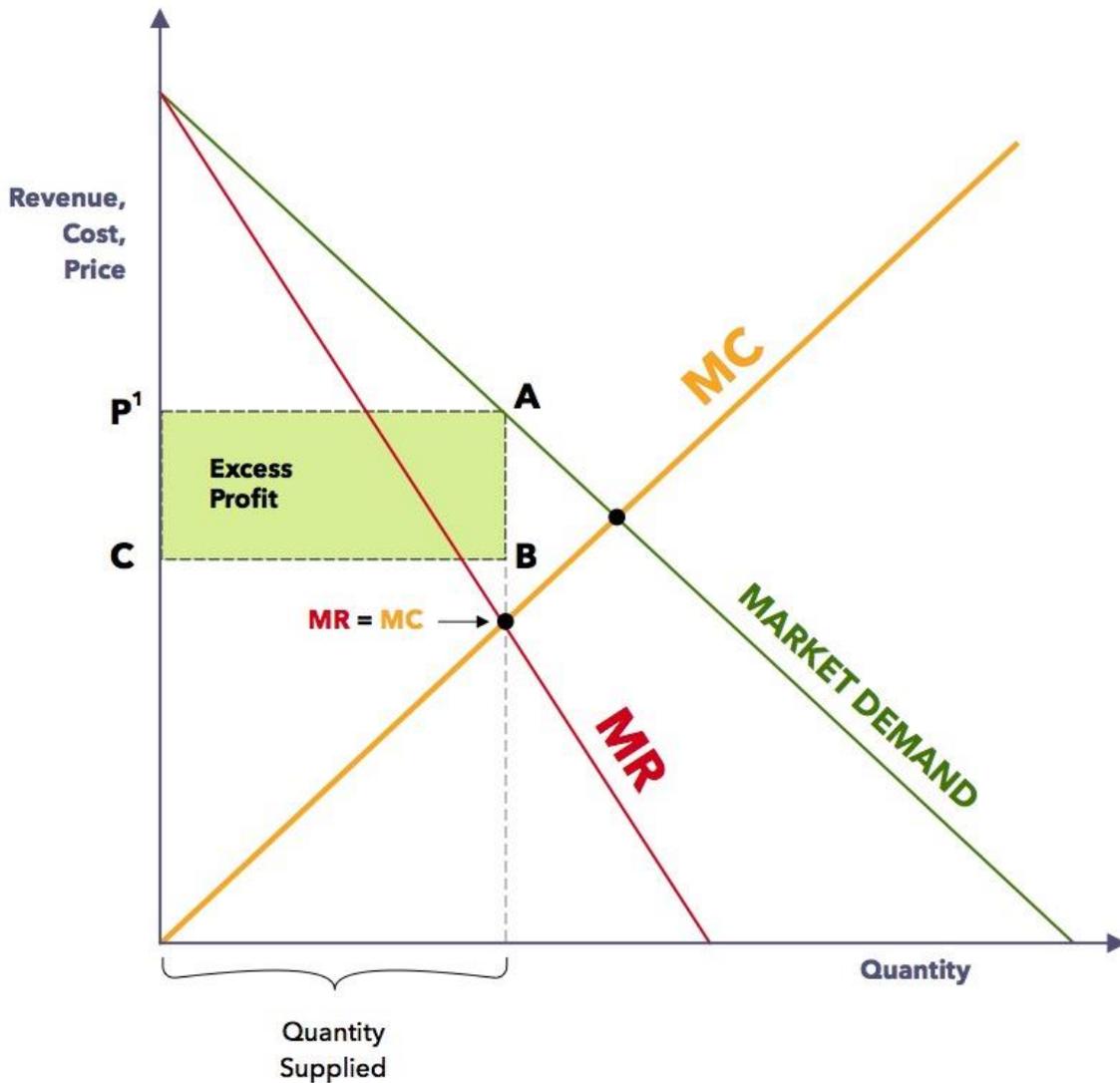


The following is information that the interveners Robyn Allan and Marc Eliesen committed to file during the Oral Workshop depicting and describing the market model and economic theory most relevant to BC's refined product market.

### Complex Monopoly Model BC Refined Product Market



In a non-competitive market—with relatively few suppliers and barriers to entry—suppliers are able to exert market power to determine price and quantity.

When there is only one supplier, the market structure is characterized as a ‘Monopoly’. When there are few sellers the market structure is characterized as an ‘Oligopoly’.

When a market relies on:

- (i) relatively few companies for supply;
- (ii) these companies have access to similar information; and
- (iii) these companies have ongoing relationships that provide insight into pricing practices;

it is in their profit maximizing interest to make decisions as if they were a single firm. The economic term for this market structure is ‘Complex Monopoly’.

**Parkland:** “Parkland confirms that wholesale pricing...is not directly related to cost of production or operation...we have described our method for determining rack prices on the basis of external pricing information...and this has no direct relation to costs.” Parkland answer to Question #2H, Exhibit C5-6, page 11.

**Suncor:** “Market prices are generally based on North American and international benchmarks (referenced daily from various independent reporting agencies, e.g Argus Media and OPIS (Oil Price Information Service). Suncor answer to Question #17, Exhibit C2-2, page 7.

Further, Suncor states, “...all of the companies have suggested the Pacific Northwest is the base price for the Vancouver rack.” Transcripts, July 18, 2019, page 351.

**Imperial:** “Factors that influence the setting of wholesale prices may include (i) relevant U.S. finished product benchmark prices...Chicago spot prices and Pacific Northwest spot prices...” Imperial answer to Question #17, Exhibit C8-2, page 6.

Suppliers of refined product to BC access the same information and look to the same US markets and markers to set their prices. As well, they regularly engage in agreements to buy and sell products from each other. They do not need to collude because the information they require to make similar pricing decisions is readily available to them. The OECD describes the behaviour as ‘conscious parallelism’. It is not illegal, as collusion would be, but it results in a similar outcome.

One of the most pronounced indications that firms behave as a ‘Complex Monopoly’ is that they often jointly raise prices at or around the same time. This is certainly the case in the BC wholesale, and to a lesser extent, retail markets.

***The gasoline and diesel market in BC is a ‘Complex Monopoly’ where few sellers regularly sell and buy refined product to and from each other to meet their retail obligations, and access the same information regarding prices, market demand and supply conditions.***

In a 'Complex Monopoly', 'Excess Profits' are realized as firms seek to maximize profits by exerting their market power and by engaging in similar pricing practices. In economic theory, 'Excess Profits' are also referred to as 'Economic Profit' or 'Supernormal Profits'.

It is important to note that in a 'Complex Monopoly' not only is price higher than it would be under a competitive market structure, **quantity supplied is less** than what it would be under a competitive market structure.

The green box in the graphic above (area P<sup>1</sup>ABC) identifies the 'Excess Profit' achieved in a 'Complex Monopoly'.

The formula for estimating 'Excess Profit' is: Quantity Supplied x (Price – Average Cost). Average Cost includes total cost plus a Reasonable Return on Investment. In economic theory cost plus investment return is also called 'Normal Profit'. 'Normal Profit' is the revenue to producers that reflect their ability to cover all costs plus a return that reflects a risk element.

In the graph above, Average Cost intersects the profit maximizing quantity at the letter 'B'. (The average total cost curve is not shown, but 'B' is where it passes through the quantity supplied.

Profit per unit (or litre) is: Price minus Average Cost (which is price as defined by 'C'). Therefore, if average cost per litre is 20 cents and wholesale price is 50 cents, the 'Excess Profit' per litre would be 30 cents. Regulating away this 'Excess Profit' or 'Excess Price'—or what is sometimes referred to as 'price gouging'—would not result in a reduction in quantity supplied since it is in the interest of the supplier to continue to supply at the same quantity until price equals average cost.

'Complex Monopolies' rely on barriers to entry. Significant barriers to entry exist in BC. The marine and rail infrastructure is limited and even if the expansion of Trans Mountain were to increase capacity for refined product deliveries (which the NEB evidentiary record indicates is not expected to occur beyond 50,000 barrels a day), the supply would continue to be delivered by the same suppliers—Suncor and Imperial. There would be no change in the concentration of the market or in how these companies continue to rely on information and relationships to maximize price beyond a competitive outcome.