



How to drive investment in emerging clean technologies

Project finance, superannuation and tax incentives

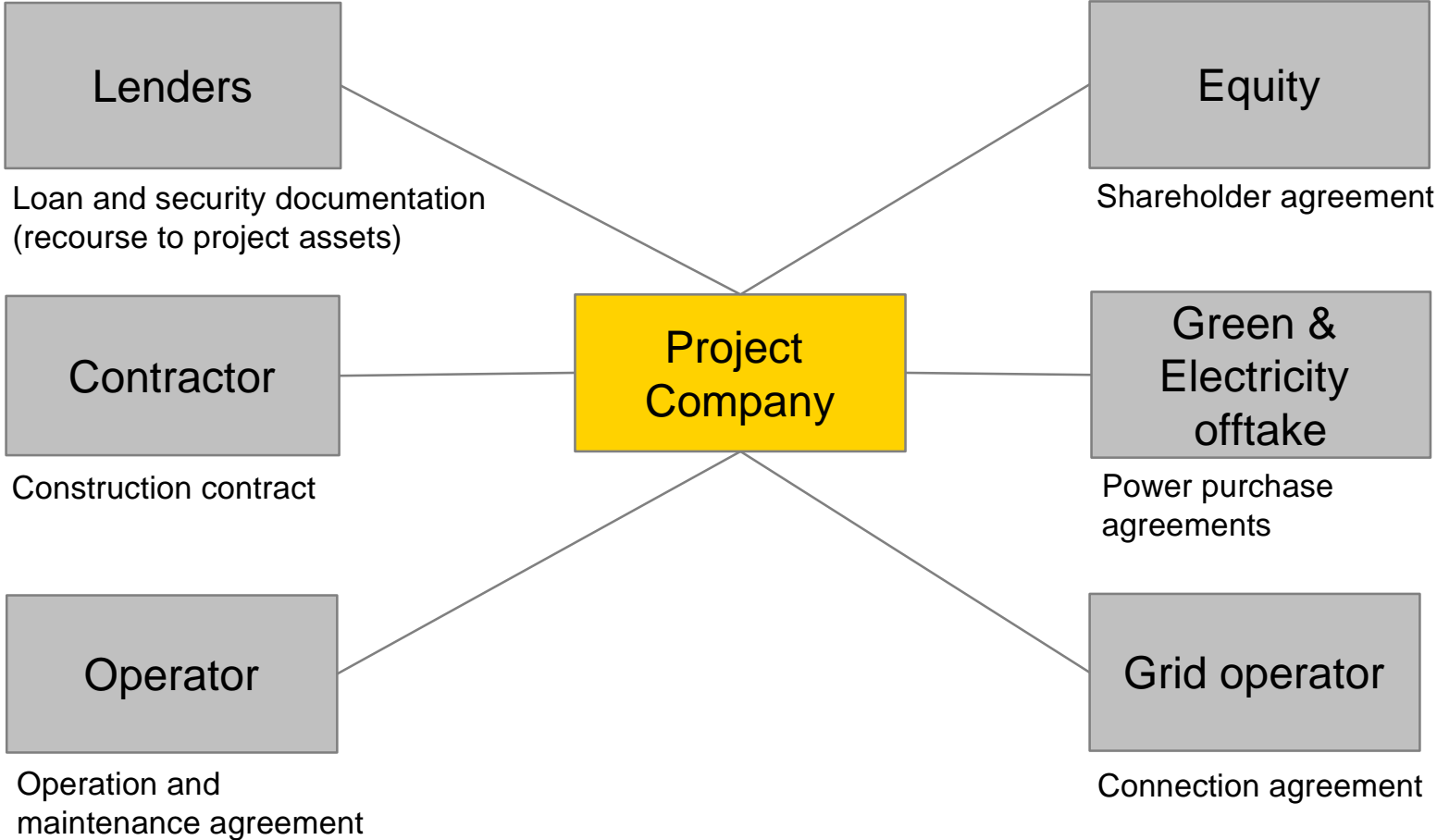
Ernst & Young's study is revealing at least 3 key levers

Exploring the conditions under which earlier project financing might occur

Boosting infrastructure investment through superannuation

Tax incentives for investor engagement

What is project financing?



What is required for a successful project financing?

Key risks	Potential mitigants
Technical/Scale up risk	Process guarantee Selection of equipment manufacturer Commissioning tests/ LD regime/warranty period
Construction	Turnkey EPC contract Technical due diligence from a bank approved expert
Market	Creditworthy off-taker for electricity and REC's Market study from bank approved expert
Operating	Experienced operator Extensive renewable resource data Energy yield assessment from a bank approved expert Appropriate site selection Grid connection agreement
Other risks	Potential mitigants
Financial	Financiers/Underwriters Interest rate and exchange rate hedging programme
Force majeure	Insurance
Licence/Title/Property rights	Legal and technical advisers Project management capability Level of government support

Current debt and equity markets

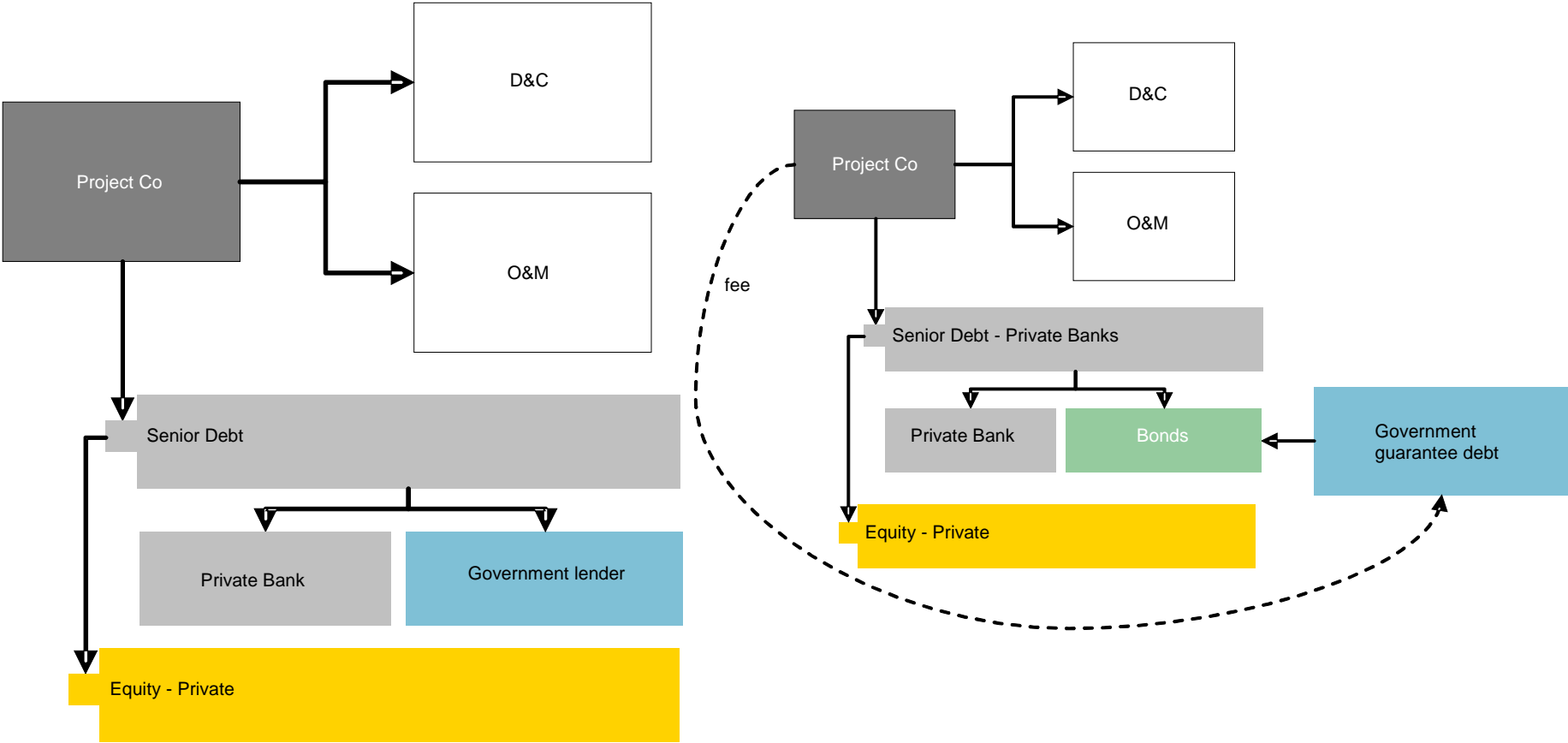
Current equity and debt investor risk appetite is extremely low

Project finance will not take technology risk

Government support will be required where technology has not been rolled out on a commercial basis

Rapid project development requires funding tied to the successful implementation of scalable low emission technology

Potential modes of Government support



Modes of support

Grants require government to pick the winners and government money invested once and for all

Feed-in tariffs – apparent lack of appetite to apply to commercial scale developments

Government loans and guarantees – potential for government to reduce or remove support when technology proven on commercial basis

Power purchase agreements – mechanisms required to allow developers to access long-term PPAs

Boosting infrastructure investment through superannuation

Superannuation funds are wary of investing further in local infrastructure assets

GFC has suppressed superannuation appetite for infrastructure investment

Direct investment in infrastructure can create liquidity issues for superannuation funds

Higher risk to invest in greenfield assets – even more to invest in commercialisation of a new technology

Boosting infrastructure investment through superannuation

Proportion of assets June 2008 – default investment options

Assets	Corporate	Industry	Public sector	Retail	Total
Australian shares	37%	30%	31%	24%	29%
International shares	24%	23%	25%	18%	23%
Listed property	4%	2%	4%	3%	3%
Unlisted property	4%	10%	6%	3%	7%
Australian fixed interest	12%	6%	6%	22%	11%
International fixed interest	7%	5%	8%	4%	6%
Cash	5%	6%	8%	16%	9%
Other assets	7%	17%	12%	9%	13%
Total	100%	100%	100%	100%	100%

Source: APRA June 2008

Boosting infrastructure investment through superannuation

There are ways available to boost superannuation investment in infrastructure:

- Infrastructure bonds to provide a modest tax incentive around qualifying infrastructure projects

- Renewables Australia to provide more clarity over project pipeline

- Long-term regulatory certainty and transparency

But superannuation funds will remain wary of greenfields risk and technology risk

Tax incentives for investor engagement

Current state

Some significant Government grants

No specific tax incentives targeted at cleantech

Ernst & Young paper *“Accelerating cleantech – Future tax measures to accelerate the delivery of clean technologies in Australia”*

Examples of tax incentives used in Australia

Incentives to encourage expenditure

- Accelerated deductions for capital expenditure
- Additional tax deductions for expenditure
- Refundable tax credits

Incentives to encourage investment

- CGT concessions / exemptions
- Tax loss flow through
- Dividend concession

Incentives to reduce overheads

- Payroll tax reductions
- Stamp duty exemptions
- Fringe Benefits Tax rebates

Lesson from previous tax incentives

Desire to invest in the underlying technology should be the primary motivation to invest or spend

The tax deduction or credit should be the bonus

Care needs to be taken to protect the revenue base

Abused tax incentives can damage reputations

Some bad examples:

- Infrastructure bonds

- Film investment funds

- Forestry investments

- Exploration farm-in arrangements

Issues to consider when approaching the Government for tax incentives

Who do the incentives need to be targeted towards?

- Established entities

- Start up entities

- Size and profile limitations

Different cash flow and value profiles

- Tax losses – only valuable where there is a tax liability

- Tax credits – valuable since refundable, however timing of refund is critical

Administration of tax incentives

Obtaining certainty

Examples of some obvious quick fixes

Extend immediate deduction for mineral and petroleum exploration to geothermal exploration

Capped or reduced effective lives for retrofitting cleantech improvements to existing buildings and other assets

Where to next?

Clean Energy Council has submitted the Ernst & Young paper to Government on behalf of all participants in the industry

Individual industry participants should consider where existing tax laws are creating a barrier to investment in cleantech and bring these to the attention of Government

Ernst & Young can assist individual participants to approach Government

Contact details

Geoff Rumble

Executive Director – Project Finance Advisory

Direct: 02 9248 5496

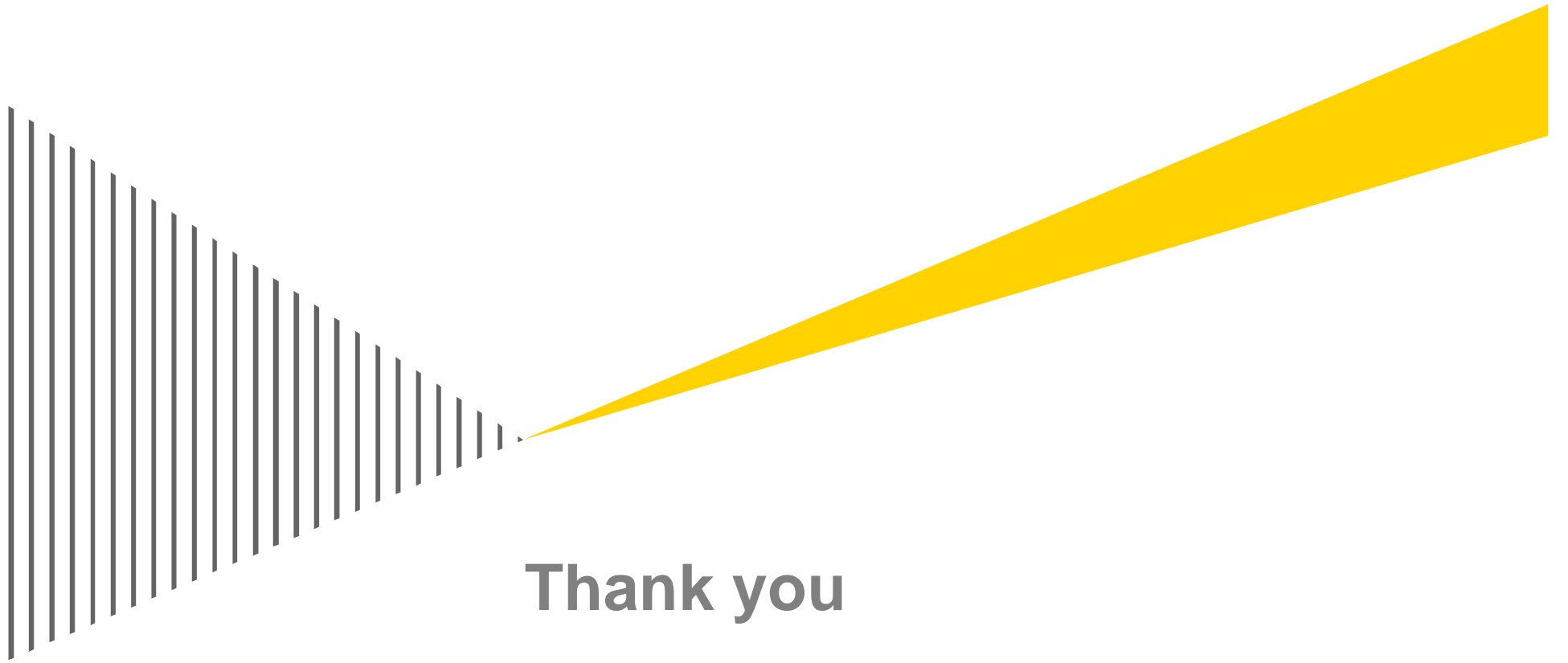
geoff.rumble@au.ey.com

Jonathan Rintoul

Executive Director – Tax

Direct: 02 9276 9256

jonathan.rintoul@au.ey.com



Thank you