

# SAMPLE QUESTIONS

The following sample cases and questions have been developed to mimic the style and rigor of the FSA Level II exam. All correct answers are derived only from the cases presented and the information contained in the Level II Study Guide. Read each case and answer the corresponding questions. Each case will be accompanied by 3 to 6 questions on the exam. To manage time effectively during the two-hour exam period, candidates may consider first quickly reading each case and skimming accompanying data, returning to assess the data in more detail as questions require. It is recommended that candidates spend 8 to 11 minutes to read each case and answer all associated questions.

Note that the computer-based exam is delivered using a split screen, with cases presented on the left and associated questions presented on the right. During the exam you will have access to a computer-based calculator and scratch pad in the test platform. More information about testing logistics can be found in the Candidate Handbook.

## PRACTICE CASE 4: ELECTRIC UTILITIES & POWER GENERATORS INDUSTRY

Companies in the Electric Utilities & Power Generators industry generate electricity, operate electricity transmission and distribution networks, and/or sell electricity to end-users, including households, businesses, and industrial plants. Electricity generation represents the largest source of GHG emissions in the world. Fuel combustion in electricity-generation operations produce both GHG emissions and hazardous air pollutants such as nitrogen oxides. Companies that provide transmission and distribution services often source electricity from third parties in addition to distributing energy from owned fuel-combustion operations.

Regulated utilities accept comprehensive oversight from regulators on their pricing mechanisms and their allowed return on equity in exchange for their license to operate as a monopoly. The cost of supplying electricity is highest during periods of high demand. To accommodate this, utilities may request rate increases. However, they may be impacted to the extent that a requested rate increase exceeds the rate approved by regulators (regulatory lag). Utilities can also encourage consumers to efficiently use energy via education programs and/or implement demand response program, which allow consumers to reduce electricity use during periods of high demand.

Companies A and B are regulated utilities that generate electricity, then distribute and sell the electricity to residential and commercial customers. Company A operates in a region with aggressive GHG emissions reduction requirements, including a requirement for renewable energy sources to supply a minimum of 40% of the electricity distributed to customers and participation in a cap-and-trade scheme

limiting carbon emissions. Company A is aware that GHG emissions regulation will likely become increasingly stringent in the future. Additionally, the revenue Company A earns is decoupled from the amount of electricity its customers consume, so revenues are not directly tied to the quantity of electricity sold.

Company B operates in a region currently without GHG emissions reduction requirements, but is anticipating new regulation to be implemented in the near future. The revenue Company B earns is a direct product of the amount of electricity it sells to its customers (i.e., it is not “decoupled”). Company B recently expanded its operations to a new region to develop a new electricity generation plant. Both companies use smart grid technology to various extents, which enables greater opportunities to increase end-user energy efficiency, thus reducing peak energy demand.

Below is operating and sustainability data for Companies A and B:

	COMPANY A		COMPANY B	
	YEAR 1	YEAR 2	YEAR 1	YEAR 2
Number of residential customers served	500,000	550,000	1,000,000	1,000,000
Total electricity generated (MWh)	7,000,000	7,000,000	15,000,000	17,000,000
Percentage non-renewable	70%	65%	50%	60%
Percentage renewable	30%	35%	50%	40%
Gross global Scope 1 emissions (metric tons)	6,000,000	6,000,000	9,00,000	9,000,000
Percentage covered under emissions-limiting regulation	100%	100%	0%	10%
Percentage covered under emissions reporting regulation	100%	100%	50%	60%
Percentage of electric load served by smart grid technology	30%	40%	20%	20%
Customer electricity savings from efficiency measures by market	10%	12%	0%	0%

For the following questions, refer to Practice Case 4: Electric Utilities & Power Generators Industry.

1. **What two types of financial impact does the metric, “customer electricity savings from efficiency measures by market,” have on Company A? (Choose two.)**
  - A. Increase in revenue
  - B. Decrease in revenue
  - C. Neutral impact on revenue
  - D. Increase in expenses
  - E. Decrease in expenses
  - F. Neutral impact on expenses

2. Which two sustainability issues have interrelated impacts for Company A and B? (Choose two.)
- A. Access and affordability
  - B. Energy management
  - C. GHG emissions
  - D. Air quality
  - E. Customer welfare
3. Both Company A and Company B experienced the same level of GHG emissions from Year 1 to Year 2. Which metric should be used to normalize “gross global Scope 1 emissions” to compare the companies’ GHG Emissions performance?
- A. Number of residential customers served
  - B. Percent covered under emissions-reporting regulations
  - C. Total electricity generated (MWh)
  - D. Percent of electric load served by smart grid technology
4. In the context of each company’s regulatory climate, which normalized metric indicates that Company B faces less near-term risk than Company A?
- A. Percentage of electric load served by smart grid technology
  - B. Gross global Scope 1 emissions per total electricity generated
  - C. Total electricity generated per number of residential customers served
  - D. Percentage covered under emissions reporting regulations
5. A user comparing the two companies concludes that Company A faces greater risk than Company B related to electricity generation. What evidence supports this conclusion?
- A. Company A’s percentage renewable energy falls below current regulatory standards
  - B. Company A’s percentage non-renewable energy is decreasing at a slower rate
  - C. Company B faces more uncertainty related to emissions-limiting regulation
  - D. Company B generates more total electricity, indicating greater economic efficiency

## PRACTICE CASE 5: NON-ALCOHOLIC BEVERAGES INDUSTRY

Companies in the Non-Alcoholic Beverage industry produce a variety of beverage products for personal consumption, such as juices, soft drinks, coffee and tea products, energy drink products, and others. Generally, the industry is not considered to be highly regulated. However, trends related to consumer health and environmental responsibility have become increasingly important to management teams.

Widely publicized medical research has linked the consumption of high-calorie, high-sugar beverages to the growth in global obesity rates, increased risk of health disease, and other acute health impacts. As such, the nutritional content of products increasingly shapes the industry's competitive landscape as consumers demand healthier products and greater transparency in product labeling. In some jurisdictions, concerns regarding the accuracy and truthfulness of product labelling and marketing have prompted labeling regulation, with scrutiny targeted toward products marketed to children. Companies that adapt to changing consumer preferences and an evolving regulatory environment by offering more healthful alternatives can capture additional market share and limit their exposure to regulation and litigation.

The Non-Alcoholic Beverages industry is a leading global consumer of fresh water. Water is the primary ingredient in substantially all of the industry's products. Given companies' heavy reliance on large volumes of clean water and the fact that water stress is increasing in different regions globally, companies may be exposed to supply disruptions that could significantly impact operations and add to costs and, in extreme cases, risk business as a going concern. As the industry is one of the most exposed to water risk in direct and indirect operations, local governments in regions facing increasing water stress have also instituted regulations mandating that manufacturing operations achieve certain efficiency thresholds and do not exceed total allowable limits on water withdrawal.

	COMPANY A	COMPANY B	COMPANY C	COMPANY D
Total revenue (billions)	\$11.6	\$9.2	\$14.4	\$10.3
Number of production facilities	22	17	13	14
Revenue from low-calorie drinks (billions)	\$2.9	\$4.6	\$1.4	\$3.0
Total water consumed (billion liters)	200	190	125	150
Percent of water consumed in regions with High Baseline Water Stress	10%	30%	20%	25%
Percent of water replenished	90%	70%	50%	60%

For the following questions, refer to Practice Case 5: Non-Alcoholic Beverages Industry.

6. Which company faces the lowest level of risk related to water management?
- A. Company A
  - B. Company B
  - C. Company C
  - D. Company D
7. An analyst is comparing the operating efficiency of the four companies. What metric should they use to normalize “total water consumed”?
- A. Number of production facilities
  - B. Total revenue
  - C. Revenue from low-calories drinks
  - D. Total fleet road miles traveled
8. All else equal, how should Company B’s performance on the health and nutrition sustainability topic be factored in to discounted cash flow analysis?
- A. Increase cost of capital
  - B. Increase growth projections
  - C. Decrease expense projections
  - D. Decrease book value of assets
9. A user is applying the five factors to understand how water management effects the financial performance of companies in this industry. Which three of the five factors lend insight into the nature of financial impact? (Choose three.)
- A. Direct financial impacts and risks
  - B. Legal, regulatory, and policy drivers
  - C. Industry norms, best practices, and competitive drivers
  - D. Classification of supplier quality by water use intensity
  - E. Management focus on license to operate
10. Assuming each company operates in regions where consumers demonstrate an increasingly high willingness to pay for healthy, low-calories products, which company is best positioned to capture market share?
- A. Company A
  - B. Company B
  - C. Company C
  - D. Company D