Environmental Taxes – Driving green behavior

Global Indirect Tax Advisor webcast series

Administration

Polling questions

- Polling questions will appear as we proceed through the presentation.
- As mentioned, in order to receive the certificate of attendance, we require participants to take part in at least four of the five polling questions.
- If you qualify for the certificate of attendance, it will be sent to you following the webcast.

Attendee questions

- You may submit questions in the *Ask a question* button on the left. We will answer as many questions as we can during Q&A. If we are unable to answer your question during the webcast, someone from KPMG may reply via phone or email following the webcast.
- For technical issues, please use the *Question Mark* button in the upper-right hand corner of the media player.

Your feedback

- When the webcast is over, the webcast player will automatically refresh to display an exit survey. Feel free to complete the survey, as your comments are very valuable to us.

Today's presenters

Lachlan Wolfers

Head of Global Indirect Tax Services, KPMG International

Mike Hayes

Global Head of Renewables, KPMG International and National Sector Leader, Renewables & Sustainability, KPMG in Ireland

Warwick Ryan

Global Leader, Virtual Center of Excellence (VCOE) for Excise and Environmental Taxes, KPMG International

Barbara Bell, CTA

Director, Head of Environmental Taxes, KPMG in the UK

Lucy Lin

Senior Manager, Indirect Tax, KPMG China

Agenda

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1 **Climate Change, KPMG IMPACT, Virtual Center of Excellence (VCOE) for Excise and Environmental Taxes**

2 **Criteria for a successful and not-so-successful environmental taxes**

3 **Case Study #1: EU Green Deal: Carbon Border Adjustment Mechanism (CBAM)** — elaborating 4 options with global implications

4 **Case Study #2: China VAT refund policy** — reflecting China's policy towards environment protection

5 **Case Study #3: Transport mobility — environmental taxes of the future** — role of economic modelling

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Climate change and KPMG IMPACT

Mike Hayes

Global Head of Renewables, KPMG International and National Sector Leader, Renewables & Sustainability, KPMG in Ireland

Our position on climate change

KPMG strongly supports the need to reduce global carbon emissions sharply if the planet is to avoid catastrophic climate change.

KPMG have been passionate advocates for action on climate change for well over a decade, including at COP21 in Paris in 2015, and we have been proactively reducing our own emissions since 2007.

KPMG supports the use of effective carbon pricing systems that reduce emissions efficiently and cost-effectively.

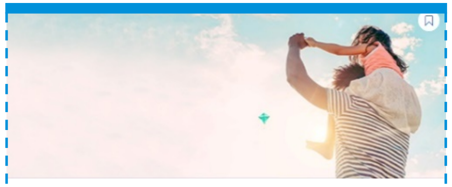
KPMG IMPACT

Global expertise building a more sustainable and resilient future in the Impact initiatives.

The webpage can be found here.

Environmental, social, governance (ESG) and sustainability

Developing responsible and sustainable strategies, business models, operations and investments.

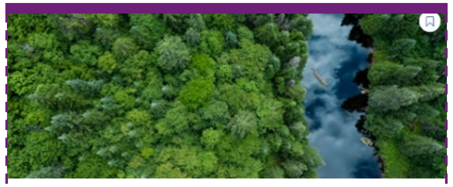


Economic and social development

Measuring impact and enabling societies to grow in a more equitable way and allowing economies to prosper.

Sustainable finance

Integration of ESG in responsible investment, financing, insurance and corporate finance strategies and processes.



Climate change and decarbonization

Driving business models, products and services that address climate change and to help clients reduce carbon emissions.

IMPACT measurement, assurance and reporting

Enabling clients to devise improved methods, tools and frameworks to better track and measure performance.

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Virtual Center of Excellence (VCOE) for Excise and Environmental Taxes

Warwick Ryan

Global Leader, Virtual Center of Excellence (VCOE) for Excise and Environmental Taxes, KPMG International

Virtual Center of Excellence (VCOE) for Excise and Environmental Taxes

80 – Global team

Community of Practice

- 80 participants
- Tax and Advisory
- Monthly telecons
- Working Groups

Client focus

Client supporting

- Client newsletters — H2
- Latest developments
- Shared insights

New taxes

Thought leadership

- Green Recovery Roundtables
- EU Green Deal initiatives

Criteria for a successful and not-so-successful environmental taxes

Barbara Bell, CTA

Director, Head of Environmental Taxes, KPMG in the UK

Why use environmental taxation?

To address the failure of normal markets to incorporate environmental costs into prices

To drive environmental policies — perhaps working best as part of mixture of tax, regulation and persuasion

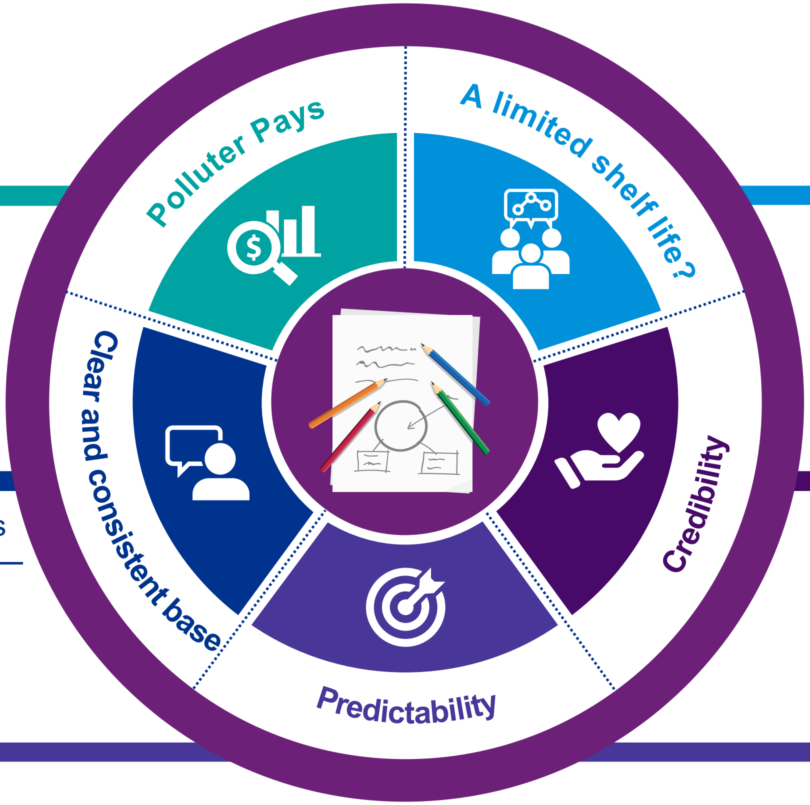
To provide market participants with flexibility allowing them to make choices about their environmental impact

To raise revenue — more palatably than taxes on work and production

Attributes of good environmental taxes

Polluter pays — i.e. the direct effect should be on the entity responsible for the environmental harm

Clear and consistent tax base — any exceptions to recognise good environmental behaviour (or — sometimes controversially — an agreed and articulated acceptance of “bad” behaviour)



A limited shelf life? Does a good environmental tax make itself redundant?

Credibility and a rate that is commensurate with the environmental harm targeted by the tax

Predictability (advance notice of tax changes)

The success of UK landfill tax — it is all about the price

- Introduced in 1996 with rates of £7 per tonne for active waste and £2 per tonne for qualifying materials (generally non-active wastes). Now £94.15 per tonne for active waste and £3 per tonne for qualifying materials
- At its height, raised £1.3bn per annum
- Devolved to Scotland in 2015 and Wales in 2018 — total revenue across the three jurisdictions is slowly declining but is protected to an extent by annual rate rises
- Changed UK waste management practices primarily by diverting waste from landfill but has also had some impact on waste production
- Environmental rationale becoming less clear, given disposal of wastes for which landfill remains the best practical environmental option and "tax everything" approach.

Aggregates levy — has anything really changed?

- A tax on the commercial exploitation of rock, sand and gravel to encourage the recycling of aggregate
- Stuck at a low rate of £2 per tonne
- Landfill tax thought to have done more to encourage the use of recycled aggregate
- Perverse outcomes — “green” infrastructure projects often hit by an unexpected aggregates levy cost
- British Aggregates Association litigation
- Now under review

Will new taxes do a better job?

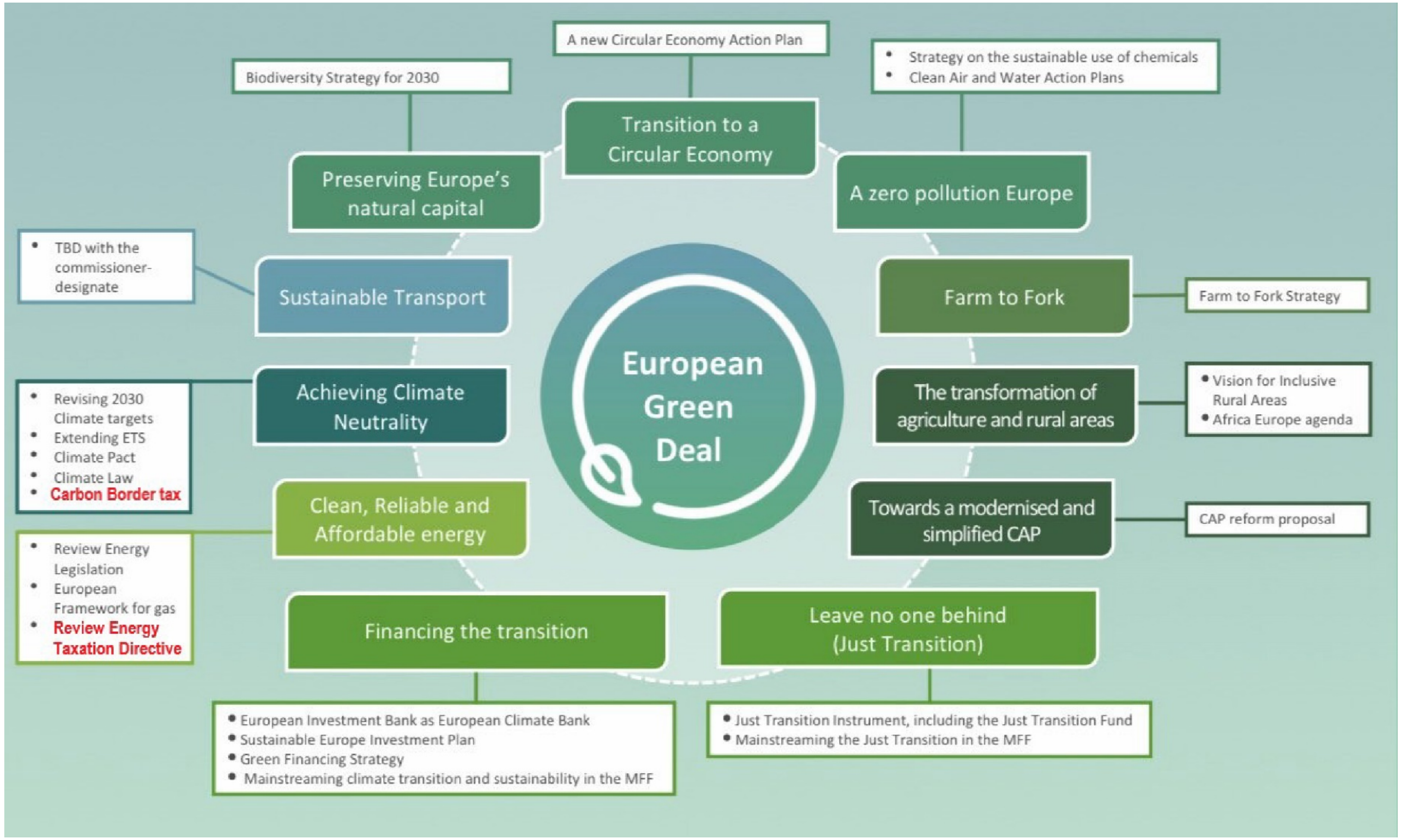
1. UK Plastic Levy from 2022 cf EU plastic tax
2. EU Green Deal
3. Post pandemic taxation

Case Study #1: EU Green Deal: Carbon Border Adjustment Mechanism (CBAM)

Warwick Ryan

Global Leader, Virtual Center of Excellence (VCOE) for Excise and Environmental Taxes, KPMG International

Case Study #1: EU Green Deal: Workstreams



David Boublil DG, Taxud, EC https://www.vleva.eu/nl/economisch-beleid/handel/events/carbon-border-adjustment-mechanism-en-de-impact-op-vlaanderen

Case Study #1: European Green Deal: Tax Workstreams

Green Deal
- Net zero emissions — 2050 (to be legislated)
- 50–55 percent emissions reductions from 1990 levels by 2030

Plastics tax
- Revenue collection based on non-recycled plastic consumption
- 10–15 major economies will be levied
- Each to design own Plastics Tax — different state taxes

Energy Taxation Directive (ETD)
- Revision of the current ETD — does it favor fossil fuels?
- Review of exemptions for various sectors
- Role of hydrogen in future fuels policy

Carbon Border Adjustment Mechanism (CBAM)
- 4 options for reducing the risk of carbon leakage
- Aim: ensure equivalent carbon costs between imports and locally produced goods

Emission Trading System (ETS)
- Pricing of carbon inside the EU
- Some sectors regulated through the ETS — floating carbon price

EU Carbon Border Adjustment Mechanism (CBAM)

Options — Consultation process — submissions due end Oct 2020

1	**Border tax**	**Customs duty**	Imported products with embedded carbon
			OR
2	**ETS**	**Extended to imports**	Require purchase of emissions allowances (producer or importer)
			OR
3	**Ex-ETS Allowances**	**Obligation to purchase allowances**	Outside ETS, dedicated to imports. Mirror ETS price
			OR
4	**Carbon tax**	**Excise or VAT style**	Apply to European production + imports

CBAM: Sector coverage — possible ambit

The Consultation Document nominates more than 127 economic activities and processes (Level 3 NACE (rev. 2)* for possible coverage by the CBAM as follows:

A. Agriculture, forestry and fishing — 13 sectors

B. Mining and quarrying — 10 sectors

C. Manufacturing — 95 sectors

D. Electricity, gas, steam and air conditioning supply — 3 sectors

E. Water collection, treatment and supply — 6 sectors.

* Statistical classification of economic activities in the European Community (NACE)

Resources

Questionnaire Page 7

a. The EU Green Deal

b. The European Climate Policy

c. The Paris Agreement on climate change

d. The UN Sustainable Development Goals

e. The EU Emissions Trading System (ETS)

f. The EU Energy Union

g. The New Industrial Strategy for Europe

h. The proposed, by the European Commission, Recovery Plan for Europe and the new recovery instrument Next Generation EU

i. The World Trade Organisation rules and EU's trade agreements

https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12228-Carbon-Border-Adjustment-Mechanism

Impact Assessment — Consultation closed

Public Consultation Questionnaire — due 28th October 2020

Case Study #2: China VAT refund policy

Lucy Lin

Senior Manager, Indirect Tax, KPMG China

Case Study #2: China's VAT system — general principles

VAT rates:

- 0 percent (exports).
- 6 percent (modern services).
- 9 percent (transportation, sales and leasing of immovable properties, basic telecommunications).
- 13 percent (goods, leasing of tangible goods).

Historically, there was no refund of excess input VAT credits, except for exports.

Exports of goods are zero rated, however "zero rating" in this context means:

- No output VAT payable.
- Refunds of excess input VAT credits used in exporting are limited by reference to the particular 'refund rates'.
- VAT refund rates are currently either 0 percent (i.e. no refund), 9 percent (partial refund) or 13 percent (full refund).
- VAT refund rates are regularly adjusted by the government to reflect China's economic policies of the time.
- The particular VAT refund rate which applies is determined by reference to the HS code of the goods being exported.

Further principles

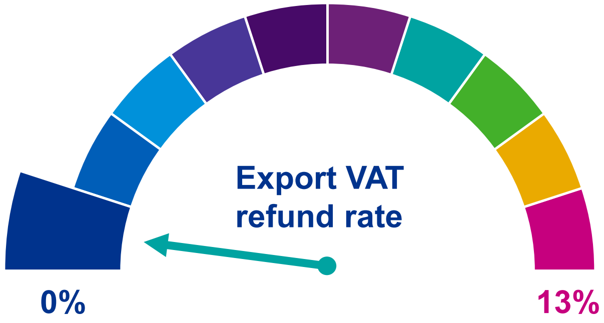
- If a business is selling domestically, then they typically get a full VAT credit for expenses, but not a refund of excess credits (until recently, when the government has trialed a limited refund scheme).
- If a business is selling domestically and exporting too, then there is effectively a mechanism to split the refundable v non-refundable credits.

Case Study #2: China's VAT system – exports of goods

As noted, the VAT refund rates differ depending on the HS customs code of the goods

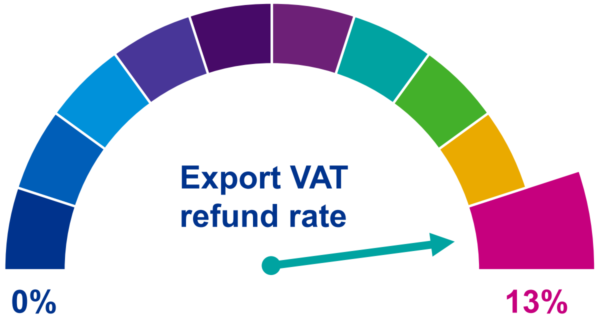
According to China's National Development and Reform Commission, the VAT refund rates aim at controlling "export of energy-intensive, pollution-intensive and resource-intensive products, so as to formulate an import and export structure favorable to promote a cleaner and optimal energy mix" (NDRC, China's National Climate Change Programme, 2007)

Examples of the policy working:



Ecologically destructive goods

- Coal (HS#2701****)
- Lead-Acid Battery (HS#85079010)

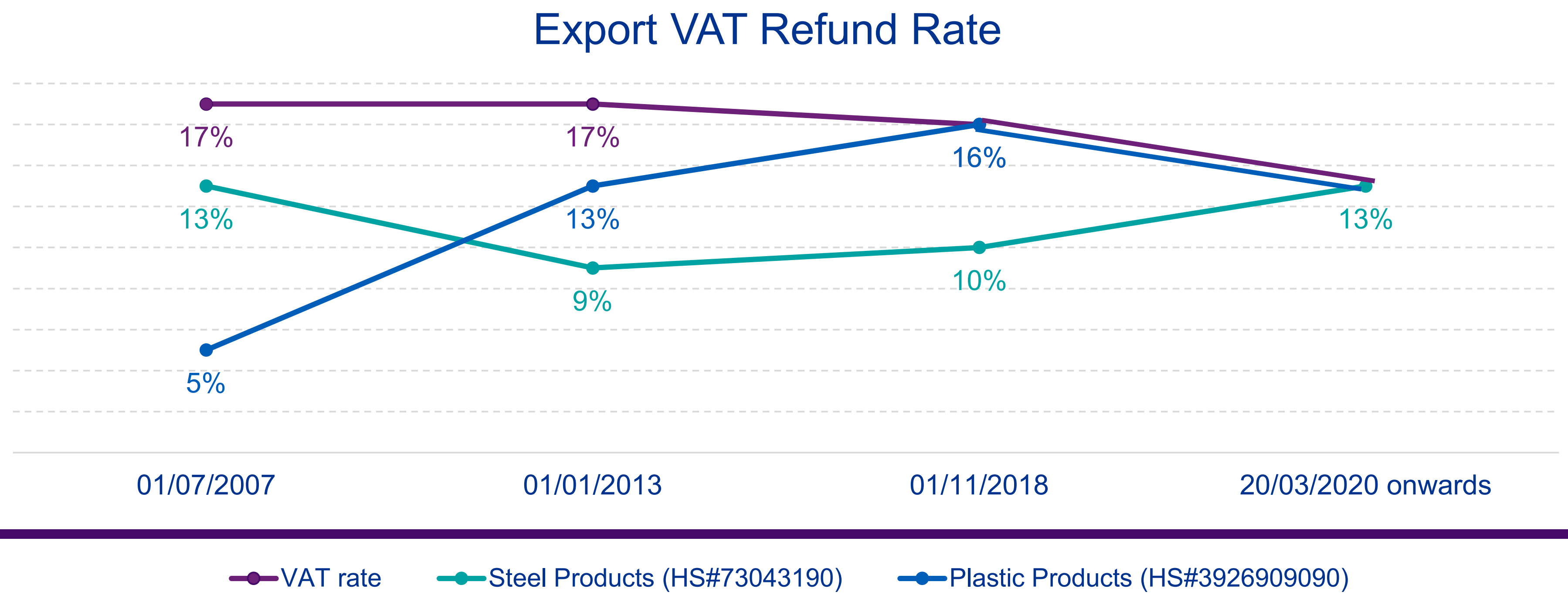


Environmental friendly goods

- Wind Power Equipment (HS#85023100)
- New Energy Vehicles (HS#87038000)

Case Study #2: China's VAT system – exports of goods

However, in recent times the policies have been less 'pure' in promoting energy efficient products in favor of broader economic considerations:



Note: In the above chart, we have listed out significant VAT refund rate changes for illustration.

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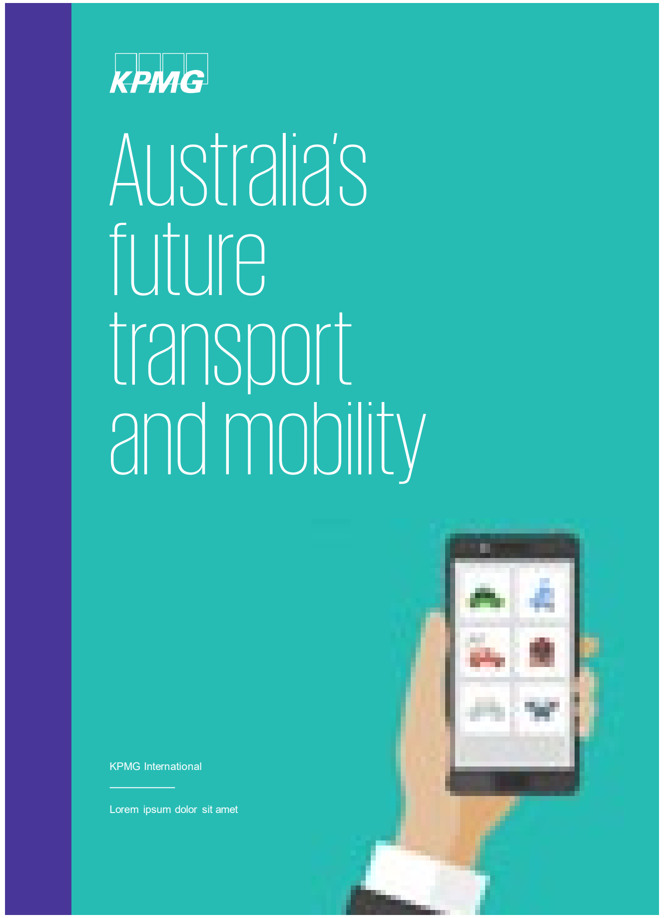
Case Study #3: Transport mobility — environmental taxes of the future

Warwick Ryan

Global Leader, Virtual Center of Excellence (VCOE) for Excise and Environmental Taxes, KPMG International

Case Study #3 : Mobility — Environmental taxes — the future



Governments generate significant **revenue** from vehicles: fuel excise, stamp duty, registration and driver license fees etc.

They also direct substantial **expenditure** to transport-related infrastructure, such as roads and public transport, and services, such as road safety.

KPMG modelling found that the emergence and uptake of Autonomous Vehicles (AVs), zero emission and Electric Vehicles (EVs) could result in **USD$36 billion pa revenue loss to Australian Governments (by 2045–46)**.

FUTURE: The environmental tax policy challenges to replace that lost revenue are enormous …

Alternative instruments:

- Other taxes on transport fuels
- Registration taxes based on CO^2 emissions
- Annual circulation taxes (directly hypothecated)
- Road tolls/vignette systems
- Congestion charging
- Air pollution charging

Questions?

Q&A

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Thank you

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