



NW Region Commingled Curbside Recycling Workgroup

Markets Sessions



Goal of the Report

To optimize residential commingled curbside recycling programs and to support effective processing systems for recyclable paper, packaging, and other materials in order to:

- Provide customer, environmental, social, and economic benefits;
- Result in quality materials for return to commerce;
- Ensure public confidence in the recycling system; and
- Provide ease of use by residents.

Audience

- City and county solid waste and recycling managers (especially NW region of WA)
- Government officials and key decision makers
- Recycling educators
- Recycling companies
- Packaging designers and manufacturers

Recommendation Highlights

- Collect only materials that have viable markets, can be sorted at MRFs, and generate revenue.
- Develop one consistent education/messaging campaign to be used by ALL communities in the region.
- Develop an RFP “Tool Kit” for recycling service contracts.
- MRF operators, processors and packaging designers/product manufacturers need to talk.

Review and Comment

- **June 6** – Final draft report posted to Ecology's Commingled Workgroup website at <http://www.ecy.wa.gov/programs/swfa/commingled/nw.html>
- **Submit comments to Alli Kingfisher at Ecology by June 30, 2016**
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(509) 329-3448
- Visit the Ecology Booth for more information!

Recycling Commodity Markets Explained

An Economist's Point of
View



Discussion Objectives

- Understand Why the Price of Recycling Commodities is so Volatile
- Understand what major factors influence demand for recyclables
- Try to estimate the average value of recyclables commodities over the next five years

Givens

- All recyclers are “Price Takers”
 - None of us are large enough to set our own price

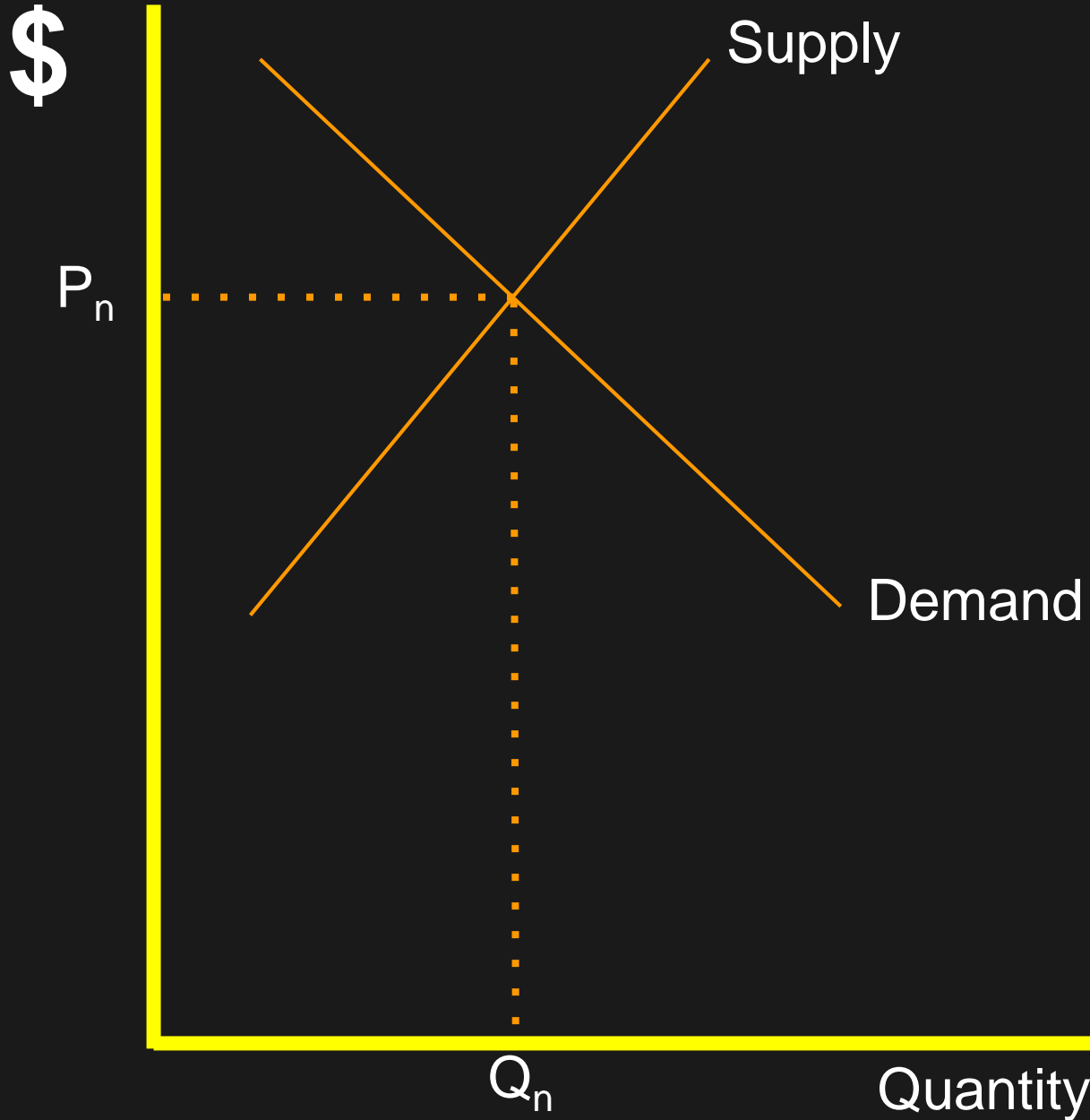
Givens

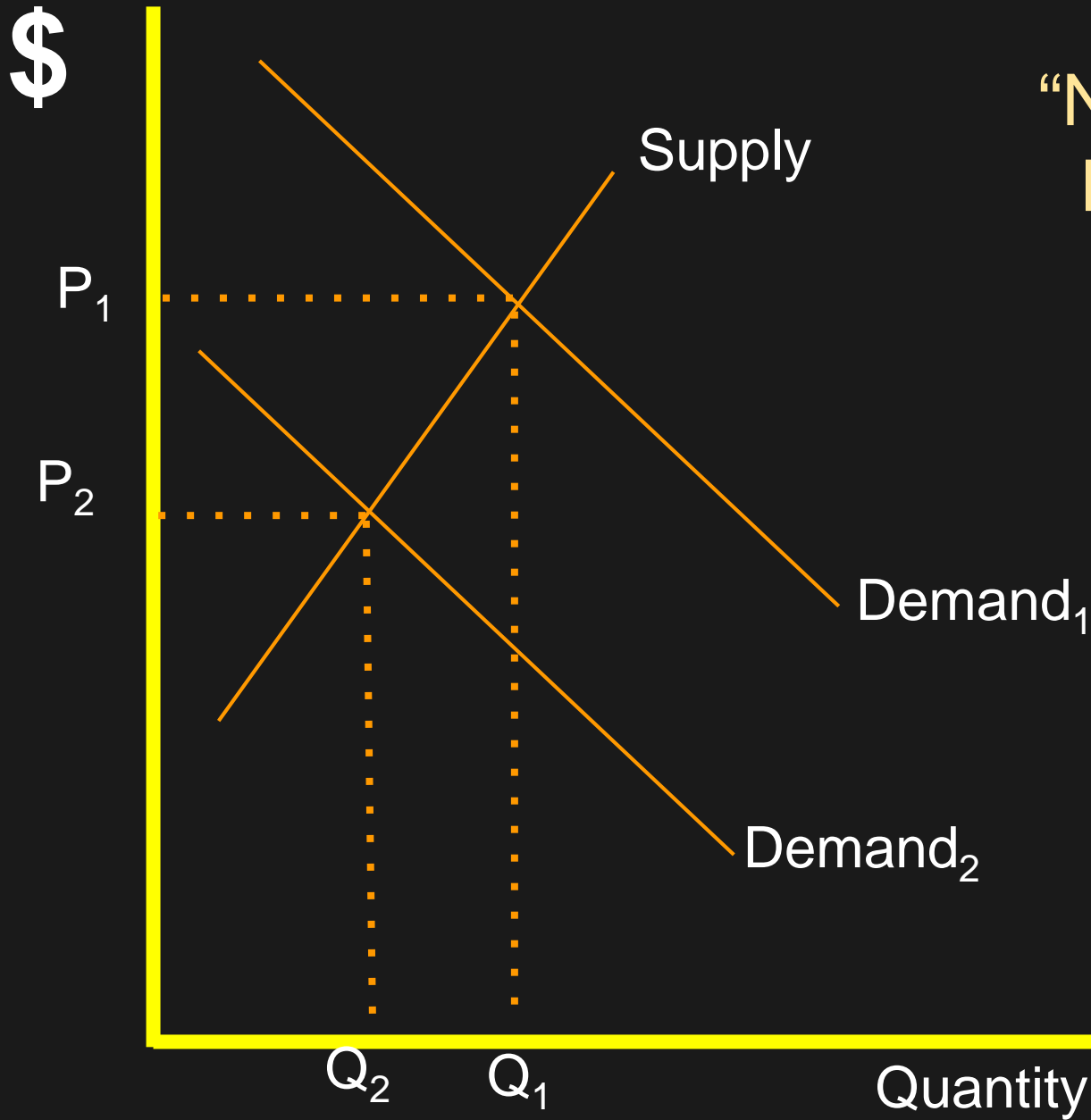
- Price is determined by the balance of supply & demand
 - In normal markets- supply adjusts to price

Givens

- With municipal recycling
 - Residential co-mingled supply is fixed!
 - Suppliers/Residences don't have any idea what the "price" is

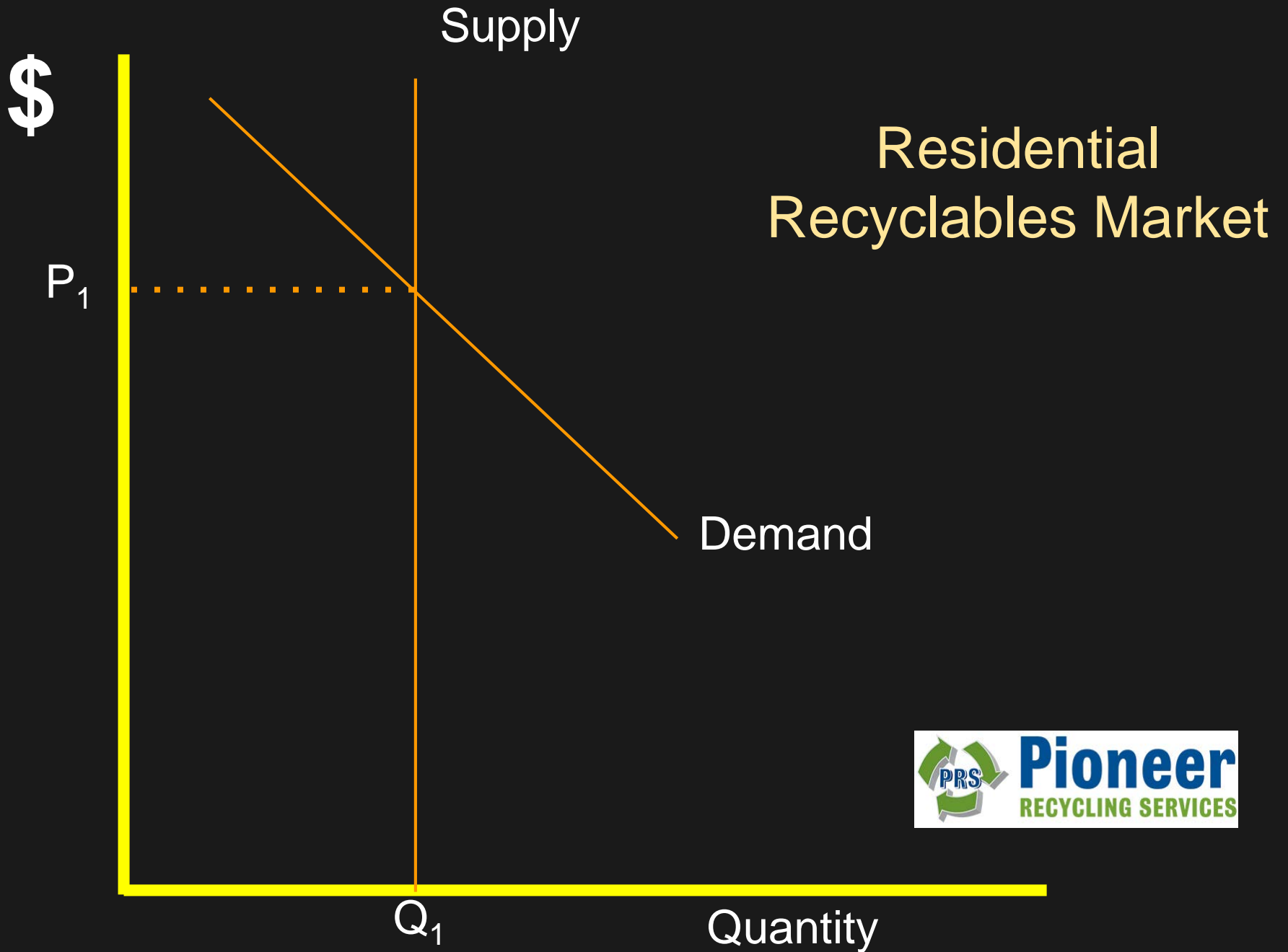
Normal Market



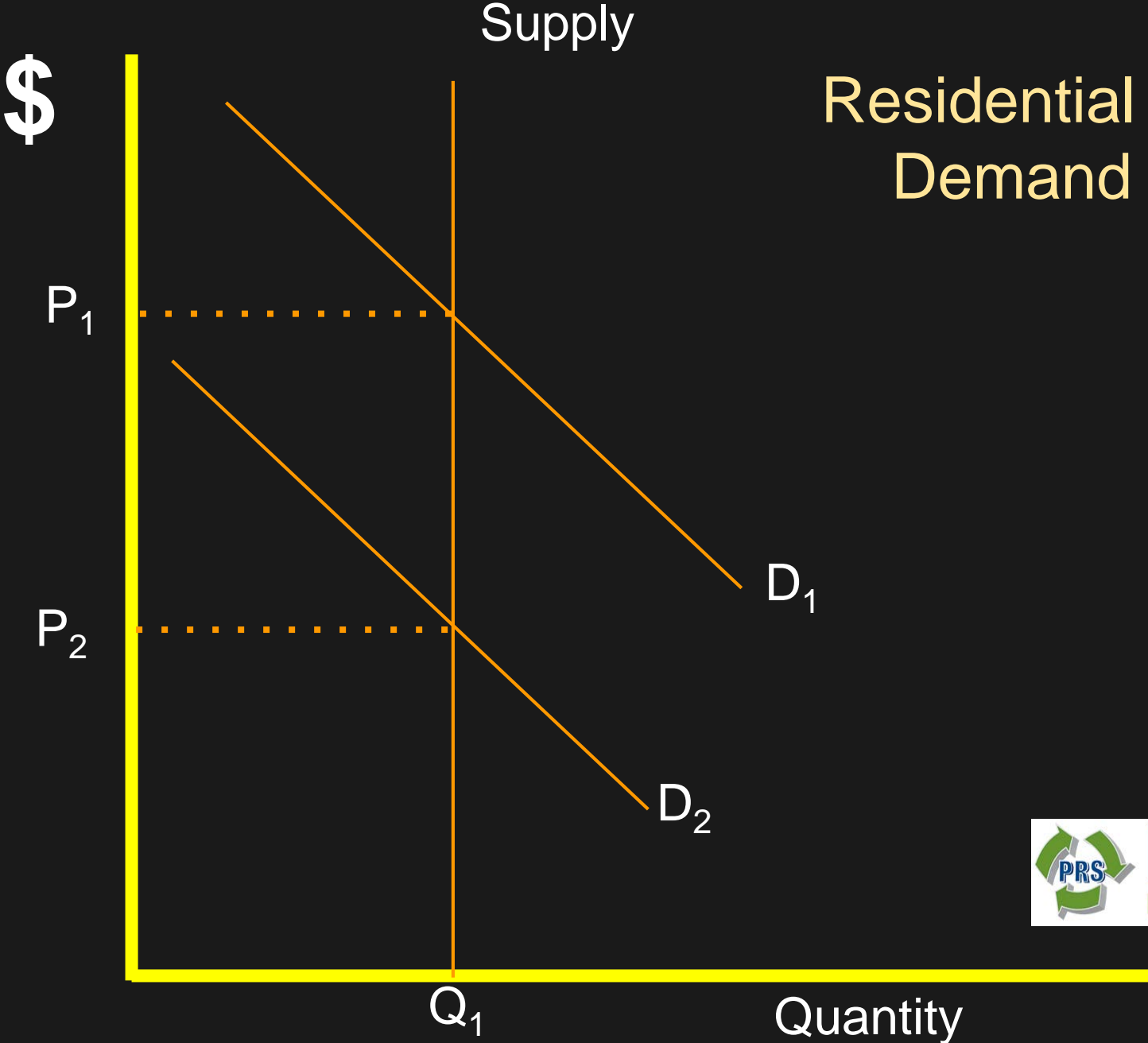


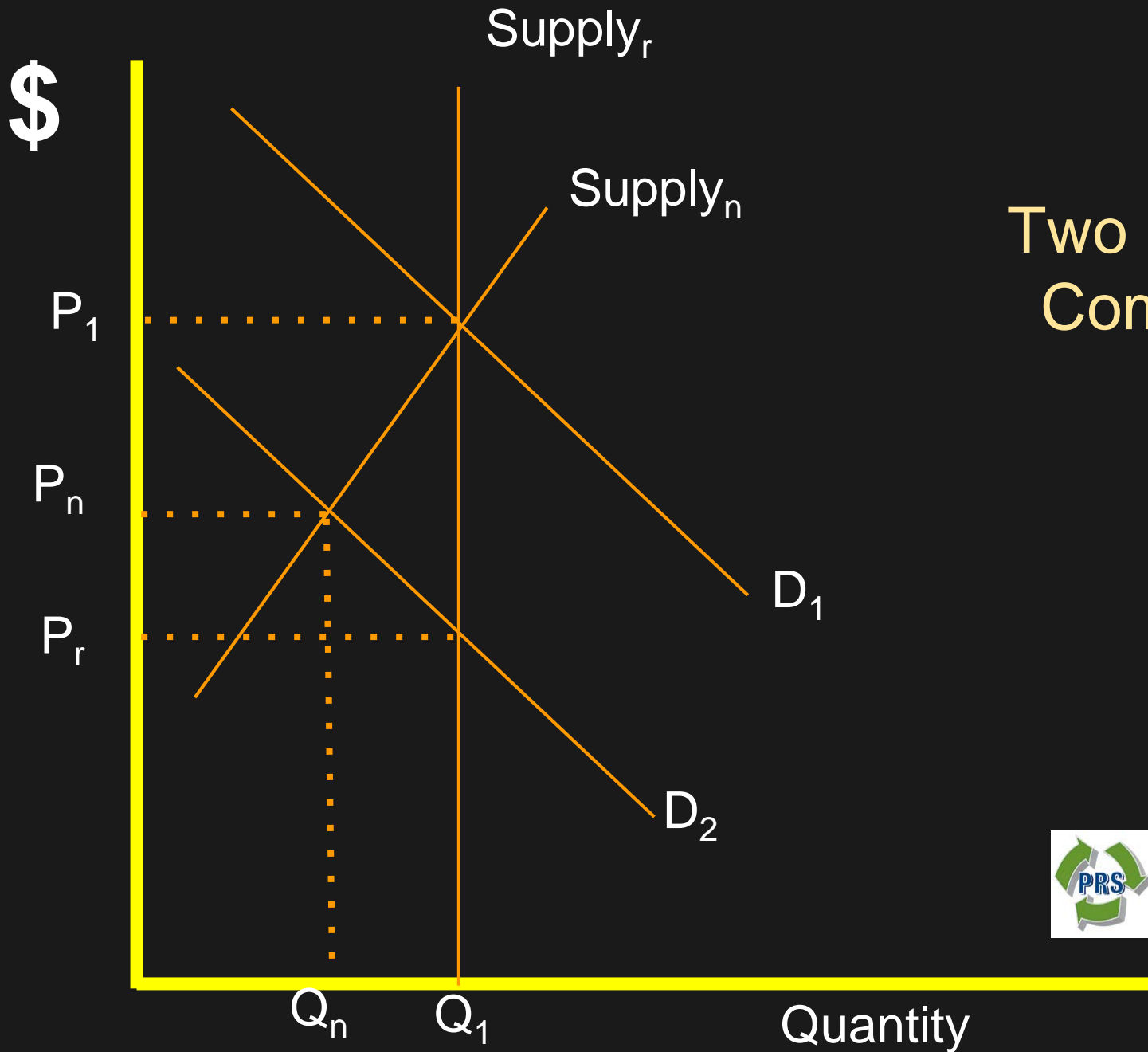
“Normal” Market Demand Shift





Residential Market Demand Shift





Two Markets Compared



Conclusions

- The fixed nature of resmix supply forces much larger changes in price as demand shifts when compared to a “normal market”
- Price volatility is the norm, stability is the exception.

Future Prices

- What Factors will influence/shift demand for recyclable commodities?

Givens

- Recyclers Operate in Global Marketplace
 - Global events can, have & will impact local pricing even though your Recycler may sell most or all material domestically
- We must think Globally to understand pricing for recyclables commodities

Major Factors Influencing Recyclable Commodity Demand

- **Currency Rates**

- A strong dollar makes exports from US more expensive relative to a buyer's other options

- 2015 Example with Europe & US

Major Factors Cont.

- **General Economic Conditions**
 - Status of Mill Customer's Local Economy(Think China)
 - Is economy growing and by how much?
 - Status of Global Economy

Major Factors cont.

- **Supply of Competing (Substitute) Materials**
 - Paper- Cost of Wood Chips vs. Recycled Paper
 - Plastics- Cost of Natural Gas and/or New Pellets vs. Recycled Plastic
 - Aluminum- Cost of New ingot vs. UBC Scrap Aluminum

Major Price Factors Cont.

- **FEAR!**
- Industry and Retail Consumers will stop spending when they feel afraid or uncertain about the future
 - Chinese Stock market decline Summer of 2015
 - US Financial Crisis of 2008-2009

What can we now predict for future pricing?

- Continued Price Volatility because the supply of comingled recyclables is fixed

Predict the Future cont.

- Relative Dollar Value- Likely to remain strong (which makes our exports of recyclables more expensive)
 - US Interest Rates are Rising
 - Foreign Interest Rates are Declining
 - Japan and EU have negative rates

Future Pricing Cont.

- Buyer Economic Conditions
 - Chinese Economy is slowing
 - Historic infrastructure build is mostly over & not likely to return
 - Current growth rate of 5-7% vs. 10-15% previously

Future Pricing Cont.

- Supply of Substitute Materials
 - Paper- Wood Chip supply increasing in Pacific NW with expansion of new construction
 - Plastic- Frackers have “cracked the code”. They can bring on new supply cheaply and quickly
 - Aluminum- New capacity in Eastern Europe and lower cost of production with drop in coal price

Future Pricing Cont.

- FEAR!
 - Always the wildcard

Future Pricing Factors Summary

- Dollar Value- Negative
- Economic Growth-Negative
- Supply of Substitute Materials-Negative
- Fear!- Wildcard

Value Trend Conclusion

- The net yield value of residential recyclables is likely to be lower over the next five years than in the previous five years.

Suggestion

- We must all prepare for a future where the value of residential recyclables does not cover the cost of transportation and processing for significant periods of time.
- Please educate your decision makers about this new reality!

Three Key Points To Remember

- Residential Supply is Fixed- Volatile Pricing is the Norm
- Recyclable Commodities are priced globally- Our local economy is not a good indicator of pricing
- Recyclable Commodity pricing appears likely to be lower, on average, than in the past



Final Thought & Quiz Question

- Why did your Supreme Being make Economic Forecasters?

Quiz Answer

- To make Weather Forecasters look good!