



cutting through complexity

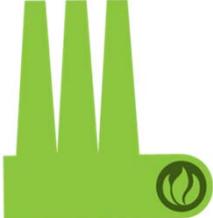
Introduction to the ***KPMG Green Tax Index***

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Sustainability challenges facing governments

Climate Change 	Energy & Fuel 	Material Resource Scarcity 	Water Scarcity 	Population Growth 
Wealth 	Urbanization 	Food Security 	Ecosystem Decline 	Deforestation 

Tax used increasingly as a green policy tool



KPMG Green Tax Index: why?

- Global green tax landscape expanding
- Not all tax teams aware
- ROI can improve dramatically after green tax analysis
- KPMG Green Tax Index to raise awareness
- Encourage tax, finance, operations, sustainability to work together
- Minimize financial exposure to green tax penalties
- Maximize benefits from available incentives



The KPMG Green Tax Index: what?

- Broad indication of governments most active in using tax as green policy tool
- Analysis of green tax penalties and incentives in 21 major economies
- Ranks countries by the extent to which they use tax to drive sustainable business and achieve green policy goals.
- Overall ranking of 21 countries
- Incentives-only and penalties-only rankings
- Top countries using tax to address:
 - Carbon and climate change
 - Green innovation
 - Energy efficiency
 - Renewable energy and fuels
 - Water efficiency
 - Material resource efficiency and waste management
 - Green vehicles
 - Green buildings
 - Pollution control and ecosystem protection.

The KPMG Green Tax Index: methodology

Tax/incentive type	Points
Carbon tax	4
Tax credits: green specific	3
R&D tax credits: green specific	3
Other tax penalties with direct green application	2
National/international carbon cap and trade system	2
Capital allowances/accelerated depreciation/deductions: green specific	2
R&D tax deductions/accelerated depreciation: green specific	2
General R&D tax incentives: not green specific but for which green innovation projects are eligible	1
Indirect tax incentives, e.g. VAT, excise taxes, customs duty	1
Other green specific tax benefits with limited application (e.g. limited flexibility or short term application)	1
Sub-national carbon cap and trade system	0.5
Existence of sub-national incentives in any category	0.5

Scores indicative, not absolute

- Tax penalties weighted most heavily
- Incentive claim process; long/short term availability and flexibility taken into account
- Tax credits score higher than deductions and capital allowances
- Focus on measures for medium/large business not SMEs or individuals
- Focus on federal tax codes (non-tax instruments not scored)

The KPMG Green Tax Index

OVERALL RANKING	
US	1
Japan	2
UK	3
France	4
South Korea	5
China	6
Ireland	7
Netherlands	8
Belgium	9
India	10
Spain	11
Canada	11
South Africa	13
Singapore	14
Finland	15
Germany	15
Australia	17
Brazil	18
Argentina	19
Mexico	20
Russia	21

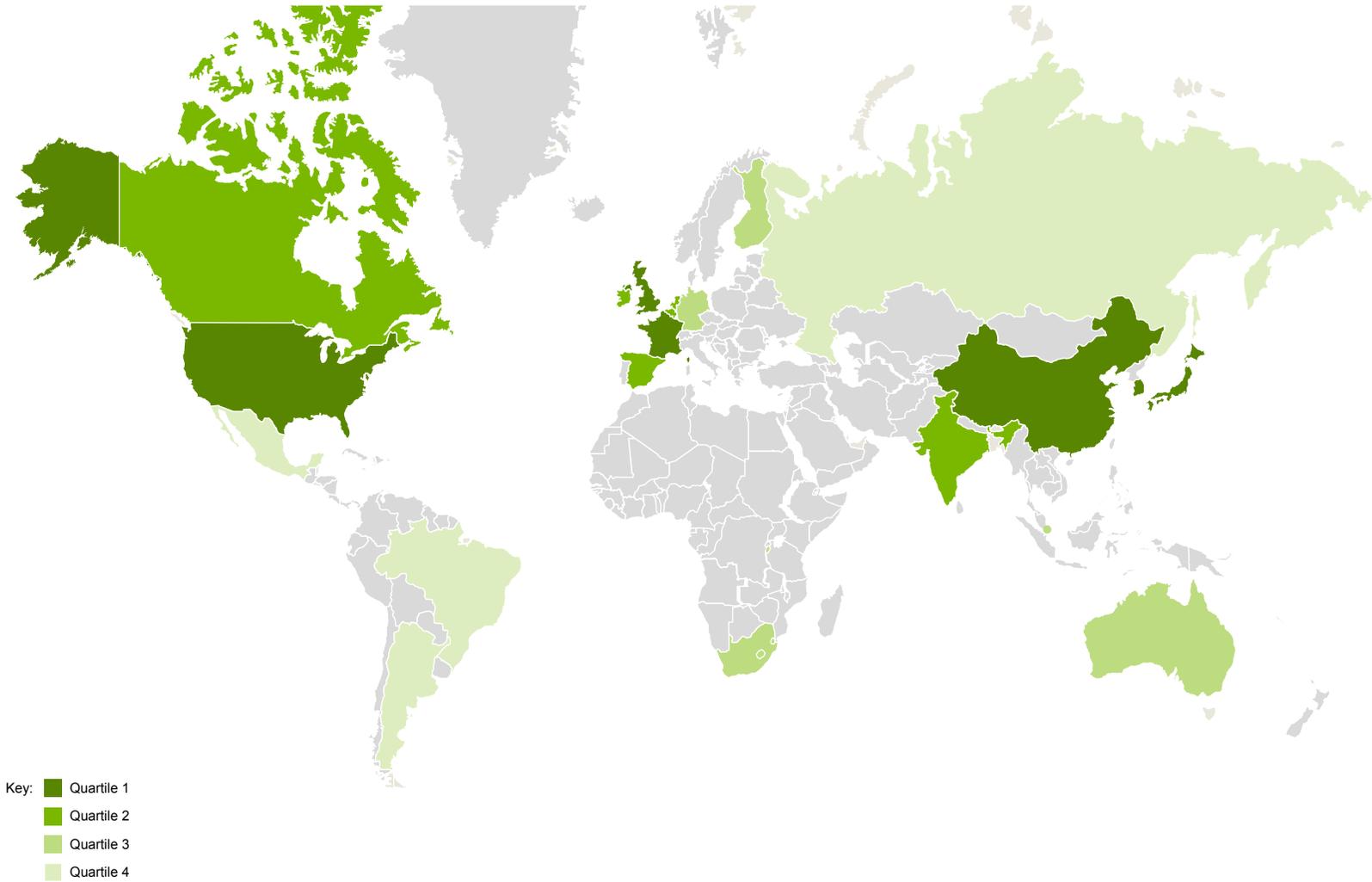
TAX INCENTIVES ONLY	
US	1
South Korea	2
China	3
India	4
UK	5
Canada	6
Netherlands	6
Japan	8
Ireland	9
Belgium	10
Singapore	11
Brazil	12
South Africa	12
Argentina	14
Spain	15
France	16
Germany	17
Mexico	18
Australia	19
Russia	20
Finland	21

TAX PENALTIES ONLY	
France	1
Japan	2
UK	3
Finland	4
China	5
Ireland	6
Spain	6
Australia	6
Netherlands	6
South Korea	9
South Africa	9
Belgium	9
Germany	9
US	14
Singapore	15
Canada	16
Russia	17
India	17
Argentina	19
Brazil	19
Mexico	19

The KPMG Green Tax Index: Quartiles

Quartile 1	US, Japan, UK, France, South Korea, China	<ul style="list-style-type: none"> ■ Highest use of green tax ■ Sheer number of incentives and penalties places in Quartile 1 ■ USA and South Korea weighted towards incentives ■ France weighted towards penalties ■ Japan, UK and China balanced between incentives and penalties
Quartile 2	Ireland, Netherlands, Belgium, India, Canada, Spain	<ul style="list-style-type: none"> ■ Medium to high use of green tax ■ Wealth of wind, solar and water resources can help to encourage investment in green technology
Quartile 3	Australia, South Africa, Germany, Finland, Singapore	<ul style="list-style-type: none"> ■ Moderate use of green tax ■ Strong use of non-tax funding eg. significant grant programs in Australia (ARENA), Finland (Tekes) and Singapore (GREET)
Quartile 4	Brazil, Argentina, Mexico, Russia	<ul style="list-style-type: none"> ■ Relatively low use of use tax as a green policy tool ■ Only 1 of the 4 has a green tax penalty (Russia's water tax). ■ Other funding programs may be used eg. Argentina's feed-in tariffs Program, Brazil's FUNTEC R&D grants

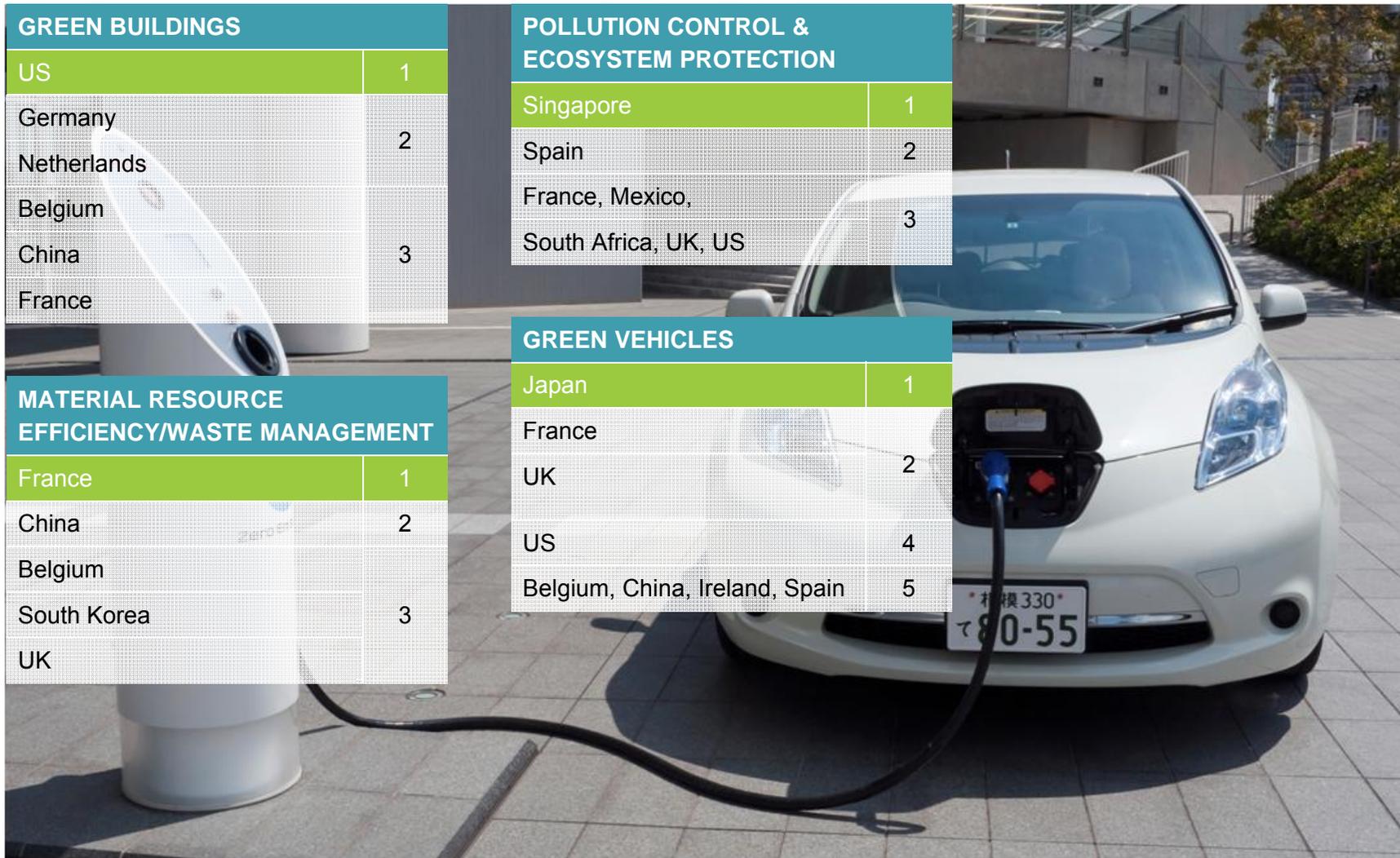
The KPMG Green Tax Index: Quartiles



The KPMG Green Tax Index

ENERGY EFFICIENCY		RENEWABLE ENERGY & FUELS	
Netherlands	1	US	1
Germany	2	Japan	2
Singapore	2	Canada	3
China, Russia, South Africa, US	4	India	4
		Ireland	4
CARBON & CLIMATE CHANGE		WATER EFFICIENCY	
UK	1	South Korea	1
Australia, Finland, Korea	2	China	2
China	5	South Africa	3
		UK	3
		Belgium	3
		Russia	5
		Singapore	5
GREEN INNOVATION			
South Korea	1		
Canada	2		
Brazil	3		
Argentina, Belgium, France, US	4		

The KPMG Green Tax Index



GREEN BUILDINGS	
US	1
Germany	2
Netherlands	2
Belgium	3
China	3
France	

POLLUTION CONTROL & ECOSYSTEM PROTECTION	
Singapore	1
Spain	2
France, Mexico, South Africa, UK, US	3

MATERIAL RESOURCE EFFICIENCY/WASTE MANAGEMENT	
France	1
China	2
Belgium	3
South Korea	3
UK	

GREEN VEHICLES	
Japan	1
France	2
UK	2
US	4
Belgium, China, Ireland, Spain	5

KPMG member firm case studies

US

Multinational consumer products company

Planned investment in R&D facility

Opportunities approx US\$30m identified

Energy credits, R&D tax deductions and credits, fixed assets, other incentives

US

Large software company

Review of energy-efficient data centers and production facilities

Approx US\$40m opportunities

Energy-efficient building deductions, R&D deductions and credits, other deductions

SOUTH AFRICA

Assisted a client to apply for tax allowance for bio-diesel manufacturing plant

Project approved by South Africa's Department of Trade and Industry

Greenfield project with preferred status

Net tax benefit of ZAR252 million (US\$28.5 million).

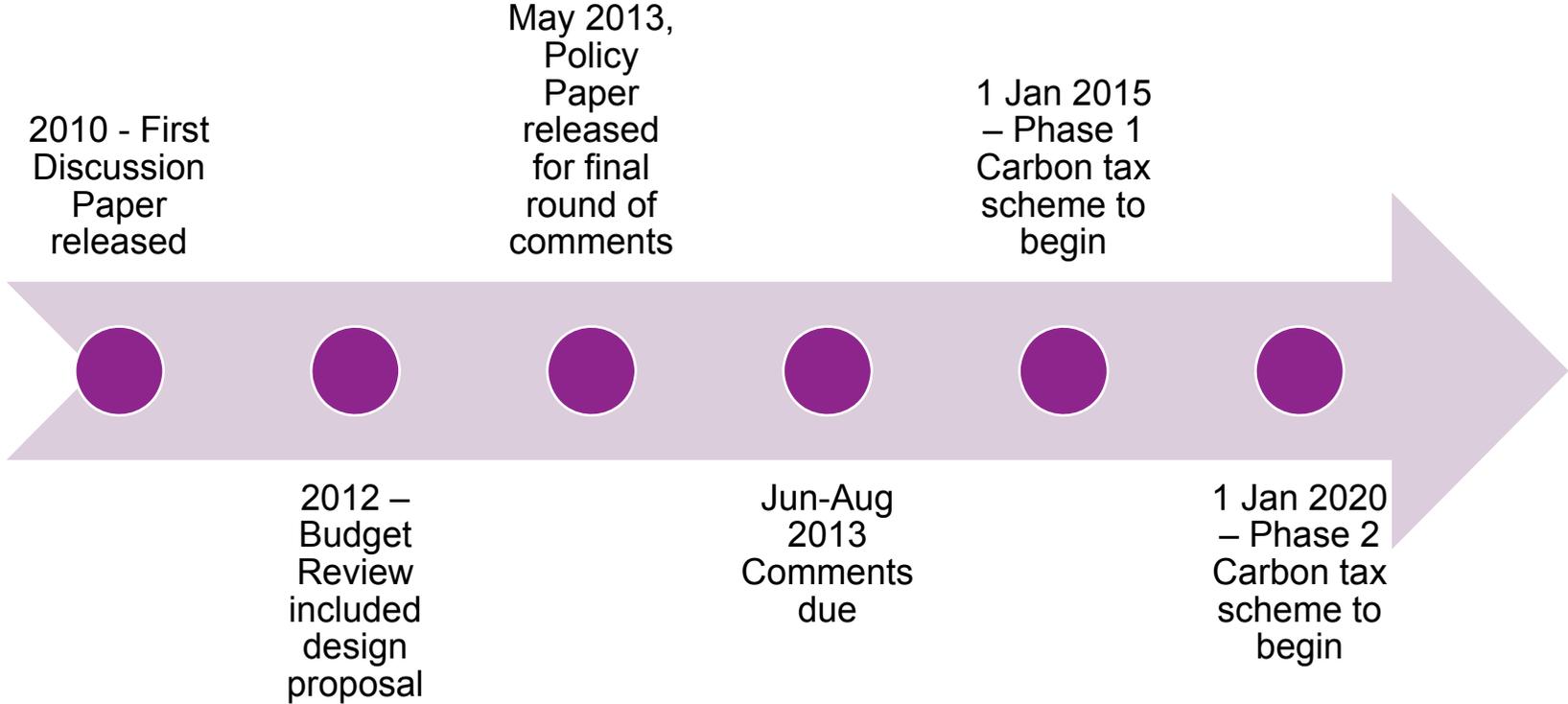


The KPMG Green Tax Index: actions

1. Monitoring system.
2. Review responses to green tax penalties
3. Review projects in pipeline
4. Calculate ROI of sustainability programs after-tax
5. Enhance understanding of green tax opportunities across the business
6. Engage with governments and industry associations



Timing of the carbon tax



Design of the carbon tax

Timing

- The first five year phase of the tax will begin 1 January 2015 and end 31 Dec 2019
- A second phase will follow, with less lenient allowances, to be determined

Rate of tax

- The tax will initially be levied at R120 per tonne of CO2 and will increase by 10% a year for the first five year phase

Scope and coverage

- A company's direct carbon tax liability will be limited to its Scope 1 emissions
- Treasury has opted for a fuel input tax
- The electricity sector is also covered by the tax and is very likely to pass the cost on
- Only companies with emissions greater than 100 000 tonnes will be covered

Basic free allowances

- Business across all sectors will be given a free allowance to the amount of 60% of their annual Scope 1 emissions
- These free allowances will be reduced in the second phase

Design of the carbon tax

Industry benchmarks

- A benchmark of carbon emissions per unit of output will be defined for each sector
- Companies that perform better than the benchmark (ie. Emit less CO2 per unit of output than the benchmark) will receive additional tax free allowances
- Those performing worse than the standard will have their allowances reduced
- This mechanism is limited to 5% above or below the basic free allowance

Additional free allowances based on trade exposure

- Some sectors may be able to claim a further allowance of up to 10% based on their level of exposure to international trade, determined by a calculation of import and export exposure
- This is an attempt to ensure that the carbon tax does not erode South Africa's trade competitiveness

Additional free allowances based on process emissions

- Sectors where activities result in 'process' emissions qualify for a further 10% additional free allowances
- Waste and agriculture sectors receive 40% allowance for process emissions, effectively making them exempt from the tax

Offsets

- Offsets are allowed to be used to meet 5-10% of the compliance obligations of companies in certain sectors
- A local system will be designed for offsets

Carbon Tax

- **The proposed Carbon tax:**

- Policy paper released for second round of comments on 2 May 2013: Issues to consider:
 1. Revenue recycling options – Other than tax shifting? Neutral result for economy?
 2. Tax shifting – “An appropriate balance should be struck between the abovementioned budget support measures, tax incentives and possible tax shifting. Some of these options were considered when the economic impact of a carbon tax was modelled. It might also be that a carbon tax could either delay or even prevent increases in income tax or other taxes as part of an environmental fiscal reform agenda.”
 3. Income Tax Deductibility – The General Deduction Formula
 4. IFRS and accounting – where is this reflected/disclosed and how accounted for?

Energy Efficiency – Allowances / Linked to carbon tax

- Section 12L proposes a deduction, in determining the taxable income of a taxpayer, an amount in respect of energy efficiency savings by the taxpayer with regard to that year of assessment.
 - The energy efficiency savings have to be measured and confirmed by an institution, board or body as prescribed by regulation.
 - No deduction is allowed if the taxpayer receives a concurrent governmental benefit in respect of energy efficiency savings.
 - This section, although promulgated in the Income Tax Act, has not yet come into effect. It will be effective on a date as prescribed by the Minister of Finance in the Government Gazette.
- 45c per kilowatt hour (or equivalent) of energy efficiency savings.
- Income Tax Act & The Department of Energy

Thank you