B International assistance arrangements

As outlined in chapter 3, automotive manufacturing industries in many countries benefit from a wide range of government assistance measures (often from all levels of government), including:

* tariff and non‑tariff barriers, such as quotas, taxes and excise duties
* direct government assistance to the domestic automotive industry, such as subsidies to domestic automotive manufacturing firms, ‘co‑investment’ capital grants and subsidies, loans and loan guarantees, investment in equity, tax holidays, the provision of relevant infrastructure, incentives for consumers to buy new vehicles, and indirect subsidies (such as to lower the price of inputs)
* regulatory barriers to trade or potential barriers, such as excessive safety, fuel efficiency, emissions or quality standards and certification programs, and other forms of assistance, such as fleet procurement policies
* assistance measures that are broadly available and can be accessed by the automotive manufacturing industry, including export financing, wage subsidies, research and development (R&D) support and tax concessions or exemptions.

Further, it is at times alleged that some countries have intervened in financial markets with a deliberate strategy of lowering or suppressing the value of their national currency, which among other effects could have a benefit to their domestic automotive manufacturing industry.

In line with the terms of reference for this inquiry, the Commission has conducted a desktop survey of the government assistance measures in nine major and emerging automotive‑producing countries or regions. The survey included those countries (and region, in the case of the EU) that accounted for more than 3 per cent of global production in 2012 or that had increased their share of global production by more than 1 percentage point between 2011 and 2012.

The Commission faced a number of challenges when undertaking this survey. Evidence on assistance measures often lacks transparency, is dispersed and difficult to verify and covers different time frames across countries. Moreover, for many forms of assistance, it has been possible to only give examples of what was committed by governments as being available to firms, rather than its budgetary cost, disaggregated by industry.

Some government policies have a broad objective, such as promoting environmental outcomes, rather than the specific objective of providing assistance to automotive manufacturing. The Commission has erred on the side of including the broader policies where it considered they could provide assistance to the automotive manufacturing industry.

The Commission is grateful for the assistance of the Department of Foreign Affairs and Trade in locating some of the information contained in this appendix.

## B.1 Tariff rates

Tariff rates on motor vehicles and components imposed by selected countries (including Australia) are given in table B.1.

It should be noted that tariff rates vary according to each country’s tariff schedule, with different rates applicable under different circumstances (often highly specific in definition). As such, the rates below should be taken as indicative of the range of generally applicable tariff rates in the selected countries shown. The figures do not account for the bilateral and regional trade agreements in force between countries that can have complex effects on the *actual* tariff rates applied to automotive products under various conditions.

Table B.1 Applied tariff rates, selected countries

2013

|  |  |  |  |
| --- | --- | --- | --- |
| Country or region | Tariff rate on passenger vehicles a | Tariff rate on commercial vehicles b | Tariff rate on automotive components c |
|  | % | % | % |
| Australia | 5 | 5 | 5 |
| Brazil | 35 | 35 | 0–18 |
| China | 25 | 6–25 | 3–25 |
| European Union | 10 | 22 | 3–4.5 |
| India | 60–100 | 10 | 10 |
| Japan | 0 | 0 | 0 |
| Mexico | 20 | 20 | 0–5 |
| Korea | 8 | 10 | 8 |
| Thailand | 80 | 40 | 10,30 |
| United States | 2.5 | 0–25 | 0–2.5 |

a Based on HM Code 8703 — motor cars and motor vehicles principally designed for the transport of persons. b Based on HM Code 8704 — motor vehicles for the transport of goods. c Based on HM Code 8708 — parts and accessories of motor vehicles.

*Sources*: Advice from DFAT (11 December 2013); US Department of Commerce (2011); WTO (2013).

## B.2 Brazil

Table B.2 Examples of government assistance to the automotive manufacturing industry in Brazil

| Policy type | Policy description |
| --- | --- |
| **Capital subsidy or grant** | *None identified.* |
| **Tax concession** | The Brazilian Government’s ‘Inovar Auto’ policy increases the federal industrial products tax on vehicles by 30 per cent, offset by a 30 per cent tax concession to eligible automotive manufacturers. Eligibility for the concession is contingent on:   * average vehicle fuel efficiency * the number of manufacturing processes that are undertaken in Brazil (Inovar Auto identifies 12 specific processes) * local investment in research and development, engineering, industrial technology and/or components suppliers * participation in standardised labelling for vehicle emissions (ICCT 2013; Tavares 2012).   A tax concession is also available to foreign automotive manufacturers that import vehicles into Brazil (subject to local investment requirements), although only for a maximum of 4800 vehicles per year (PwC 2012b).  The Brazilian Government has temporarily reduced the rate of the industrial products tax on vehicles since May 2012 as a stimulus measure. Initially, the tax cuts were to last for only three months, but they have been extended multiple times — most recently in April 2013 until December 2013 at a forecast cost of BRL2.2 billion (Government of Brazil 2012; SECOM 2013). |
| **Loans and other financing programs** | The Brazilian Development Bank provides support to automotive manufacturers in the form of low interest rate loans. Recent examples include BRL2.4 billion in financing for a new Fiat car plant, BRL373.5 million to expand Renault’s engineering program, and BRL342 million for Volkswagen to design and develop new vehicles (BNDES 2012a, 2012b, 2013).  During the global financial crisis, the Brazilian Government directed the Brazilian Development Bank and state‑owned commercial banks to provide automotive manufacturers and components suppliers with easier access to credit (ILO 2010). |
| **Input price subsidy** | Petrol and diesel prices in Brazil are indirectly regulated, with the pricing policy of oil producer Petrobras subject to the approval of the Brazilian Government — the company’s major shareholder. Petrobras’s pricing methodology is not publicly disclosed, however, a stated objective of the policy is to prevent ‘volatile’ international oil prices from being passed on to consumers. Consequently, retail prices for petrol are lower than the cost to Petrobras of importing refined fuel. In November 2013, Petrobras announced increases in the refinery gate price of petrol and diesel of four and eight per cent respectively (Orihuela 2013; Petrobras 2013a, 2013b). |
| **Rebates to consumers** | *None identified.* |
|  | (Continued next page) |

Table B.2 (continued)

| Policy type | Policy description |
| --- | --- |
| **Technology standard** | Brazil’s emissions standards for new vehicles are based on those adopted by the European Union, with some variation (IBAMA 2011; UNEP 2012).  Since 1976, all petrol in Brazil must be blended with ethanol. The current standard is a fuel blend of 25 per cent anhydrous ethanol to 75 per cent petrol, although fuel blends with as little as 18 per cent ethanol are permitted. The Brazilian Government’s championing of biofuels has encouraged the development of flexible‑fuel engines, which are capable of switching between fuel blends and 100 per cent ethanol fuel (UN-Energy 2011). |
| **Government procurement** | *None identified.* |
| **Other assistance** | Under a modified protocol to a bilateral trade agreement between Brazil and Mexico, the Brazilian and Mexican Governments will apply export quotas until March 2015 on vehicles traded between the two countries. As part of the protocol, the governments also required manufacturers to increase the proportion of vehicle components sourced locally from 30 to 35 per cent in 2012, and to 40 per cent by 2016 (Ministry of Economy (Mexico) 2012). |

## B.3 China

Table B.3 Examples of government assistance to the automotive manufacturing industry in China

| Policy type | Policy description | |
| --- | --- | --- |
| **Capital subsidy or grant** | *Key government programs*  China’s *Twelfth Five‑Year Economic and Social Development Plan* (2011–2015) designates the ‘new‑energy automobile industry’ (encompassing electric hybrid cars, pure electric cars and fuel cell cars) as one of seven strategic industries for support and development into leading pillar industries. The plan states that the Government will set up special funds for the development of these strategic industries and expand the size of government start up investment (National People’s Congress (China) 2011).  Specific assistance measures were detailed in supplementary sectoral plans, such as the *Energy Saving and New Energy Vehicles Industry Development Program* (2012–2020).   * Under the Energy Saving and New Energy Vehicles Industry Development Program, the Government has allocated funds for R&D, engineering, standard making and market applications of energy‑saving (efficient internal combustion engine cars) and new energy vehicles (National Energy Administration (China) 2012). It has been reported that China plans to invest US$18 billion over the period of the plan in the development of electric and hybrid vehicles and their key components (Stewart and Stewart 2012). * On 8 November 2013, the Ministry of Industry and Information Technology made remarks re‑affirming the Government’s intention to further expand development of new‑energy vehicles, and that China had provided subsidies for this development by RMB 5.7 billion as at the end of the 2012 (translation provided in advice from DFAT, 24 January 2014). | |
|  | (Continued next page) |

Table B.3 (continued)

| Policy type | Policy description | |
| --- | --- | --- |
| **Capital subsidy or grant** | * The Australian Trade Commission (2013) notes that China’s Ministry of Finance intends to invest over RMB 1 trillion in further research on energy efficient and new‑energy technologies. | |
| **Input price subsidy** | Subsidies have been provided for a number of inputs (land, coal, electricity, natural gas, automotive glass, and cold‑rolled steel) used by Chinese automotive and component manufacturers (Haley and Haley 2013; Stewart and Stewart 2012). | |
| **Rebates to consumers** | The Chinese Government offers subsidies of RMB 3000 for the purchase of vehicles of 1.6 litres or less (Ministry of Finance (China) and National Development Reform Commission (China) 2013). In 2013, the Chinese Government together also announced a national subsidy scheme for consumers in 28 specified cities of up to RMB 60 000 for the purchase of listed new‑energy vehicles. Many local municipal agencies offer subsidies to augment the national scheme (advice from DFAT, 24 January 2014).  Subsides for the retirement and update of old vehicles have also been used (Stewart and Stewart 2012). For example, Beijing offers scrappage payments (until 31 December 2014) of between RMB 2500 to RMB 14 500 to vehicle owners who scrap vehicles made in 1995 or earlier (Automotive News China 2013). | |
| **Capital subsidy or grant** | * Some provincial governments have implemented measures to support their local automotive industry in accordance with the policies and directives issued by the central government, including the Twelfth Five‑Year Plan and the Energy Saving and New Energy Vehicles Industry Development Program. These measures include preferential tax treatment, loan interest subsidies and credit support, and discounts on land prices (Stewart and Stewart 2012).   There have been some public estimates of assistance to the automotive industry in China.   * Haley and Haley (2013) reported that the Chinese central and seven local (provincial) governments distributed about US$18.4 billion in subsidies to the auto‑parts industry through technology‑development and industrial restructuring policies from 2001–2011.   In September 2012, the United States raised a World Trade Organization (WTO) dispute challenging Chinese export subsidies to its automotive and automotive parts manufacturers. The Office of the United States Trade Representative argued that these subsidies, including cash payments for exporting, R&D grants, financing assistance and preferential tax treatment, contravene WTO rules (which prohibit subsidies based on export performance), and amounted to at least US$1 billion over the period 2009–2011. It noted that despite having joined the WTO more than a decade prior, China had still not provided a complete notification of its central, provincial and local government subsidies (USTR 2012a, 2012b). | |
| **Tax concession** | The High and New Technology Enterprise qualification is an incentive available to automotive parts manufacturing companies that grants a 15 percent preferential corporate income tax rate to companies that meet the criteria (KPMG 2014).  Also, under the *Automotive Industry Development Policy* (2004 and updated in 2009) R&D expenses are tax deductible (KPMG 2004). | |
|  | (Continued next page) |

Table B.3 (continued)

| Policy type | Policy description |
| --- | --- |
| **Loans and other financing programs** | The Twelfth Five‑Year Plan states that the Government will make comprehensive use of preferential financial policies, such as risk compensation, and encourage financial institutions to strengthen credit support for the seven strategic industries identified in the plan (National People’s Congress (China) 2011).   * There are also reportedly a range of government measures to promote exports from China, including export targets, export financing and insurance support, and restrictions on export of raw materials aimed at increasing their relative domestic supply and restricting world supply (Stewart and Stewart 2012). For example, the authors reported that China ExIm Bank extended a RMB 5 billion export credit to Chery Automotive in 2005 and a further RMB 10 billion export credit in 2008. The bank also contributed an undisclosed portion of financing toward a US$2.7 billion Geely Auto takeover of Volvo in 2010 (Stewart and Stewart 2012). |
| **Technology standard** | The Energy Saving and New Energy Vehicles Industry Development Program sets goals for improved fuel efficiency. For example, a target average fuel consumption of 6.9 litres per 100km for all passenger vehicles by 2015 and 5.0 litres by 2020 (Australian Trade Commission 2013; National Energy Administration (China) 2012).   * It has been reported that some provincial governments have passed laws that favour their local manufacturers, for example by setting vehicle specifications for taxis to match those of locally manufactured vehicles (Haley and Haley 2013). |
| **Government procurement** | In 2012, 11 Chinese Government departments started using domestically made electric vehicles as their official business vehicles (Government of China 2012). Foreign made and joint‑venture made cars were excluded from the Chinese Government’s 2012 draft public procurement list for government vehicles (China Daily 2013; Global Trade Alert 2013). While a final list does not appear to have been adopted, a recent report suggests that Volvo Car Corporation (Chinese owned) was added to the list this year (Murphy and Zander 2013). |
| **Other assistance** | *GDP target —* The Twelfth Five‑Year Plan states that the proportion of the value added of new strategic industries (of which the new energy automobile industry is one) should comprise about 8 per cent of GDP by 2015 (National People’s Congress (China) 2011).  *Production target —* The Energy Saving and New Energy Vehicles Industry Development Program sets an objective for China to produce and sell annually 500 000 battery electric and plug‑in hybrid electric cars by 2015, 2 million by 2020 and a cumulative sales total of 5 million between 2015 and 2020 (European Chamber of Commerce in China 2013).  *Foreign ownership and local content requirements*   * Wholly foreign‑owned enterprises in vehicle assembly are not permitted in China (ownership is restricted to 50 per cent through joint ventures with domestic companies). * Wholly foreign‑owned enterprises are permitted for automobile parts manufacturers, with the exception of new energy vehicle battery manufacturing facilities for which ownership is restricted to 50 per cent (USTR 2011, 2012a). * Foreign investors are limited to no more than two joint ventures with Chinese partners for producing passenger motor vehicles and two joint ventures for commercial vehicles (European Chamber of Commerce in China 2013). * In January 2012, the Chinese Government amended its list of priorities for foreign investment, removing vehicle manufacturing from the ‘encouraged’ category and placing it in the ‘permitted’ category in view of current overcapacity and the large amount of foreign direct investment in vehicle manufacturing. Instead, China is encouraging investment in R&D and ‘new energy’ vehicles (Australian Trade Commission 2013). |

## B.4 European Union

Table B.4 Examples of government assistance to the automotive manufacturing industry in the European Union

| Policy type | Policy description |
| --- | --- |
| **Capital subsidy or grant** | ‘Regional aid’ enables EU member states to support development in specified economically disadvantaged regions (subject, in most cases, to the approval of the European Commission). Regional aid has been used by various governments to help finance the establishment or expansion of car manufacturing plants (EC 2006b). For example, the German Government has undertaken to contribute €43.7 million towards the €521.6 million expansion of a Porsche facility in Leipzig (although this aid is the subject of a European Commission investigation as to whether it complies with the regulatory framework for allowing regional aid) (EC 2012b). |
|  | Under the *Framework for State aid for Research and Development and Innovation*, EU member states may grant aid to manufacturers for:   * R&D projects for cars (including for ‘green’ technology) * technical feasibility studies in preparation for R&D projects * process and organisation innovation in services (but not for ‘routine or periodic changes’ to production lines and manufacturing processes) * establishing and operating innovation clusters to support open research, including for training and research facilities and information and communications technology infrastructure (EC 2006a).   Examples of funding for research, development and innovation include:   * €20.5 million in aid from the French Government to Renault for the development of diesel hybrid commercial vehicles (EC 2013a) * €24.2 million in aid from the French Government to Valeo (a car component manufacturer) for the development of a hybridisation system for petrol engines (EC 2013b).   Separate from grants to any individual manufacturers, general research programs may also benefit the automotive industry. For example:   * the German Government committed €500 million between 2009–11 for R&D under the National Development Plan for Electric Mobility. A further commitment of €1 billion from the Government’s Energy and Climate Fund extended these efforts until 2013 (BMWI 2012) * the UK Government announced in 2013 that it was committing £500 million over ten years to a new research centre for advanced engine technologies, to be matched by a further £500 million investment by industry partners (Cable 2013). |
|  | The European Commission may also authorise member states to provide assistance for worker training, where there is an underinvestment in training that contributes to market failures (European Parliament 2009; Foecking and Majcher-Williams 2010). |
| **Tax concession** | Many member states offer tax concessions for consumers to purchase electric, hybrid and/or other alternative fuel vehicles. In several cases, owners of eligible vehicles may be fully exempted from paying vehicle‑related taxes (such as vehicle registration charges, road taxes and fuel consumption taxes). In other cases, vehicle‑related taxes are applied at a discounted rate, or are waived for an initial registration period (ACEA 2013b). |
|  | (Continued next page) |

Table B.4 (continued)

| Policy type | Policy description |
| --- | --- |
| **Loans and other financing programs** | The European Investment Bank (EIB) has provided loans to car manufacturers across Europe, including to sponsor investments in ‘green’ technology. During 2009 and 2010, as part of the European Clean Transport Facility, the EIB reported lending €3.1 billion to car manufacturers (Srejber 2010). In November 2012, the European Commission and EIB announced further cooperation on financing innovation in Europe’s automotive sector as part of the ‘CARS 2020 Action Plan’ (EC 2009, 2012a). |
|  | Under the *Community guidelines on state aid for rescuing and restructuring firms in difficulty*, the European Commission permits member states to offer loans or loan guarantees to companies that require urgent assistance to avert otherwise inevitable financial collapse. To be approved under  the guidelines, any state aid must be restricted to the minimum amount necessary, not impose undue adverse spillover effects on other member states, and adhere to the principle of ‘one time – last time’ — that is, troubled companies cannot be repeatedly bailed out by governments. On this basis, the European Commission authorised £6.5 million in loans from the UK Government to assist MG Rover in 2005 (EC 2004, 2005). |
|  | During the global financial crisis, the European Commission permitted member states to subsidise interest repayments and/or offer state guarantees on loans. These temporary provisions, which expired at the end of 2010, were intended to facilitate car companies’ access to credit (EC 2009). As one example, restructuring aid from the French Government to PSA Peugeot Citroën included a state guarantee to cover the company’s bond issues (an estimated subsidy equivalent of €486 million) (EC 2013c). More generally, in that period:   * the French Government provided €6 billion in loans to Peugeot Citroën and Renault, €2 billion to the financial services operations of these two firms and €600 million to automotive industry suppliers (AFP 2009) * the German Government loaned €1.5 billion in bridge financing to the Opel automotive manufacturing firm in 2009 (Government of Germany 2009) * the Swedish Government gave SEK 20 billion (about US$3 billion) in credit guarantees to automotive manufacturing firms, which were used in loans of approximately SEK 4 billion each to Volvo and Saab. The Volvo loan was repaid to the Government in 2012, but the Saab funds were lost when the company went bankrupt in 2011 (advice from DFAT, 24 January 2014) * the UK Government provided £2.3 billion in loans and loan guarantees during 2009–2010 to automotive manufacturing firms under the Automotive Assistance Program (House of Commons Business and Enterprise Committee (UK) 2009). |
| **Input price subsidy** | *None identified.* |
|  | (Continued next page) |

Table B.4 (continued)

| Policy type | Policy description | |
| --- | --- | --- |
| **Rebate to consumers** | During the global financial crisis, various EU member states adopted scrappage programs for old vehicles (‘cash for clunkers’) to boost demand for new vehicles.   * In France and Italy, consumers were only eligible for a rebate where the vehicle they were purchasing met carbon dioxide emissions targets. * The Portuguese and Spanish Governments initially operated scrappage programs without emissions targets for vehicles, but later amended their schemes to include such targets for some vehicles. The Portuguese Government included emissions targets from January 2009 to December 2010 (when the program was suspended), and the Spanish Government included such targets from September 2008. * The Dutch, German and UK governments did not apply emissions targets in their scrappage programs at any stage (although in the Netherlands, a more generous rebate was available for diesel‑engine vehicles) (Leheyda and Verboven 2013).   None of the programs discriminated between domestically (or European) produced and imported vehicles. |
| **Other assistance** | The German state of Lower Saxony holds approximately 20 per cent of voting rights in Volkswagen. Under the federal German Government’s ‘Volkswagen Law’, some decisions for consideration at an annual general meeting of Volkswagen’s shareholders require a majority of more than 80 per cent of the decision‑making capital of the company. This provides the Lower Saxony Government with veto powers over major corporate decisions at Volkswagen (Court of Justice of the European Union 2013). |

## B.5 India

Table B.5 Examples of government assistance to the automotive manufacturing industry in India

| Policy type | | Policy description |
| --- | --- | --- |
| **Capital subsidy or grant** | | The Indian Government has contributed around INR 22.9 billion in funding to the National Automotive Testing and R&D Infrastructure Project, which involves establishing and upgrading automotive testing and research facilities around the country. Additionally, state governments that host project facilities have granted land at concessional rates (NATRiP 2013). |
| **Tax concession** | | The Indian Government applies reduced excise duty rates for small and fuel‑efficient vehicles, as well as hybrid engine systems. Custom duties concessions for specified components for electric and hybrid vehicles are also available until March 2015 (Government of India 2013; Haugh, Mourougane and Chatal 2010).  Some state governments also offer tax concessions for vehicle purchases. For example:   * the Delhi Government provides a refund on value added tax, road tax and registration charges for purchases of new electric vehicles (Delhi Government 2012) * state governments in Madhya Pradesh, Kerala, Gujarat and West Bengal have reduced excise taxes on electric vehicles (Perdiguero and Jiménez 2012). |
|  | (Continued next page) | |

Table B.5 (continued)

| Policy type | | Policy description | |
| --- | --- | --- | --- |
| **Loans and other financing programs** | The Indian Government provides funding to state‑owned banks in order to boost their capital adequacy ratios, with a stated intention that this should enable banks to extend more credit to households — including for (but not exclusive to) automotive financing. The Indian Government committed to capital infusions totalling INR 140 billion as part of the 2013‑14 budget, and in October 2013 announced ‘in principle’ support to provide additional bank funding to further stimulate consumer demand (Ind-Ra 2013; Ministry of Finance (India) 2013). | |
| **Input price subsidy** | Diesel, kerosene and Liquefied Petroleum Gas fuels are subsidised, while many oil marketing companies still set retail prices at below‑market levels and claim the difference between global market prices and local prices from the Ministry of Finance at a favourable rate (Lang and Wooders 2012). | |
| **Rebates to consumers** | Between November 2010 and March 2012, the Indian Government provided a rebate of up to 20 per cent on the ex‑factory prices of electric vehicles with 30 per cent of their parts manufactured in India, up to a maximum of INR 100 000. Manufacturers were expected to claim the rebate from government, and pass the lower prices on to consumers. INR 950 million was budgeted for the scheme (MHIPE 2012).  State governments have also introduced subsidies. For example, the Delhi Government provides a 15 per cent rebate on the base price of electric vehicles. The rebate is partly funded by a levy imposed on the sale of diesel fuel in Delhi (Delhi Government 2012). | |
| **Technology standard** | India’s emissions standards for new vehicles are based on those adopted by the European Union, with lagged implementation (Urdhwareshe 2013). | |
| **Government procurement** | The Indian Government maintains a list of approved vehicle models that can be used by ministers and senior public servants as staff cars (Ali 2004; Arora 2003). All approved models are manufactured in India. Central public sector enterprises are permitted to purchase any new model of small‑engine car manufactured in India, with consideration given to fuel efficiency and environmental impact (Dongre 2013). | |

## B.6 Japan

Table B.6 Examples of government assistance to the automotive manufacturing industry in Japan

| Policy type | | Policy description |
| --- | --- | --- |
| **Capital subsidy or grant** | | The Japanese Government does not specifically fund programs for the automotive manufacturing industry. Its industry assistance programs are generally targeted at small and medium enterprises, and so Japanese car makers are usually ineligible (advice from DFAT, 21 January 2014). |
| **Tax concession** | | The Japanese Government offers vehicle‑related tax incentives to encourage businesses and households to purchase electric, hybrid, natural gas and fuel‑efficient petrol/diesel vehicles. Depending on what environmental standards the vehicle meets, the owner may be eligible for exemptions or reductions on acquisition and tonnage (registration) taxes (JAMA 2013). |
|  | (Continued next page) | |

Table B.6 (continued)

| Policy type | | | Policy description | |
| --- | --- | --- | --- | --- |
| **Tax concession** | | Light cars (‘kei’ cars), defined as those with engine displacement below 660 cc and meeting certain height, width and length restrictions, receive preferential tax treatment (they can pay as little as 25 per cent of the weight tax of a non‑‘kei’ similar vehicle). Foreign automotive manufacturers have complained that the specifications of ‘kei’ cars have been designed to favour Japanese car makers. The Japanese Government is considering changing the tax treatment of ‘kei’ cars to bring it closer in line with the taxation of other small cars, but has not yet made a final decision (advice from DFAT, 21 January 2014).  Japan’s ‘Special Measures for Industrial Revitalization and Innovation’ provides the government with scope to support business efforts to restructure and innovate. The special measures available include government subsidies, debt guarantees and tax concessions. The policy has had limited application in Japan’s automotive industry.  In 2012, the Japanese Government approved measures that entitled Mazda Motor Corporation to a concession on the registration and license tax for a proposed capital raising. The capital raising by Mazda was to facilitate a restructuring of the company, which the government deemed to be a ‘resources productivity innovation’, and eligible for support under the legislation (METI 2012). | |
| **Loans and other financing programs** | | *No examples identified.* | |
| **Input price subsidy** | | The Japanese Government offers an Employment Adjustment Subsidy, which provides employers with a time‑limited subsidy of up to 80 per cent of workers’ wages (67 per cent for large companies) as an incentive to maintain employment levels during production downturns. Subsidies may be paid to employers for workers to take leave, to be temporarily transferred to another job, or to undertake education and training (Hirashima 2013; Soble 2009; Steinberg and Nakane 2011). | |
| **Rebates to consumers** | | In June 2009, the Japanese Government introduced two forms of consumer subsidy to encourage purchases of fuel‑efficient vehicles — a scrappage program for replacing old vehicles with more fuel‑efficient models, and a direct grant (without requiring that an old vehicle be traded in) for new cars that met high fuel‑efficiency and emissions standards. Initially, few foreign cars were eligible for the subsidy, as they had not been certified as meeting the necessary standards. After complaints from the United States Trade Representative, the Japanese Government modified the program to allow more foreign cars to qualify for subsidies (Cooper 2010). Both streams of the consumer subsidy program ended in September 2010 (Canis et al. 2010). Following the 2011 Tohoku earthquake, a second round of ‘eco car’ subsidies — for which JPY300 billion was budgeted — was made available from December 2011 until September 2012 (IEA 2013; Waschilowski 2012). | |
|  | (Continued next page) | | |

Table B.6 (continued)

| Policy type | | Policy description | |
| --- | --- | --- | --- |
| **Technology and safety standards** | The Japanese Government imposes fuel economy standards for all vehicle manufacturers selling in the Japanese market — those that fail to comply are subject to official warnings and, subsequently, financial penalties. All vehicles must also be certified for safety and greenhouse gas emissions, with a higher standard ‘four‑star status’ available for the most environmentally friendly models (JAMA 2009). Foreign automotive manufacturers, such as in the US and EU, have argued that the Japanese Government’s refusal to recognise similar internationally‑based testing imposes a cost burden on imported vehicles (ACEA 2013a; Marantis 2013).  For low‑volume imported vehicles (where less than 5000 vehicles per year per vehicle type are to be brought into Japan) an alternative to full assessment by Japanese regulators is available under a ‘Preferential Handling Procedure’. Under this procedure, the certification of the exporting‑country regulator is recognised as sufficient to accredit a vehicle for sale in Japan (Canis et al. 2010; JAMA 2009; USTR 2013). | |
| **Government procurement** | *None identified.* | |
| **Other assistance** | The New Energy and Industrial Technology Development Organization (NEDO) is an independent administrative agency that receives funding from the Japanese Government. NEDO coordinates R&D efforts in industry, academia and government, focusing on industrial, energy and environmental technologies. In relation to Japan’s automotive sector, recent research by NEDO has focused on battery and fuel technologies for vehicles. Some projects include:   * basic research, since 2009, into lowering the costs and improving the performance of electric vehicle batteries (NEDO 2013) * a 2008–12 research project into hydrogen supply infrastructure to support commercialisation of fuel cell vehicles (NEDO 2012).   Requirement for the biennial inspection and testing of vehicles that have been in use for at least three years provides some incentive for Japanese consumers to purchase new vehicles, rather than incur costs to maintain older vehicles to the requisite safety and environmental standards. This effect was more pronounced prior to reforms to the inspection and testing regime in the mid‑1990s — in 1993, the average car age was 2.93 years; by 2009, it had risen to 7.49 years (Kitano 2013; Smitka 2002, 2013).  Devaluation of the Japanese yen through monetary easing by the Japanese Government resulted in a depreciation of about 25 per cent against the US dollar between December 2012 and May 2013 (McKinnon and Liu 2013). | |

## B.7 Korea

Table B.7 Examples of government assistance to the automotive manufacturing industry in the Republic of Korea

| Policy type | | Policy description |
| --- | --- | --- |
| **Capital subsidy or grant** | | The Korean Government has committed to supporting the development and adoption of alternative fuel technology for vehicles, including investments in:   * R&D into improving mileage for electric vehicles * commercialisation of hydrogen fuel cars * establishment of electric vehicle charging infrastructure (OECD 2012a; PCGG 2011).   The Korean Government provides approximately US$100 million (roughly KRW 100 billion) per year to support R&D (advice from DFAT, 28 November 2013). Examples of assistance to R&D include:   * a program to develop replaceable batteries for electric buses, supported by about KRW 17.2 billion of government funding over the period 2010–2013 (Ministry of Land, Infrastructure and Transport (Korea) 2012) * programs to develop natural gas vehicles (including buses), to be supported by about KRW 10 billion of government funding per year over the period 2012 to 2015 (unofficial translation of Korean Ministry of Environment press release supplied in advice from DFAT, 28 November 2013). |
| **Tax concession** | | The Korean Government applies lower consumption and vehicle tax rates for small‑engine vehicles. For the smallest category of engine (capacity less than 1000 cc) most taxes applied on the purchase of a vehicle are waived (KAMA 2013).  Hybrid vehicles attract a tax exemption up to a maximum of KRW 3.1 million (this exemption replaced a previous subsidy program in 2009). In 2012, 35 830 such vehicles were sold, giving a maximum possible support value of KRW 111 billion in that year. Electric vehicles receive tax exemptions of up to KRW 4.2 million per unit (estimated maximum support value of KRW 3 billion in 2012) and compressed natural gas vehicles, of between KRW 16 million and KRW 42 million per unit (no estimated support value available) (advice from DFAT, 28 November 2013).  Additionally, the Korean Government has announced a ‘bonus–malus’ system to take effect (if legislated) from 2015. When in place, tax concessions will be provided for low‑emission vehicles, while increased tax rates will be levied on high‑emission vehicles (Jones and Yoo 2012). |
| **Loans and other financing programs** | | During the global financial crisis, the Korea Development Bank provided liquidity support to Daewoo (at the time, a subsidiary of GM) and Ssangyong (Stanford 2010). |
| **Input price subsidy** | | The Korean automotive industry, together with other industries, benefits from low energy prices due to government‑regulated prices and major government participation in the sector (advice from DFAT, 21 January 2014). |
| **Rebates to consumers** | | As of 2013, the Korean Government provides a subsidy of up to KRW 15 million to each buyer of an electric vehicle. Municipal governments may also operate their own rebate schemes for consumers — for example, Seoul provides an additional KRW 15 million subsidy for electric cars, while Jeju Island offers KRW 8.7 million (Sojung 2013). |
|  | (Continued next page) | |

Table B.7 (continued)

| Policy type | | Policy description | |
| --- | --- | --- | --- |
| **Technology standard** | Korea has adopted emissions standards for petrol and gas‑fuelled vehicles used by the US Government of California (the Non‑Methane Organic Gases Fleet Average System), and European Union emissions standards for diesel‑fuelled vehicles (KAMA 2013).  The Korean Government is progressively introducing combined fuel economy and greenhouse gas emission targets, with car manufacturers to achieve 100 per cent compliance by 2015. Testing of fuel economy is aligned with processes under the Corporate Average Fuel Economy standards used in the United States (An, Earley and Green-Weiskel 2011).  As a consequence of the bilateral trade agreement negotiated between Korea and the European Union, a five‑year plan for harmonising vehicle safety standards commenced in 2009. Where inconsistency between Korean and European standards remains, Korea will be required not to apply its standards in a way that limits market access (KAMA 2013; Stangarone 2009).  Despite the above evidence of international standardisation and harmonisation, reports suggest Korea still has many technical vehicle requirements that are ‘just different enough’ from international standards to impose an additional burden on imported vehicles, and that have drawn complaints from US and EU automotive industries (advice from DFAT, 28 November 2013). | |
| **Government procurement** | The Korean Government has established a target for 50 per cent of vehicles purchased for the public fleet to be alternative fuel vehicles (OECD 2012a). The municipal Government of Seoul has committed to replacing all vehicles in its public fleet (including taxis and buses) with either electric or hybrid engine systems by 2020 (Seoul Metropolitan Government 2011). | |
| **Other assistance** | Regulated automotive insurance premiums are higher for imported car models compared to most domestically produced models. At least in part, this appears to be due to relatively higher repair costs associated with imported cars (including sourcing replacement components). The Korea Insurance Development Institute reported that the average insurance payout in 2012 was around KRW 1 million for a domestically produced vehicle, but nearly KRW3 million for an imported vehicle (KIDI 2013a, 2013b). | |

## B.8 Mexico

Table B.8 Examples of government assistance to the automotive manufacturing industry in Mexico

| Policy type | | Policy description |
| --- | --- | --- |
| **Capital subsidy or grant** | | Mexico’s federal and state governments invest in public research centres that can benefit the automotive sector. For example, the Center for Research and Technical Assistance of the State of Querétaro was built with both federal and state government funding, along with private sector investment. The Center provides facilities for vehicle and component testing, and has contributed to the development of parts and machinery used within the automotive sector (ProMexico 2013). |
|  | (Continued next page) | |

Table B.8 (continued)

| Policy type | | | Policy description | |
| --- | --- | --- | --- | --- |
| **Capital subsidy or grant** | | Automotive manufacturers are eligible for capital grants through Mexico’s trade and investment agency, ProMexico, for projects that generate economic development (Trani 2012). Small and medium sized enterprises may also be eligible for a share of MXN 350 million in federal funding provided through the National Enterprise Institute, which is intended (among other things) to reduce automotive industry demand for imported components in favour of domestic suppliers (ProMexico 2013).  Local and state governments may also provide incentives for manufacturers to locate in their territories. For example, the Querétaro state government offers financial support for worker training and relocation (Government of Querétaro 2013). | |
| **Tax concession** | | Since 2003, the Mexican Government has offered tax concessions to support automotive manufacturing under a federal Automotive Decree. A key benefit of the decree is that a carmaker may import foreign‑produced cars duty free, subject to achieving local production targets (ProMexico 2013).  The Mexican Government provides general tax incentives for exporting manufacturers, including in the automotive sector. Examples include:   * Sectoral Promotion Programs, which entitle companies in specified industries (such as vehicle and auto‑parts manufacturing) to access preferential tariff rates both for imports (for goods to be used in local production) and exports * the *Decree to Promote Manufacturing, Maquila and Export Services Companies*, which provides various exemptions or limits on import duties paid by export‑oriented companies in producing exports. Additional concessions for corporate income and value added taxes also apply — although tax reforms legislated in 2013 will remove some of these * the High Volume Exporting Companies Registry, which provides exporters (where exports exceed US$2 million annually, or account for at least 40 per cent of the company’s sales) with streamlined tax processes and opportunities to recover import duties paid * the Return of Import Taxes to Exporters program, which refunds eligible exporters for import taxes paid on goods used as inputs into exported goods (EY 2013b; PwC 2013b).   State governments may also offer additional tax concessions to manufacturers. For example, the Querétaro State Government offers discounted property taxes for eligible companies that create jobs through the construction of new manufacturing facilities (Government of Querétaro 2013). | |
| **Loans and other financing programs** | | *None identified.* | |
| **Input price subsidy** | | Fuel prices are subsidised, with Pemex (the state‑owned oil company) importing petrol and diesel and reselling it domestically at a price set by the Mexican Government each month. Since 2010, the Mexican Government has sought to increase retail prices gradually to reduce overall losses associated with the subsidy (Plante and Jordan 2013). | |
|  | (Continued next page) | | |

Table B.8 (continued)

| Policy type | | Policy description | |
| --- | --- | --- | --- |
| **Input price subsidy** | During 2009, the Mexican Government operated a Job Preservation Program — a scheme to subsidise businesses, including in the automotive industry, to retain workers during the economic downturn. In exchange for agreeing to work shorter hours, workers were compensated by the government for lost earnings (subject to a cap of MXN 5100 per worker). MXN 217 million was provided to workers in the automotive industry (Galhardi 2009; Messenger and Rodríguez 2010). | |
| **Rebates to consumers** | Between July 2009 and March 2010, the Mexican Government operated a Vehicle Renewal Program — a MXN 500 million scrapping scheme, providing subsidies for consumers who traded in old vehicles (at least ten years old) for new vehicles worth no more than MXN 160 000. To attract the MXN 15 000 rebate, new vehicles had to be manufactured in Mexico or in a country with which Mexico had signed a bilateral trade agreement (Calderón 2009). | |
| **Technology standard** | Mexico’s fuel economy and emissions standards for new vehicles are based on those adopted by the United States, with some variation (SEGOB 2013; UNEP 2012). Mexico also gives consideration to the safety and environmental standards established by the World Forum for the Harmonization of Vehicle Regulations (ProMexico 2013). | |
| **Government procurement** | *None identified.* | |
| **Other assistance** | ProMexico provides non‑financial assistance to companies seeking to develop export markets. Under its transactional business accompaniment program, ProMexico assists with connecting Mexican companies to overseas partners — for instance, to integrate Mexican components manufacturers into global supply chains (ProMexico 2013).  Under a modified protocol to a bilateral trade agreement, the Brazilian and Mexican Governments will apply export quotas until March 2015 on vehicles traded between the two countries. As part of the protocol, the governments also required manufacturers to increase the proportion of vehicle components sourced locally from 30 to 35 per cent in 2012, and to 40 per cent by 2016 (Ministry of Economy (Mexico) 2012).  To improve air quality in Mexico City, local authorities regulate which days cars can be used under a scheme known as *Hoy no Circula*. Tighter restrictions apply to vehicles that are at least ten years old or exhibit poor environmental standards, while the best rated vehicles are not subject to any usage restrictions (Ministry of Environment (Mexico City) 2013). | |

## B.9 Thailand

Table B.9 Examples of government assistance to the automotive manufacturing industry in Thailand

| Policy type | | Policy description |
| --- | --- | --- |
| **Capital subsidy or grant** | | *None identified.* |
| **Excise tax regime** | | Thailand currently imposes vehicle excise duties based on the size and type of engine. The lowest rates of duty are applied to pick‑up vehicles with engine capacity equal to or less than 3250 cc, and the highest rates to any vehicles with engine capacity over 3000 cc.  Under a new excise tax structure, to take effect from 1 January 2016, the schedule of duty rates varies by engine size, fuel type and CO2 emissions, with hybrid vehicles emitting no more than 100 g/km of CO2 emissions attracting the lowest rates of duty for passenger motor vehicles (PMVs). The new excise tax structure, will reduce the excise duty on eco‑cars from 17 per cent to 14 per cent if CO2 emissions are equal to or less than 100 g/km (BOI 2013; Pramualcharoenkit 2013). However, PMVs with engines over 3000 cc (which are traditionally imported) will still be charged the maximum rate of 50 per cent, regardless of fuel type or CO2 emission. By contrast, pickup passenger vehicles up to 3250 cc (mostly locally manufactured) will be charged excise duty of no more than 30 per cent and as little as 3 per cent if they are pickup vehicles that emit no more than 200g/km (advice from DFAT, 28 November 2013).  The Thai Government’s rationale for the excise regime is to support fuel‑efficient and alternative‑energy vehicles. |
| **Tax concession** | | *Producers* — Thailand’s Board of Investment provides tax incentives for different parts of the Thai automotive industry.   * Car manufacturers that invest at least THB 15 billion in a facility that will, within five years, produce more than 100 000 units (per year) of a passenger car model can be exempted from corporate income taxes for five years. * Manufacturers participating in Thailand’s ‘eco‑cars’ scheme are eligible for: exemption from corporate income taxes for up to eight years, exemption from import duties for machinery and equipment, a 90 per cent reduction in import duties on raw materials and components (where they cannot be produced locally). * Manufacturers of tyres and high‑tech vehicle components are also eligible for corporate income tax holidays and import duty exemptions and reductions. * Manufacturers of natural‑gas vehicles face reduced import duties for natural‑gas fuel tanks and control system components. * Several other specified automotive activities (where they occur outside Bangkok) are eligible for a 50 per cent reduction of corporate incomes taxes for five years, with additional tax deductions allowed for costs associated with transport, utilities, construction, and infrastructure installation (BOI 2013; UNESCAP 2012).   Companies are eligible to claim a 200 per cent deduction on their corporate income taxes for eligible R&D expenses (EY 2013a; TAI 2012).  *Consumers* — Tax incentives are available to owners of alternative‑fuel vehicles, such as reductions in the road tax for vehicles powered (entirely or as a hybrid) by natural gas (IISD 2013). Lower excise taxes are applied to eco‑cars than for conventional passenger cars (as mentioned above). |
|  | (Continued next page) | |

Table B.9 (continued)

| Policy type | | Policy description | |
| --- | --- | --- | --- |
| **Loans and other financing programs** | The Small and Medium Enterprise Development Bank of Thailand can provide loans, guarantees and other financial service support to small and medium enterprises (such as Thailand’s automotive component suppliers). In 2012, the bank signed a Memorandum of Understanding to provide support for initiatives to improve the environmental standards in Thailand’s automotive and automotive components manufacturing industries (SME Bank 2012). | |
| **Input price subsidy** | Compressed natural gas, liquefied petroleum gas, diesel and biofuels are subsidised at different rates, depending on the particular fuel type (IISD 2013). | |
| **Rebates to consumers** | The Thai Government introduced an excise tax rebate scheme for first car buyers who purchased vehicles between September 2011 and December 2012. Eligibility for the rebate (capped at THB 100 000) was contingent on the vehicle having an engine capacity not exceeding 1,500 cc or being pick‑up vehicles manufactured in Thailand, and worth no more than THB 1 million. The excise tax rebate was paid to qualifying owners within one year of purchase, although recipients are required to retain ownership of the vehicle for at least five years (BOI 2011). | |
| **Technology standard** | Thailand has adopted European Union emissions standards for new vehicles (Srisurapanon and Wanichapun 2001). | |
| **Government procurement** | *None identified.* | |
| **Other assistance** | Import licences are required to import used vehicles and automotive components, and are available only for imports that are intended to be re‑exported or used for non‑commercial purposes (Marantis 2013).  ‘Non‑tax incentives’ are available to foreign vehicle and vehicle parts manufacturers to establish operations in Thailand, including land ownership rights and streamlined procedures to facilitate work permits and visas for employees brought in from abroad (Asawachintachit 2012; BOI 2013). | |

## B.10 United States

Table B.10 Examples of government assistance to the automotive manufacturing industry in the United States

| Policy type | | Policy description |
| --- | --- | --- |
| **Capital subsidy or grant** | | Various state governments provide investment grants and job training grants to automotive manufacturers. For example:   * Michigan’s business development program provides grants, loans or other economic assistance of up to US$10 million to businesses that create jobs and/or provide investment. In 2012‑13, the program provided grants to a number of automotive design, component and manufacture companies (Michigan Economic Development Corporation 2013) * Kentucky provides matching grants for industry‑specific workforce training programs. Grants have been provided to a number of automotive manufacturers and component manufacturers (Kentucky Cabinet for Economic Development 2013) |
|  | (Continued next page) | |

Table B.10 (continued)

| Policy type | | | Policy description | |
| --- | --- | --- | --- | --- |
| **Capital subsidy or grant** | | * Mississippi provided US$363 million to Nissan toward the cost of building an assembly plant in Madison County in 2003, followed by US$7.3 million for infrastructure in 2011 and US$7.5 million for plant expansion in 2012 (Nave 2012). | |
| **Tax concession** | | The Federal Government provides a tax credit of between US$600 and US$1000 against excise tax imposed on the purchase of qualified plug‑in electricity vehicles (US Department of Energy 2013b).  Various states provide state tax concessions to automotive and automotive component manufacturers, including in relation to property taxes and income taxes. For example:   * Michigan provided a credit against its state business tax to Chrysler in 2010 (valued at US$1.3 billion over 20 years), and to Ford (valued at US$909 million over 15 years). These credits were provided to encourage the companies to expand in Michigan over competing states and countries (Michigan Economic Development Corporation 2010). GM received a tax credit valued at US$1.1 billion in 2008‑09 (Michigan Economic Development Corporation 2009) * Indiana and Ohio provide job creation and job retention tax credits against various state taxes (including commercial activity tax and corporate income or franchise tax). The credits are performance based and are subject to the creation or retention of jobs. Ford, Chrysler, and GM have received both job creation and job retention tax credits (Indiana Economic Development Corporation 2013b; Ohio Development Services Agency 2012a, 2012b) * Indiana provides an alternative fuel vehicle manufacture tax credit of up to 15 per cent of qualified investment in the manufacture of alternative fuel vehicles (Indiana Economic Development Corporation 2013a) * Mississippi granted Toyota US$296 million in tax incentives to build a manufacturing plant near Tupelo (MDA 2010) * Georgia provided Kia Motors with US$76 million in tax credits in 2006 to establish its first US manufacturing plant in that state, as part of a total of US$410 million in support (Birmingham Business Journal 2006) * Kentucky granted Toyota US$146.5 million in tax incentives to expand its Georgetown manufacturing facility in 2013 (Automotive News 2013b), after having committed US$240 million in incentives to Ford to expand its Louisville plant (City of Louisville 2010). | |
| **Loans and other financing programs** | | *Automotive Industry Financing Program* (part of the Troubled Asset Relief Program). In response to the global financial crisis, in 2008‑09 the US Government provided around US$80 billion in loans and other forms of support (such as the purchase of automotive company stocks and securities) to Chrysler and GM and their respective finance arms. Both Chrysler and GM had filed for bankruptcy protection in 2009, and received the loans to continue operating during company restructuring. As of 31 December 2013, the US Treasury Department had recovered approximately US$63.2 billion of the funds dispersed through the program (US Department of the Treasury 2014).   * The *Automotive Supplier Support Program* providedgovernment‑backed protection on money owed to automotive suppliers for products shipped to automotive companies participating in the Automotive Industry Financing Program (valued at US$5 billion) (US Department of the Treasury 2013). Automotive suppliers also permitted to sell their receivable commitments from automotive manufacturers to the Treasury (at a discount) to receive money immediately (US Department of Commerce 2010). | |
|  | (Continued next page) | | |

Table B.10 (continued)

| Policy type | | Policy description | |
| --- | --- | --- | --- |
| **Loans and other financing programs** | * The *Automotive Warranty Commitment Program* provided loans to protect warranties on new vehicles purchased from GM and Chrysler during their restructuring period (valued at US$1.1 billion) (ILO 2010; US Department of the Treasury 2013). * The *Advanced Technology Vehicles Manufacturing Loan Program* providedloans to support the development of the manufacture of advanced technology vehicles and associated components in the US — for example, over the period 2009‑10, US$5.9 billion was loaned to Ford, US$1.45 billion to Nissan and US$456 million to Tesla (US Department of Energy 2013a). | |
| **Input price subsidy** | *None identified.* | |
| **Rebates to consumers** | *Consumer Assistance to Recycle and Save* (also known as ‘cash for clunkers’). Credit to consumers who trade in old, fuel‑inefficient vehicles when buying or leasing new, more fuel‑efficient vehicles. The credit was US$3500 or US$4500 depending on the type of vehicle purchased and was non‑discriminatory, applying equally to the purchase of domestic and foreign vehicles. The program provided support totalling US$2.85 billion and has now ended (US Department of Transport 2009).  Various states provide incentives for the adoption of hybrid and plug‑in electric vehicles. State rebates or tax credits range from US$1000 in Maryland to US$6000 in Colorado (National Conference of State Legislatures 2013). | |
| **Technology standard** | Greenhouse gas emissions standards and corporate average fuel economy standards require new cars and light trucks to achieve 35.5 miles per gallon by 2016. In 2011, the US Government announced an agreement with thirteen large automotive producers to increase fuel economy to 54.5 miles per gallon (163 grams per mile of CO2) by 2025 (NHTSA 2012; US EPA 2012). From August 2013, US Customs will refuse any consumer products that are noncompliant with US energy conservation standards (GPO 2013). | |
| **Government procurement** | In 2011, the Federal Government announced that by the end of 2015, all new light duty vehicles leased or purchased by government agencies be alternative fuelled vehicles, such as hybrid or electric, compressed natural gas, or biofuel. Executive fleets are also required to achieved maximum fuel efficiency (White House Office of the Press Secretary 2011). The policy does not discriminate between US and foreign made vehicles. | |