Self Test
Transaction Costs Economics and U.S. Natural Gas Markets

Created by Benoit Gervais, Sami Kemal and Alex Lombardia

Click on True or False to test your knowledge of the chapter.

1. **True** **False** If the UK produced 3241 billion cubic feet of natural gas, it produced 91.8 billion cubic meters of natural gas.

2. **True** **False** Energy content of gas varies from a low of about 800 BTUs/ft^3 to a high of 1,300 BTUs/ ft^3.

3. **True** **False** The energy content of US gas is approximately 1,000 BTUs/ft^3 = 500 Kcal/m^3

4. **True** **False** Transaction cost economics includes four models of market governance; in order of decreasing formality they are unified, trilateral, bilateral and market.

5. **True** **False** The prevailing form of governance in the US gas market industry has been independent of government decisions and has been only ruled by the technological evolution of the industry.

6. **True** **False** Government regulation has been the only factor influencing the change in market governance in the US gas industry in the last two decades.

7. **True** **False** The U.S. Natural Gas Act of 1938, which unified regulation for interstate and intrastate pipelines, allowed for vertical integration.

8. **True** **False** 'Take or pay' provisions were very seldom utilized in the US gas industry.

9. **True** **False** Regulation did not generally affect the duration of long term contracts; the duration of long term contracts was based on the efficiency terms solely.

10. **True** **False** Regulation induced change in the natural gas industry has transformed the factors that drive transactions costs, influencing the choice of governance structure and affecting the contract structure too.

11. **True** **False** Today, in the US, deregulation uncertainties have decreased in the gas market. This has brought stability in the natural gas prices.

12. **True** **False** 1Million BTU is also called a Therm.

13. **True** **False** The Middle East Region has the largest natural gas reserves.

14. **True** **False** The residential sector consumes the most natural gas in the U.S.

15. **True** **False** Uncertainty, asset specificity and frequency of transactions are three factors influencing transaction costs.

16. **True** **False** With the Public Utilities Holding Company Act (PUHCA) in 1935, the interstate gas market de-integrated from three to two layers of integration. Thus, transportation and production were broken off from local distribution

17. **True** **False** To prevent 'hold up' related to specific assets, natural gas contracts were, on average, longer than in typical non-regulated markets.

18. **True** **False** In the early years of the natural gas industry, 'line packing' and gas storage were the only way to meet peak requirements.

19. **True** **False** Energy content of natural gas solely depends on its carbon content, such as CH_4, C_2H_6, C_3H_8 and so on.

20. **True** **False** After 1938, a bilateral model was the preferred governance model for pipelines under a regulated monopoly structure.

21. **True** **False** Between 1938 and 1970, interstate pipelines companies engaged in simple transactions of natural gas from producers to consumers under the careful supervision of federal regulators.

22. **True** **False** Between 1954 and 1978 was the highest period of regulation of the US gas industry, which disrupted economic allocation and distorted gas prices.

23. **True** **False** In the heating market, when reliability is an important issue, firms will tend to make short-term contracts.

24. **True** **False** Information technologies (IT) in the natural gas sector have contributed to a decrease in market efficiency due to the complicated digital systems used.

25. **True** **False** Economics of scale has become less important than economies of scope with the wide spread use of IT among companies.

26. **True** **False** A rule of thumb is companies that spend more on information technology (IT) investment in the firm are the most profitable companies.

27. **True** **False** The internet has contributed to increasing market share for some energy companies.

28. **True** **False** The information revolution is dramatically changing cost structures and may require new management and business techniques.

29. **True** **False** Trade in natural gas tends to be regionally oriented.

30. **True** **False** Geologists search for oil and gas in three kinds of traps.

31. **True** **False** The natural gas futures trade organized by NYMEX with delivery at the Henry Hub in Louisiana is an example of bilateral governance.

32. **True** **False** In an industry with frequent transactions it is best to buy the product in the spot market.

33. **True** **False** 3 Mcf of natural gas is 3 million cubic feet.

34. **True** **False** Since 1980, natural gas has had the fastest consumption rate growth of all fossil fuels.

35. **True** **False** The GISB's standards concerning electronic transfer in gas marketing, which were approved by FERC in 1996 and introduced in 1997, helped standardize the sales of natural gas.

36. **True** **False** Large industrial customers are most likely to take on-system gas.

37. **True** **False** Released capacity, when referring to natural gas pipelines, is the average daily capacity that a pipeline can deliver.

38. **True** **False** The choice between unified contracts and other forms of governance for purchasing inputs is termed the fish-or-cut bait decision. (Adrian Sikorski)

39. **True** **False** Market governance is appropriate when there are recurring transactions involving specific assets, regardless of frequency, when there are alternative trading partners available.

40. **True** **False** Vertical integration was crucial during the early development of long distance pipelines to transmit natural gas.

41. **True** **False** With open access to natural gas pipelines, the operational control of pipeline companies for physical delivery and production dispatch has increased and so marketers have no role to play in balancing service. (contributed by Durga Kar)

42. [**True**] [**False**] In 2000, U.S. consumption of natural gas was around 20 trillion BTUs. (contributed by William Koch)