to validate findings.



Questions asked by the consumer survey

A11 Roy Morgan Research questionnaire

Do you, or does any member of your immediate family work in any of the following companies/industry sectors?

What is your post code?

What is your gender?

Are you currently employed?

Which of the following occupational categories best suits you? (Options provided)

What is your approximate annual personal income?

What is your current age?

Which products do you currently consume? (Options provided)

What type of tobacco product do you smoke or use, even if only occasionally?

How often do you normally smoke manufactured cigarettes? How often do you normally smoke roll your own cigarettes?

How many manufactured cigarettes do you normally smoke each day (on average)?

How many roll your own cigarettes do you normally smoke each day (on average)?

What is your regular brand of manufactured cigarettes, that is, the one you smoke more than any other brand now-a-days?

What other brands of manufactured cigarettes do you currently smoke?

What is your regular brand of roll your own cigarettes, that is, the one you smoke more than any other brand now-a-days?

What other brands of roll your own cigarettes do you currently smoke?

Are you aware that unbranded tobacco can be purchased? Unbranded tobacco is also known as 'chop chop.' It is loose tobacco or cigarettes in cartons or packs that are sold without a brand name. This does not include branded tobacco products that are now sold in plain packaging that are green/brown in colour with graphic health warnings and information messages.

Since you turned 18 have you ever purchased unbranded tobacco?

Throughout the survey, we're just focusing on products you buy for your own use. Do you purchase unbranded tobacco for your own use currently?

Have you purchased unbranded tobacco in the last 12 months? (we are talking about purchases for your use)

In the past 12 months, how often did you purchase unbranded tobacco?

Well, can you give me an estimate of how often you purchased unbranded tobacco in the past 12 months?

Since you turned 18, how long had you been buying unbranded tobacco?

Well, can you give an estimate of how long you had been buying unbranded tobacco since you turned 18?

When you last purchased unbranded tobacco, from which outlet or outlets did you buy it?

When you last purchased unbranded tobacco, how many grams of unbranded tobacco did you purchase?

When you last purchased unbranded tobacco, what format or formats was the unbranded tobacco in?

When you last purchased loose unbranded tobacco, how many grams did you buy? (In grams)

When you last purchased loose unbranded tobacco, how much did it cost in total?

How long ago was your most recent purchase of loose unbranded tobacco?

Well, can you give me an estimate of when your most recent purchase of loose unbranded tobacco was?

When you last purchased cartons of unbranded tobacco, how many did you buy?

When you last purchased cartons of unbranded tobacco, how much did it cost in total?

How long ago was your most recent purchase of unbranded tobacco in cartons?

Well, can you give me an estimate of when your most recent purchase of unbranded tobacco in cartons was?

When you last purchased packs of unbranded tobacco, how many did you buy?

When you last purchased packs of unbranded tobacco, how much did it cost in total?

How long ago was your most recent purchase of unbranded tobacco in packs?

Well, can you provide an estimate of when your most recent purchase of unbranded tobacco in packs was?

When you were smoking unbranded tobacco, how much of it would you say that you smoked per day?

Well, can you provide an estimate of how much unbranded tobacco you were smoking per day?

How did you usually consume unbranded tobacco?



Questions asked by the consumer survey (cont.)

A11 Roy Morgan Research questionnaire (cont.)

How many suppliers did you ever purchase unbranded tobacco from, since you turned 18?

When you stopped buying unbranded tobacco did you not smoke or did you purchase duty paid tobacco products?

Why did you smoke unbranded tobacco?

Do you know the country of origin of the unbranded tobacco that you purchased?

Where does it usually come from?

Please select the reasons why you stopped purchasing unbranded tobacco? (Options provided)

How often do you purchase unbranded tobacco?

Well, can you provide an estimate of how often you purchase unbranded tobacco?

Since you turned 18, how long have you been buying unbranded tobacco?

Well, can you provide an estimate of how long you have been buying unbranded tobacco?

From which outlets do you usually buy your unbranded tobacco?

How many grams of unbranded tobacco do you purchase for the average purchase?

What format or formats do you usually purchase unbranded tobacco in?

What is the minimum price that you have paid for loose unbranded tobacco in bags?

What is the average price that you have paid for loose unbranded tobacco in bags?

What is the maximum price that you have paid for loose unbranded tobacco in bags?

What is the minimum price that you have paid for unbranded cigarettes in cartons?

What is the average price that you have paid for unbranded cigarettes in cartons?

What is the maximum price that you have paid for unbranded cigarettes in cartons?

What is the minimum price that you have paid for unbranded cigarettes in packs?

What is the average price that you have paid for unbranded cigarettes in packs?

What is the maximum price that you have paid for unbranded cigarettes in packs?

How much would you say that you smoke per day of unbranded tobacco?

per day of unbranded tobacco?

The most recent time you purchased unbranded tobacco what format or formats was it?

How much loose unbranded tobacco did you buy? (In grams)

How much did it cost in total?

How long ago was your most recent purchase of loose unbranded tobacco?

Well, can you provide an estimate of when your most recent purchase of loose unbranded tobacco was?

How many cartons of unbranded cigarettes did you buy?

How much did it cost in total?

How long ago was your most recent purchase of unbranded tobacco in cartons?

Well, can you provide an estimate of when your most recent purchase of unbranded tobacco in cartons was?

How many packs of unbranded cigarettes did you buy?

How much did it cost in total?

How long ago was your most recent purchase of unbranded tobacco in packs?

Well, can you provide an estimate of when your most recent purchase of unbranded tobacco in packs was?

How do you usually consume unbranded tobacco?

How many suppliers have you ever purchased unbranded tobacco from, since you turned 18?

Do you find unbranded tobacco easier or harder to obtain than a year ago or has there been no change?

If you cannot get unbranded tobacco do you not smoke or do you purchase duty paid tobacco products?

Why do you smoke unbranded tobacco?

Do you know the country of origin of the unbranded tobacco that you purchase?

Where does it usually come from?

Contraband cigarettes are legitimate brands of cigarettes purchased in shops without duty paid.

Are you aware that contraband cigarettes can be purchased?

How did you become aware of the availability of contraband cigarettes?

Since you turned 18, have you ever purchased contraband cigarettes?



Questions asked by the consumer survey (cont.)

A11 Roy Morgan Research questionnaire (cont.)

Do you purchase contraband cigarettes for your own use currently?

Have you purchased contraband cigarettes in the last 12 months?

If you think you might have purchased contraband cigarettes, which brand(s) was it? Any others?

What would you do if contraband product were not available where you usually purchase it from? (Options provided)

How would you rate the overall quality of the contraband product(s) you purchase compared to the non-contraband version(s)?

Counterfeit cigarettes are packs of cigarettes labelled with a brand name that are not really that particular brand. They have been smuggled into the country without duty paid.

Are you aware that counterfeit cigarettes can be purchased?

How did you become aware of the availability of counterfeit cigarettes?

Since you turned 18 have you ever purchased counterfeit cigarettes?

Do you purchase counterfeit cigarettes for your own use currently?

Have you purchased counterfeit cigarettes in the last 12 months?

If you think you might have purchased counterfeit cigarettes, which brand(s) was it? Any others?

What made you believe the cigarettes were counterfeit?

What would you do if counterfeit product were not available where you usually purchase it from?

How would you rate the overall quality of the counterfeit product(s) you purchase compared to the non-counterfeit version(s)?

You have indicated that you have bought counterfeit product. What does the availability of the brand(s) in counterfeit form make you feel? (Options provided)

You indicated that you would feel more negative towards the brand knowing that it is available in counterfeit, can you please explain why you feel this way?

What would you do if counterfeit product were not available where you usually purchase it from? (Options provided) How would you rate the overall quality of the counterfeit product you purchase compared to the real legitimate brand?

The most recent time you purchased counterfeit cigarettes, did you buy them by weight, by packs, or by cartons?

When you bought the counterfeit cigarettes by weight, how much did you buy?

How much did it cost in total?

How long ago was your most recent purchase of counterfeit cigarettes by pack?

When you bought the counterfeit cigarettes/carton, how much did you buy?

How much did it cost in total?

How long ago was your most recent purchase of counterfeit cigarettes by carton?

Do you find counterfeit cigarettes easier or harder to obtain than a year ago or has there been no change?

Why do (or did) you smoke counterfeit cigarettes?

The most recent time you purchased contraband cigarettes, did you buy them by weight, by packs, or by cartons?

When you bought the contraband cigarettes by weight, how much did you buy?

How much did it cost in total?

How long ago was your most recent purchase of contraband cigarettes by weight?

When you bought the contraband cigarettes by pack, how much did you buy?

How much did it cost in total?

How long ago was your most recent purchase of contraband cigarettes by pack?

When you bought the contraband cigarettes by carton, how much did you buy?

How much did it cost in total?

How long ago was your most recent purchase of contraband cigarettes by carton?

Do you find contraband cigarettes easier or harder to obtain than a year ago or has there been no change?

Why do (or did) you smoke contraband cigarettes?

It is sometimes possible to purchase cigarettes for less than the normal retail price. The price of these 'cheap cigarettes' is several dollars or more below the normal retail price, (for example, a price of AUD10 or less for a pack of 25, or AUD8 or less for a pack of 20).



Questions asked by the consumer survey (cont.)

A11 Roy Morgan Research questionnaire (cont.)

Before today, were you aware of packs of cheap cigarettes that can be purchased for less than the normal retail price? Since you turned 18 have you ever purchased cheap

cigarettes for your own use?

Do you purchase cheap cigarettes for your own use currently?

Have you purchased cheap cigarettes for your own use in the last 12 months?

How did you become aware of the availability of cheap cigarettes?

If you think you might have purchased cheap cigarettes, what brand(s) were they?

What would you do if cheap cigarettes were not available where you usually purchase them from?

What did you do if cheap cigarettes were not available where you usually purchased them from?

How would you rate the overall quality of the cheap cigarettes that you have purchase(d) compared to the full price product(s)?

The most recent time you purchased cheap cigarettes, did you buy them by packs, or by cartons, or both?

When you bought the cheap cigarettes by pack, how many packs did you buy?

How much did it cost in total?

How long ago was your most recent purchase of cheap cigarettes by pack?

When you bought the cheap cigarettes by carton, how many cartons did you buy?

How much did it cost in total?

How long ago was your most recent purchase of cheap cigarettes by carton?

From what outlets do/did you usually buy cheap cigarettes?

Do you find cheap cigarettes easier or harder to obtain than a year ago or has there been no change?

Why do (or did) you smoke cheap cigarettes?

Why did you stop smoking cheap cigarettes?

You have indicated that you have purchased either contraband or counterfeit cigarettes in the past. Sometimes people refer to contraband or counterfeit cigarettes as 'cheap' cigarettes. These people may or may not know that the 'cheap' cigarettes are contraband or counterfeit.

Whilst you are familiar with the terms contraband and/or counterfeit, do you also know contraband or counterfeit cigarettes as 'cheap' cigarettes?

Do you purchase rolling papers, tubes, or both for the purpose of smoking loose tobacco?

When you purchase rolling papers for smoking loose tobacco, what is the once pack size of rolling papers you usually purchase?

What percentage of that pack of rolling papers do you use before the pack is damaged, lost or discarded? (Options provided)

When you purchase tubes for smoking loose tobacco, what is the one pack size of tubes you usually purchase?

What percentage of that pack of tubes do you use before the pack is damaged, lost or discarded? (Options provided)

Have you travelled outside of Australia in the last 6 months?

Did you bring back any manufactured cigarettes or any other tobacco products to bring back to Australia on any of your trips to other countries in the past 6 months?

How many trips in the last 6 months did you make where you purchased manufactured cigarettes or any other tobacco products to bring back to Australia?

For each type of product listed below, indicate how much you brought back into Australia on average per trip? (Options provided)

In which countries did you buy manufactured cigarettes/any other tobacco products?

Did you buy duty free manufactured cigarettes or any tobacco products at the airport or port on your return to Australia after any of your trips to other countries in the last 6 months?

How many trips did you make in the last 6 months where you purchased duty free manufactured cigarettes or any other tobacco products on your return to Australia?

For each type of product, indicate how much you purchased in duty free on average per trip.

In the last 12 months have you received or purchased any manufactured cigarettes or roll your own tobacco that was posted from abroad?

What one type of tobacco product did you receive most recently?

When did you last receive manufactured cigarettes or roll your own tobacco from abroad?

How much did you receive? (Please enter a 0 if you did not receive any of that type of product.)

From which countries were the manufactured cigarettes or roll your own tobacco posted from?

On your most recently received manufactured cigarettes or roll your own tobacco, did you declare it to customs or pay any additional taxes?



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