

**Implementing the McKibbin
Wilcoxon Blueprint for climate policy
in
Australian States**

Warwick J McKibbin
ANU and Lowy Institute

Presentation based on:

⌘ McKibbin W.J and P.J. Wilcoxon (2002) *Climate Change Policy after Kyoto: A Blueprint for a Realistic Approach*, Brookings Institution, November

Overview

- What is the climate change policy issue?
 - Managing Uncertainty in a sustainable way
- What is the The McKibbin Wilcoxon Blueprint?
- Implementing the Blueprint at the State level within Australia

Different views on the climate debate:

- Some argue that climate change doesn't exist, that the science is wrong, that nothing should be done
- Some argue that climate change is so important that there is no cost too high to tackle the problem
- Both approaches are likely to be wrong
- A Sensible must take into account the risks as well as the costs of the responses.

Two well known climate policy responses:

- Carbon tax
- Permit trading

A carbon tax:

- A fixed price for carbon with revenue going to the government
- Emission outcome is unknown but the cost of carbon is known with certainty
- Problems
 - Tax payments are enormous
 - If optimal reduction is 20% of emissions, firms must pay tax on 80% of original output.
 - Very unpopular with industry!

Domestic permit trading:

- Quantity of emissions is certain and fixed at the quantity of permits
- Price of carbon is uncertain and depends on marginal abatement costs given the target
- Problems:
 - Price of permits (i.e. cost to the economy) might be very large and highly variable
 - Costs might substantially exceed the benefits

Are there any alternatives?

- Need a policy with best features of permits and taxes
- Like a tax:
 - Should guarantee that costs won't be excessive
- Like permits:
 - Should avoid huge transfers to the government
- Importantly it should make property rights clear over a long period and provide incentives for industry, households and governments to reduce emissions at low cost

Solution: The Blueprint (a hybrid policy)

- Each participating jurisdiction would:
 - Require that producers of primary energy within their borders have an annual emission permit for each ton of carbon embodied in their energy produced and sold domestically or imported
 - Issue perpetual emissions permits equal to a specified fraction of a base period emissions.

Solution: The Blueprint (a hybrid policy)

- Each participating jurisdiction would:
 - Be allowed to sell additional annual permits to firms within its borders at a stipulated price (\$P per ton of carbon), in a State System within Australia \$P could be \$A10 per ton of Carbon (\$A2.72 per ton of CO₂).
 - Create domestic markets in the perpetual and annual permits

Solution: The Blueprint (a hybrid policy)

- The permits can only be used in the jurisdiction of issue: no national or international trading.

Looking at the policy in more detail:

Perpetual
Permit
(Endowment)

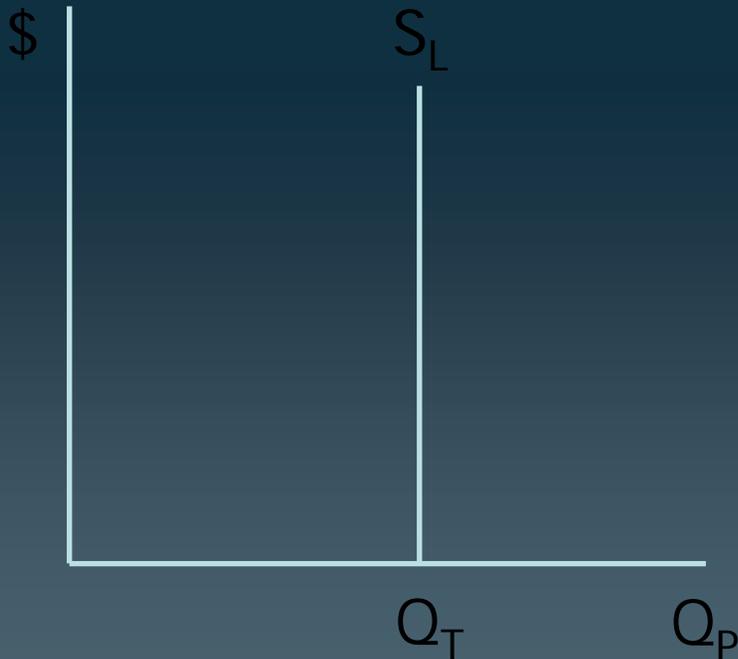
- ⌘ Allows one unit per year forever
(or for a long period)
- ⌘ Distributed once at enactment
- ⌘ Can be leased or sold within jurisdiction
- ⌘ Quantity can set by agreement: Q_T
- ⌘ Price will be set by the market

Annual
Permit

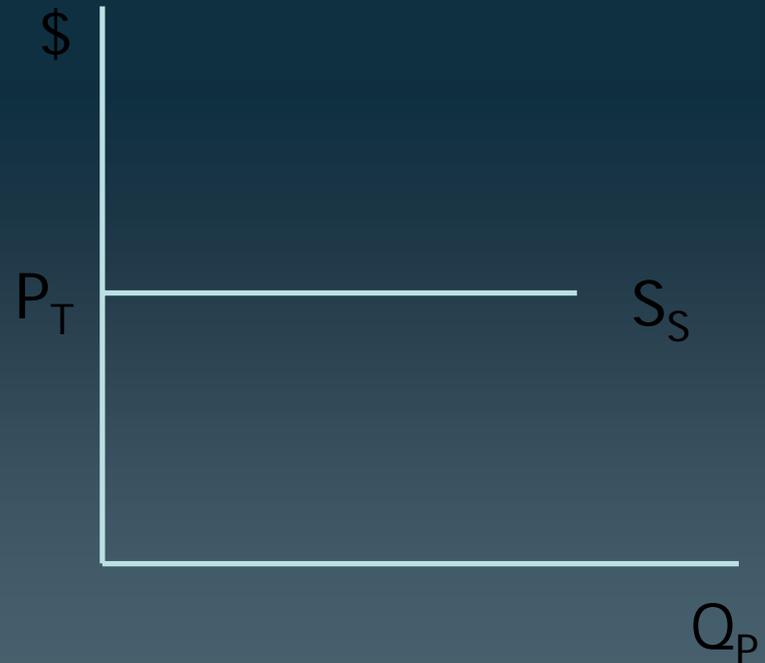
- ⌘ Allows one unit for one year
- ⌘ Sold by government as demanded
- ⌘ Price set by agreement: P_T

Supply of each type of permit (for use in a given year)

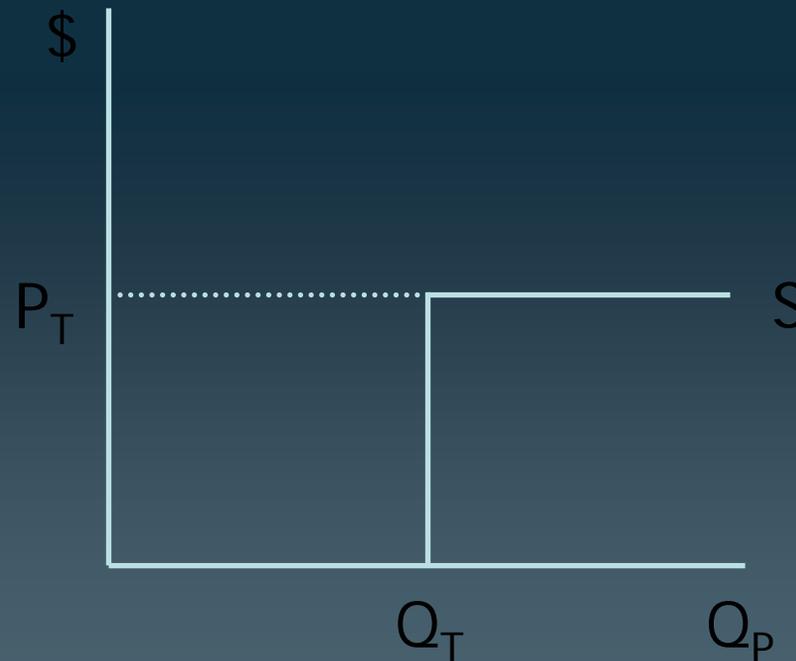
Perpetual permits for lease



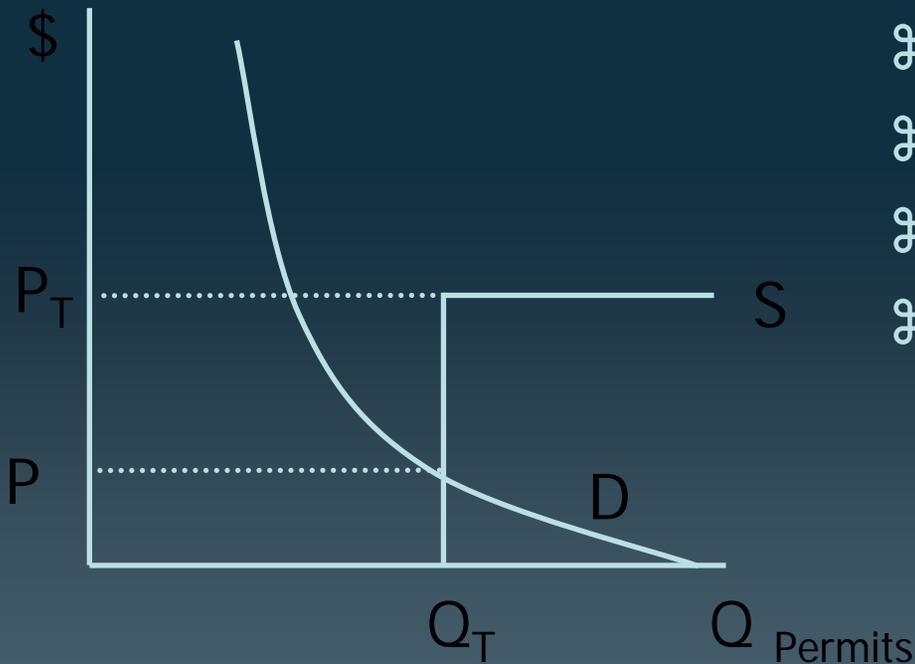
Annual permits for sale



Overall supply of permits (for use in a given year)

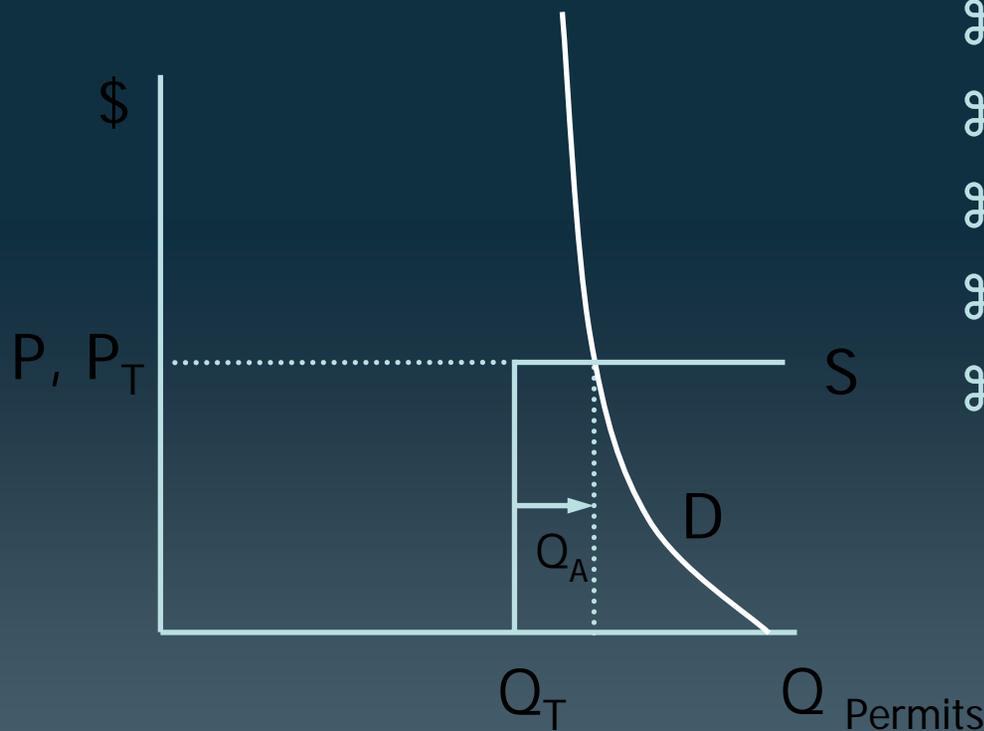


If abatement is easy:



- ⌘ MAC rise slowly
- ⌘ Low D for permits
- ⌘ P below threshold
- ⌘ No annual permits
- ⌘ Hit target Q_T

If abatement is difficult:



- ⌘ MAC rises rapidly
- ⌘ High D for permits
- ⌘ P at threshold P_T
- ⌘ Annual permits used
- ⌘ Emissions exceed Q_T

Key Points

- Each system is run within a jurisdiction using that jurisdiction's own imperfect monitoring and enforcement mechanisms and its own legal and accounting systems
- No trade in the assets outside the area
 - only local markets
 - Short run efficiency guaranteed by a common price (no need for trading outside the area)
 - Long run efficiency driven by structural change
- Incentives for all actors are internalized within the jurisdiction

Advantages of the Blueprint policy

- Guarantees that compliance costs would not be too high
- Can be justified on cost-benefit grounds
 - Current knowledge about climate risks justifies slowing emissions at low cost

Advantages of the Blueprint policy

- Avoids huge transfers to the government
 - Each government can decide how to hand out perpetual permits but once these property rights are distributed they are not revisited (like land contracts)
 - Permits act as transition relief for industries (and affected workers) and will reduce opposition
 - Also, easy for industry to understand -- like grandfathering
- Reduces emissions wherever cost-effective
 - Prudent: eliminates emissions where possible below a fixed price

More advantages ...

- Maintains sovereignty
- Provides the equivalent of a futures market (perpetual permit market)
 - Allows individual risk management

More advantages ...

- No direct transfers of wealth across state or national boundaries
 - Trading is local, rather than international
- Gives incentives for early action
 - Perpetual permits could be distributed now, even without a treaty!
 - The private sector is already doing this but property rights unclear

More advantages ...

- Built-in incentives to monitor and enforce
 - Annual permits generate government revenue
 - Owners of perpetual permits do not want permit prices to erode
- Credible
 - Less draconian than alternatives so more likely to be enforced into the future

Still more advantages ...

- Relatively easy to modify as information arrives
 - Can raise or lower the capped price as risks become better known
- Easy to add states or countries over time
 - Does not require re-negotiation of treaty
 - New states or countries don't hurt existing permit owners

Still more advantages ...

- Creates a future market in carbon (the perpetual permit market)
 - Gives a long term price signal but with a fixed short term cost

A conventional permit scheme at the State level is problematic

- Why would any State want to introduce a pure permit trading system with a flexible price without in practice having something like the Blueprint mechanism to prevent the costs rising well beyond the benefits

Summary

- The Blueprint could be implemented at the State level within Australia
- It does not require Kyoto ratification but can be made consistent with Kyoto style systems in the future.
- States can join a scheme that can easily evolve to be a national scheme by issuing their own permits and choosing the agreed price of annual permits to be common across States

Background Papers

www.sensiblepolicy.com

www.notwrong.com