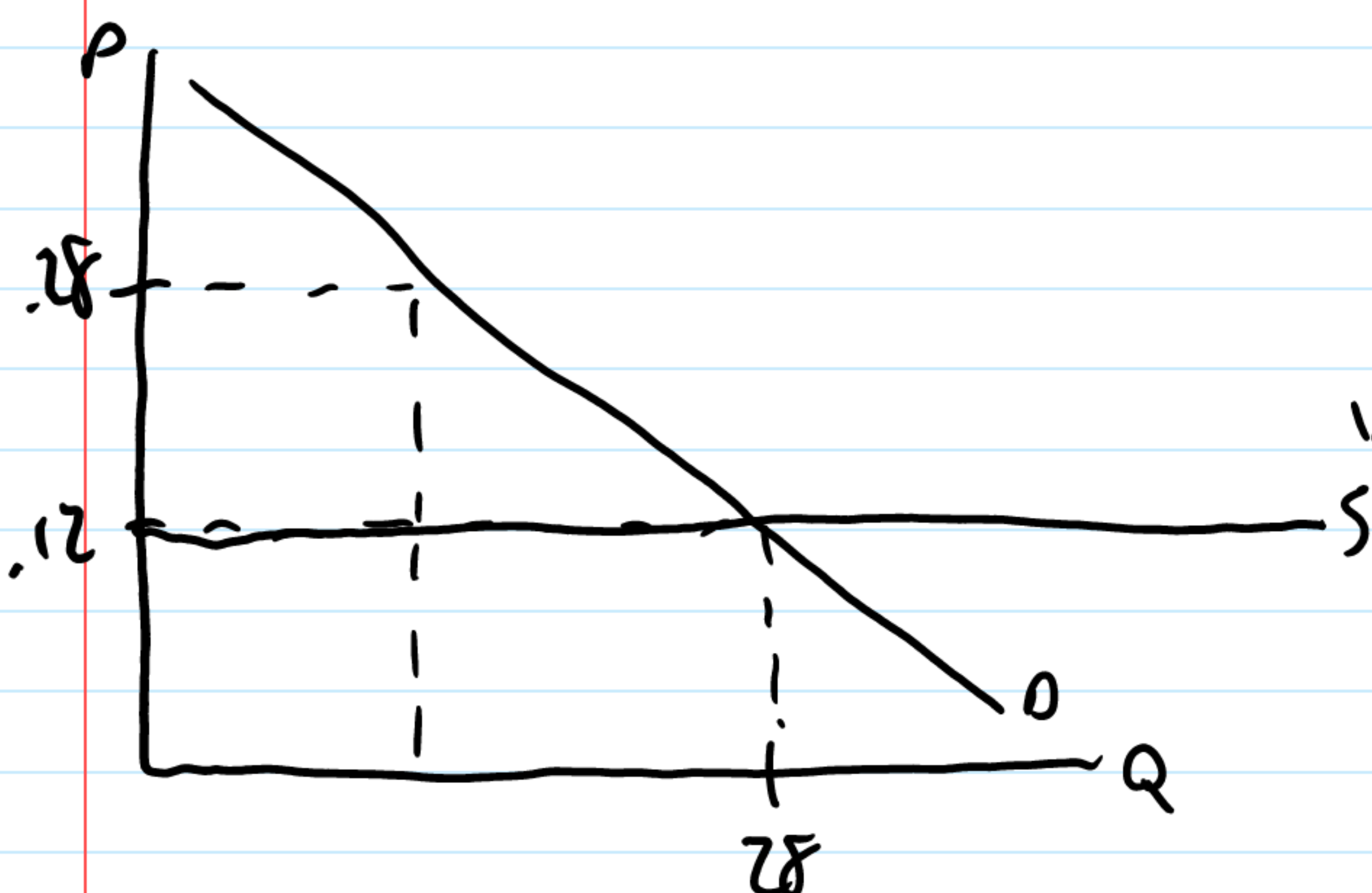


worked w/ Nick Lane

$$\beta = -.75 \quad P_0 = .12 \quad MC = .12 \quad Q_0 = 28 \quad MEC = .05/1 \quad MEIB = .25$$



Flat because electricity
utility is a monopoly

$$-.75 = \frac{Q-28}{P-.12} \cdot \frac{.12}{28}$$

$$Q = \frac{Q-28}{P-.12} \cdot \frac{.12}{28}$$

$$\begin{aligned} \beta &= -.75 \\ -.75 &= (Q-28)/(P-.12) \cdot \beta/700 \\ -175 &= Q-28/P-.12 \\ -175P+21 &= Q-28 \\ Q &= -175P+49 \end{aligned}$$

$$\begin{aligned} Q &= (-175P+49)/(P-.12) \cdot \beta/700 \\ \text{Numerator has to be } Q \\ Q &= -175P+49 \\ 175P &= 49 \\ P &= .28 \end{aligned}$$

Sorry! We got stuck here :

We're going to use P and Q instead of real numbers

$$\begin{aligned} Q &= (-175P+49-28)/(P-.12) \cdot \beta/700 \\ Q &= -175P+21 \\ 175P &= 21 \\ P &= .12 \end{aligned}$$

$$\begin{aligned} 2) \text{ Cost} &= 21,500,000P \\ \text{benefit to taxpayers} &= .05Q \\ \text{decreased emissions} &= (Q-Q_0) \cdot 21,500,000 \end{aligned}$$

$$3) \frac{(Q-Q_0) \cdot 21,500,000}{7,000,000,000} = 43(Q-Q_0)/15200$$

1) Emissions could be effectively regulated in cities and other areas with high smog such as LA or cities in India and China. This is because smog is usually very local to the city and has a large negative impact.