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## PASSAGE II

**SOCIAL SCIENCE:** *This passage discusses some social and economic issues regarding liquid natural gas as an energy source.*

Although oil and gasoline remain important energy sources, it is natural gas that currently supplies around 25 percent of America's energy needs. A recent study shows that natural gas use was roughly 22 trillion cubic feet (TCF) annually. Natural gas demand is increasing at phenomenal rates because of its ability to create cleaner fuel for electrical power. Experts predict that annual demand is likely to increase to almost 32 TCF in less than a decade. At a consumption rate of 32 TCF per year, the United States would only have about a five-year supply of natural gas. Known natural gas reserves in North America are quickly becoming exhausted. In fact, in the past thirty years, known supplies have dwindled from almost 300 TCF to around 150 TCF.

It is no wonder that natural gas has become a controversial and critical topic of discussion among politicians, business leaders, and consumers. It is apparent that the United States will need to drastically increase imports of natural gas to relieve shortages. One way that economists believe this can be done is by importing liquid natural gas. Experts predict that liquid natural gas imports will increase by almost 500 percent in a few short years. Currently, the country imports very little liquid natural gas. The process of transporting liquid natural gas is complicated and expensive. This is the most obvious reason why America has been reluctant to choose liquid natural gas over other energy sources. Converting natural gas into liquid natural gas involves cooling natural gas as it is collected to  $-260^{\circ}\text{F}$ . This transforms the gas into a liquid, which is then injected into a specially designed vessel for transport. When the liquid natural gas reaches its destination, the liquid is reheated into its original gaseous state and allowed to flow into a pipeline. Even though new technology has considerably decreased transportation costs for liquid natural gas, it is still often uneconomical. This is especially true for nations with other energy sources.

One of the largest misconceptions about liquid natural gas is that it is an abundant source of natural gas. While liquid natural gas imports continue to increase, the public demand for natural gas increases at an even higher rate. Even though the United States has several facilities that can process liquid natural gas, these facilities are consistently unable to obtain enough liquid natural gas to operate at their fullest capacity. Even when liquid natural gas is obtainable, there is a fear that low natural gas prices in the United States will make liquid natural gas uneconomical. Most business leaders and politicians are reluctant to create new facilities to process liquid natural gas because these facilities are expensive and risky. This limits the capacity to process liquid natural gas even if it becomes more readily available.

The United States also faces competition from Asia in securing liquid natural gas. Competition for liquid natural gas will most likely become even more ferocious as other populous countries like Japan and

China become more desperate for fuel sources. Some of the more daring politicians and business leaders believe that building new liquid natural gas facilities will help companies and consumers take advantage of future increased liquid natural gas imports. Currently, Canada is the largest liquid natural gas supplier for the United States. However, liquid natural gas imports from Canada will decrease considerably in the next decade as Canadian consumption increases and supplies of natural gas dwindle. Therefore, consumers and business leaders should not rely on liquid natural gas to solve America's energy needs and consumers should continue to expect high prices as demand grows and supplies decline.

11. According to the passage, current known North American supplies of natural gas are:
  - A. sufficient to provide the United States with natural gas for the next thirty years.
  - B. down approximately 50 percent from thirty years ago.
  - C. decreasing at a rate of 25 percent per year.
  - D. extremely difficult to access.
12. The author of the passage would most likely agree with which of the following statements?
  - F. Liquid natural gas will never be a viable source of energy in the United States.
  - G. America's energy needs will not be met by the use of liquid natural gas alone.
  - H. The populations of Japan and China are growing too rapidly to be served by liquid natural gas.
  - J. Until another reliable energy source is discovered, liquid natural gas is the best solution to the world's energy problems.
13. One of the main ideas of the passage is that:
  - A. energy sources are dwindling around the world.
  - B. natural gas supplies one-quarter of America's energy needs.
  - C. liquid natural gas takes millions of years to form.
  - D. the known supply of liquid natural gas is limited.
14. It can be inferred from the second paragraph (lines 16–38) that America's reluctance to choose liquid natural gas over other energy sources will:
  - F. not prevent America from importing more liquid natural gas from other countries.
  - G. induce Japan and China to build new liquid natural gas processing facilities.
  - H. most likely continue until the cost and problems associated with liquid natural gas can be reduced.
  - J. lead to a decrease in the current demand for liquid natural gas in other countries, such as Canada.

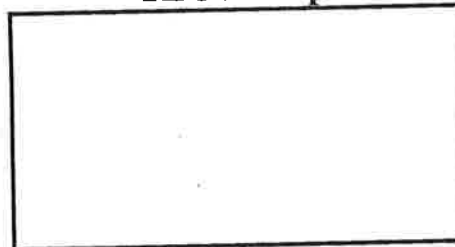
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15. According to the passage, which of the following countries supplies the most liquid natural gas to the United States?
- A. Japan.
  - B. China.
  - C. Canada.
  - D. Asia.
16. According to the third paragraph (lines 39–54), misconceptions exist about liquid natural gas regarding:
- I. its abundance.
  - II. the expense of converting it.
  - III. public demand for it.
- F. I only
  - G. II only
  - H. II and III only
  - J. I, II, and III
17. As it is used in line 6, the word *phenomenal* most nearly means:
- A. annual.
  - B. efficient.
  - C. extraordinary.
  - D. inconsequential.
18. The passage states that all of the following are reasons for America's reluctance to choose liquid natural gas EXCEPT:
- F. the expense of transporting liquid natural gas.
  - G. the increasing demand for liquid natural gas.
  - H. the difficulty in processing liquid natural gas.
  - J. the possibility of low natural gas prices.
19. The passage states that which of the following is true about natural gas?
- A. It currently supplies more than half of America's energy needs.
  - B. The United States has an unlimited supply of natural gas.
  - C. Canada is the world's largest exporter of natural gas.
  - D. Annual demand for natural gas is increasing at a rapid rate.
20. As it is used in line 32, the word *vessel* most nearly means:
- F. process.
  - G. source.
  - H. facility.
  - J. container.

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