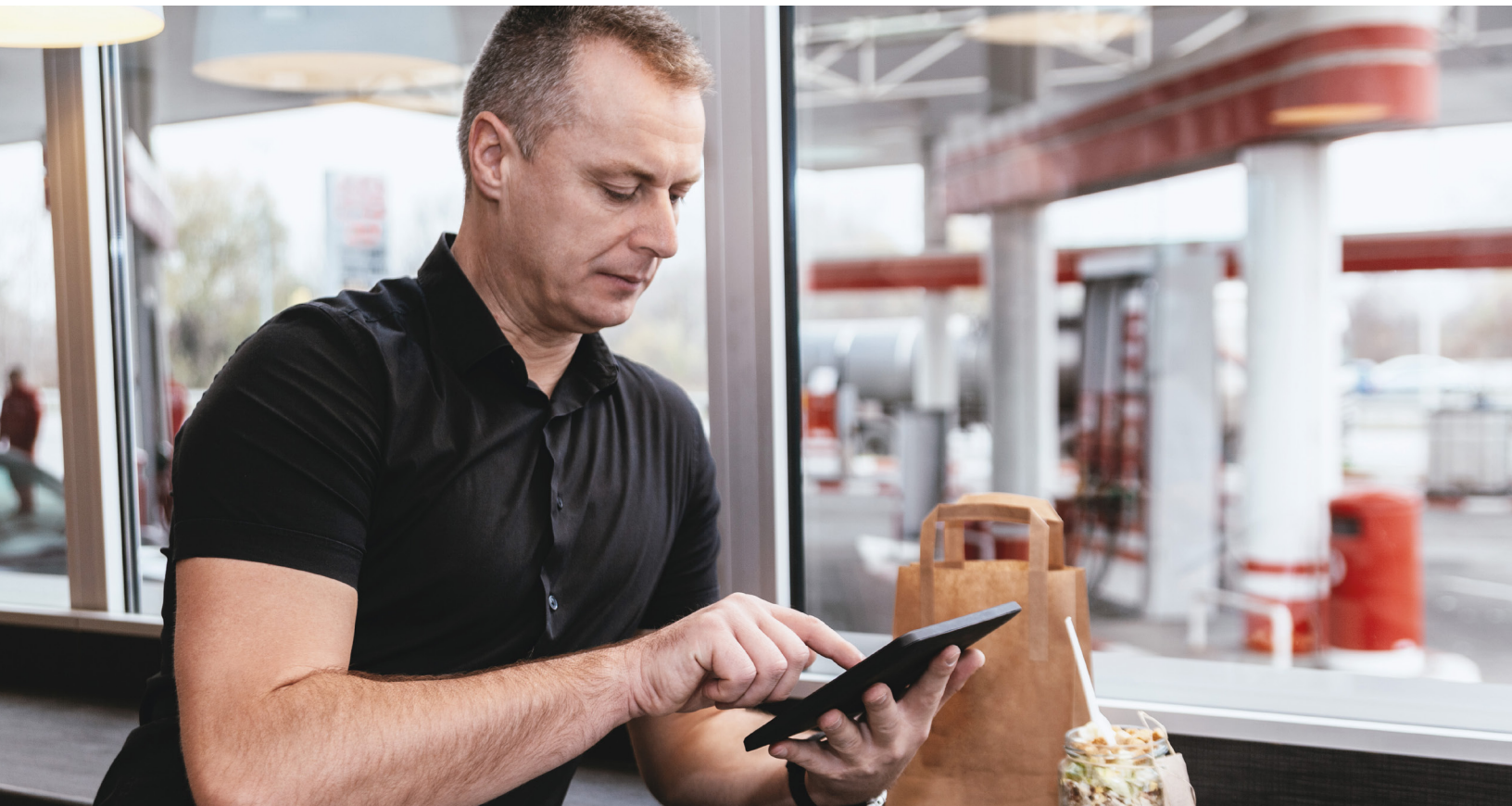


Oil & Gas Practice

# Fuel retail in the age of new mobility

With the industry at a crossroads, operators need to move quickly to rethink strategy, build new capabilities, and transform their businesses.

*This article was a collaborative effort by Álvaro Bau, Arjun Chopra, Mladen Fruk, Lazar Krstić, Klaas Mantel, and Florian Nägele, representing views from McKinsey's Oil & Gas Practice.*



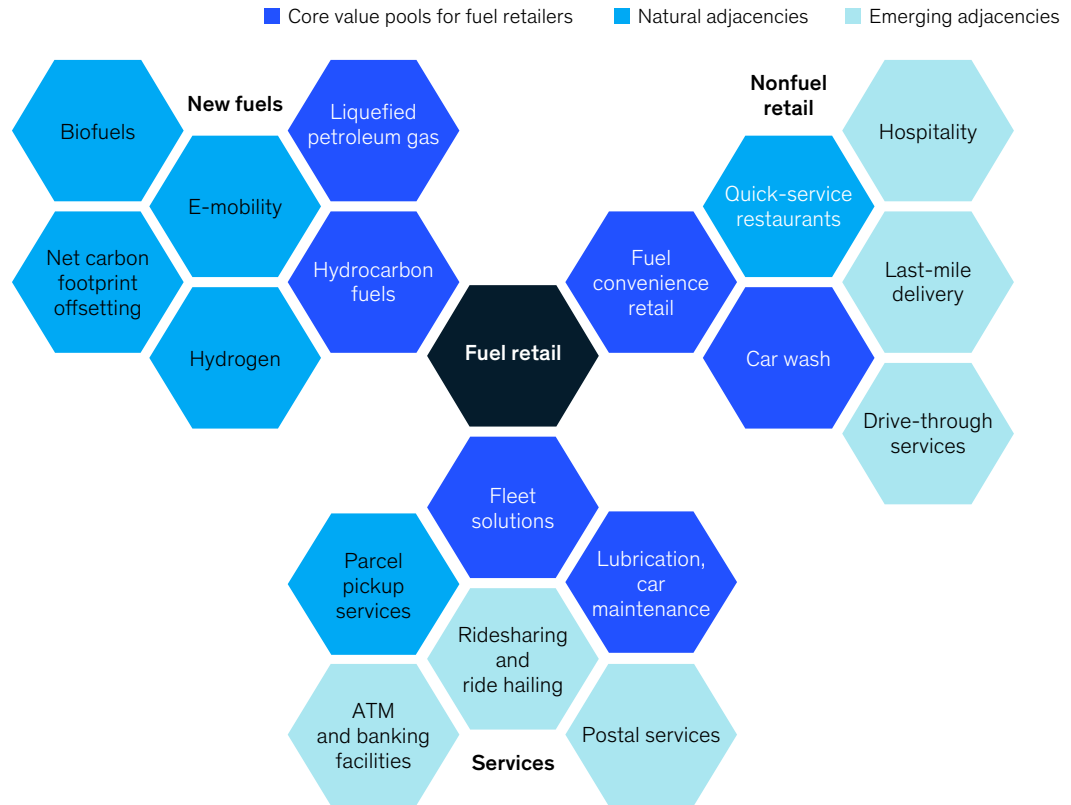
**Over the past decade**, fuel retail has been one of the more resilient segments in the oil and gas industry. The growth of both out-of-home consumption and small-format retail has enabled forecourts to capture significant incremental value from convenience retail and other nonfuel retail (NFR) business. Innovative fuel retailers capable of using NFR to unlock additional value from their real estate have been competing fiercely to acquire networks, especially from oil majors. As a result, industry asset values have soared. For example, acquisition multiples for US convenience stores have almost doubled—from six to seven times annual earnings before interest, taxes, depreciation and amortization (EBITDA) a decade ago to ten to 12 times today—and now exceed the multiples of integrated oil and gas companies.

Like many industries, fuel retail was severely affected by the global pandemic in the first half of 2020, with fuel volumes in some months more than 50 percent down from the previous year. However, most markets have experienced a rapid recovery as private mobility rebounded, partly because public transportation was perceived to present an infection risk. McKinsey analysis indicates that forecourt retail can continue to offer attractive returns in the future, with operators having access to a large number of adjacent value pools (Exhibit 1).

To tap into these pools, fuel retailers will need to rethink their strategies, build their capabilities, and transform their businesses. This article looks at the situation today and the likely evolution of fuel demand over the next few years, identifies emerging

Exhibit 1

**Fuel retail remains an attractive business with a large number of adjacent value pools.**



opportunities in convenience retail and electric vehicle (EV) charging, and considers what it will take to develop an attractive, competitive, and profitable NFR offer.

### Where are we now?

During the early-2020 lockdowns, fuel sales volumes plummeted in most markets (Exhibit 2). However, as lockdowns eased, fuel demand quickly recovered. In the United States, for example, gasoline sales volumes in July were only 10 percent lower than in July 2019. On the other hand, the global economic slowdown and the widening of opportunities to work from home have reduced mobility and cast doubt on whether fuel volumes will regain their prepandemic levels in all markets.

Convenience shopping has proved considerably more resilient, however. Keen to avoid crowded supermarkets, many shoppers have sought out convenience stores instead. Royal Dutch Shell announced that basket sizes in its stores had increased by 15 percent year to date in September

2020, for instance.<sup>1</sup> Similarly, customers' consolidation of shopping trips more than made up for reduced traffic at Circle K forecourt stores.<sup>2</sup> These and other indicators suggest that convenience stores are becoming a destination of choice not only for traditional categories such as tobacco, drinks, and snacks but also for newly introduced and expanded grocery assortments.

Some innovative players have captured new demand by partnering with food delivery platforms; examples include BP with Deliveroo in the United Kingdom, Shell with Foodpanda in Singapore, and 7-Eleven with DoorDash in the United States. Meanwhile, a resilient category among traditional forecourt operations was car wash,<sup>3</sup> benefiting from an increased emphasis on hygiene. However, demand for fresh food for motorists on the move—the leading growth category in forecourt convenience—declined sharply and has yet to regain its prepandemic levels in many markets. Applegreen, for instance, reported that travel restrictions and the closure of food offerings had a

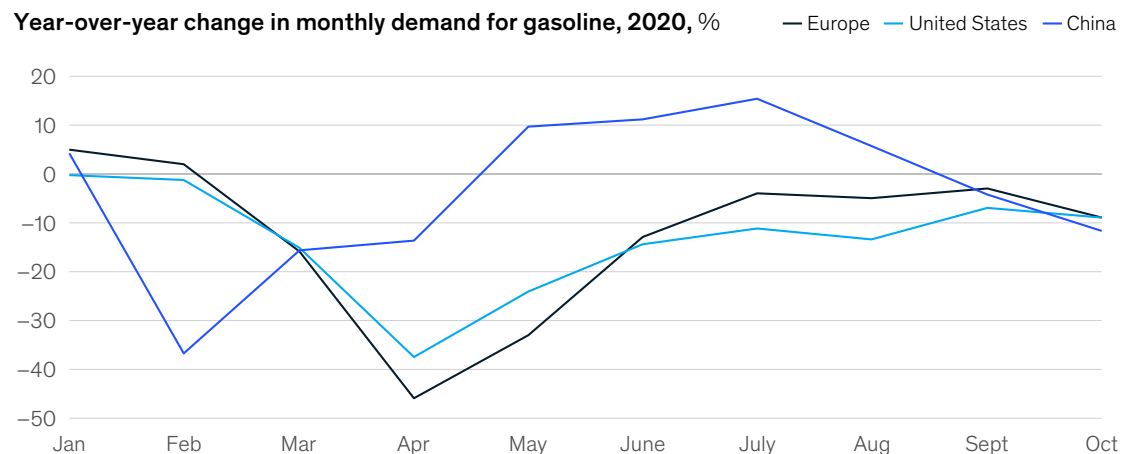
<sup>1</sup> Third-quarter 2020 results, Royal Dutch Shell, October 29, 2020, shell.com.

<sup>2</sup> Second-quarter fiscal year 2021 results, 12- and 24-week periods ended October 11, 2020, Alimentation Couche-Tard, November 24, 2020, corpo.couche-tard.com.

<sup>3</sup> Rich DiPaolo, "The effect of the pandemic on carwashing," November 23, 2020, carwash.com.

Exhibit 2

## Fuel sales volumes fell by more than 50 percent in some months in 2020, but recovered rapidly.



Source: IEA Monthly Oil Data Service; FGE; McKinsey analysis

significant impact on its Welcome Break business in the United Kingdom, although sales started to recover as food offers were reopened from June 2020.<sup>4</sup>

In some ways, the dramatic shifts experienced in 2020 as everyday life changed significantly have given fuel retailers a preview of the likely impact of the energy transition in years to come.

### Declining demand

The long-term outlook for fuel retail envisages a decline in the global value pool from \$87 billion in 2019 to \$79 billion in 2030.<sup>5</sup> Developing markets in Asia, Latin America, and the Middle East can expect modest growth in consumer fuel purchasing, while mature economies are likely to see a gradual decline, with the most pronounced impact in Europe, followed by the United States and China. This decline will be driven by efficiency improvements,

regulations to curb emissions, and the rise of electrification and shared mobility, with the relative importance of each factor differing by country.

In the medium term, fuel demand will also be reshaped by behavioral changes among consumers. The shift from public transportation to private vehicles—seen as the ultimate in personal protective equipment—is likely to increase demand. On the other hand, demand is likely to decrease from the rise in working from home, the acceleration in migration to online shopping channels, and the switch from supermarket to convenience retail as populations move away from dense urban centers.

However, the decline in the fuel retail value pool is expected to be offset by gains in nonfuel retail, with the global forecourt value pool increasing from \$22 billion in 2019 to \$30 billion in 2030 (Exhibit 3). In particular, the EV-charging value

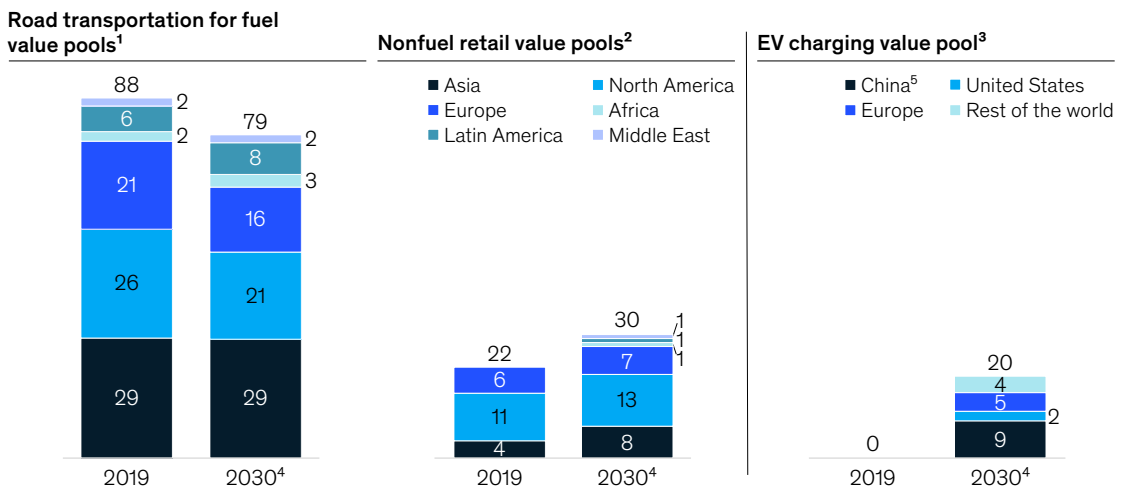
<sup>4</sup> First-half 2020 results, Applegreen, September 18, 2020, investors.applegreenstores.com.

<sup>5</sup> McKinsey analysis based on fuel demand for road transportation, including passenger vehicles and fleets.

Exhibit 3

## Developing markets and nonfuel retail are growing, while e-mobility is an emerging value pool.

Net value pools, EBITDA equivalent, \$ billion



Note: Figures may not sum exactly, because of rounding.

<sup>1</sup>Includes B2C (passenger vehicles and 2/3 wheelers) and B2B (passenger-vehicle fleets, light commercial vehicles, buses, and trucks).

<sup>2</sup>Includes forecourt convenience and car wash.

<sup>3</sup>This is a nascent and uncertain market requiring significant investment and its eventual value could differ significantly from this projection; use cases included are home, work, destination, fleet, and on-the-go charging, but not two wheelers.

<sup>4</sup>2030 projections are based on the McKinsey Muted Virus Recovery scenario.

<sup>5</sup>Assuming no cap on tariffs for public charging, allowing private players to set tariffs.

Source: McKinsey Energy Insights Value Pool model

# Upgrading their capabilities to best-in-class modern retail standards should enable oil and gas companies to extract more value from their sites.

pool is expected to rise from negligible today to \$20 billion by 2030.<sup>6</sup> Capturing this value pool will require significant investment in building not only EV charging infrastructure but also enhanced customer facilities such as seating and toilets, as well as new on-site service offerings in some cases.

The transition from conventional vehicles to electric mobility is mainly being driven by regulation, such as the European Green Deal. To date, the EV market has been dominated by affluent early adopters and government fleet purchases—small segments that are unlikely to sustain significant market expansion on their own. In 2020, sales of plug-in hybrid electric vehicles (PHEVs) and battery electric vehicles (BEVs) held up better than sales of conventional vehicles, but with the outlook remaining uncertain, regulatory moves are likely to prove decisive.

The implications for fuel retail vary by market. In mature economies, some networks will need to be rationalized—though probably not on the scale seen in the 1980s—to maintain throughput and profitability per station. However, opportunities remain in developing markets, where operators are likely to see an increase in throughput at some stations, as well as pockets of demand growth that could be tapped by building new stations. Over the long term, fuel retail margins will depend on local market characteristics—the level of competition, the penetration of hypermarkets, the prevalence of unmanned stations, and so on—and will likely prove more resilient than sales volumes.

## Competing in convenience

As the demand for fuel is expected to peak in the future, many oil and gas companies have announced ambitions to significantly increase the share of income they derive from nonfuel retailing. Examples include Sinopec in China, PTT in Thailand, and Petronas in Malaysia. Although the leaders in fuel retail operate many outlets—more than some global convenience retailers and quick-service restaurant franchises—and perform well, some small traditional oil companies lag behind these competitors in their sales performance. Upgrading their capabilities to best-in-class modern retail standards should enable oil and gas companies to extract more value from their sites.

Looking forward, the future of nonfuel consumption is likely to be shaped by three consumer trends driven by lifestyle choices and technological developments. One is “fresh and frequent,” referring to consumers’ tendency to cut down on big weekly shopping trips at out-of-town supermarkets and to purchase more of their groceries at small local stores. The second trend, “delivery and on the go,” refers to the increase in online ordering of food for delivery and the rise in consumption outside the home. The third trend, “frictionless customer experience,” refers to the use of digital menu boards and contactless payment solutions in stores to streamline the shopping experience.

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<sup>6</sup> Given the uncertainties surrounding a nascent market requiring significant investment, the eventual value pool could differ significantly from this projection.

These three trends will put some core convenience categories—tobacco, sugary drinks, salty snacks, magazines, and phone cards—under structural pressure. Fuel retailers will need to prepare for a new world that requires hyperlocal and customer-centric skills and involves an unfamiliar set of competitors. They will also need to look at developing new or additional business models and formats.

Among business models, the possibilities include multimission (developing forecourts into destinations for food shopping, click and collect, pharmacy purchases, postal services, and so on); multibrand (forming partnerships to share locations with companies such as McDonald’s and Starbucks); and retailing excellence (building advanced retail

capabilities in areas such as category management, supply chain, and food service). Among formats, fuel retailers could consider introducing or strengthening their presence in the “food to go,” “food for later,” “take a break” (adding seating areas for customers consuming food and beverages on the premises), and “car care center” formats (Exhibit 4).

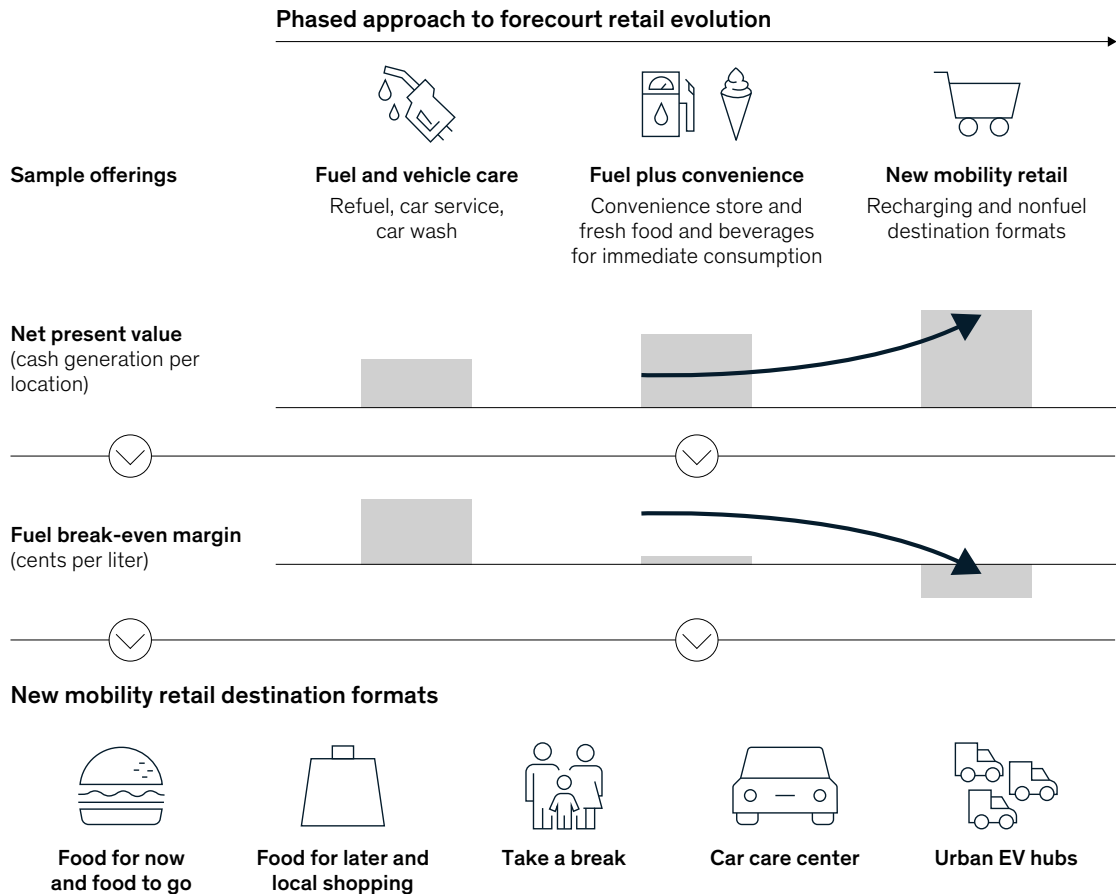
### Charging ahead

EV charging could evolve in several different ways, depending on how consumers respond to the costs and disruptions involved. The value pool for EV charging is negligible in size today, at less than \$0.1 billion, but our optimistic case<sup>7</sup> indicates that, with a high level of capital-expenditure investment

<sup>7</sup> Based on proprietary McKinsey Energy Insights and Future of Mobility models of demand and value pools.

Exhibit 4

## The focus of fuel retail is shifting from vehicles to customer needs.



in infrastructure, it has the potential to reach \$20 billion by 2030—and could also account for more than 40 percent of fuel value pools in China and up to 10 percent of those in some European countries. Whether the necessary investment will be made, however, is far from assured. In particular, it is unclear whether the natural owners of the business would be OEMs, oil and gas companies, power companies, independent private equity-backed firms, or other players.

In fact, their networks, capital, and customer knowledge put forecourt retailers in a strong position to claim natural ownership of EV charging. By treating it as an incremental business and capitalizing on their existing locations and facilities to deliver it, they could generate a high return on investment. However, any large-scale investment in EV charging would need to be justified by attractive prospects for profitability, along with sufficient EV penetration to allow charging stations to be

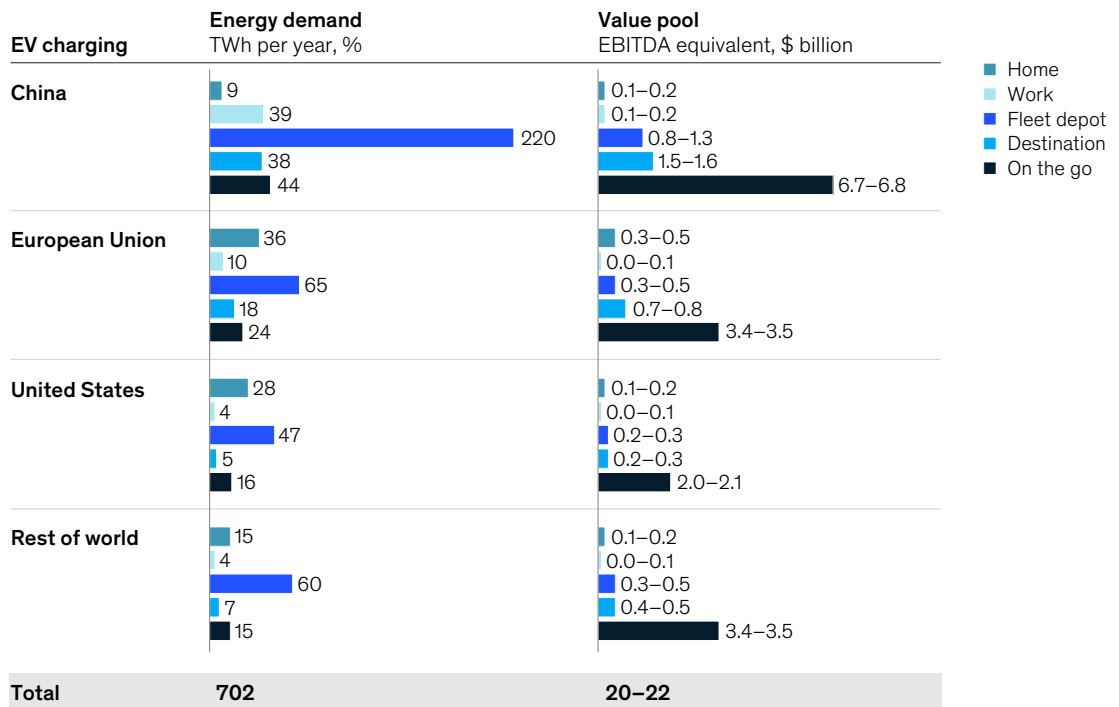
operated above utilization thresholds and earn back the capital expenditures invested.

Like other aspects of forecourt retail, EV charging varies considerably by market and location (Exhibit 5). Because different cities are at different stages of EV adoption, this is—and will remain—a hyperlocalized business. The biggest departure from conventional fuel retail is that drivers no longer have to visit a fuel station to fill up but can charge their vehicles at home, at work, at shopping malls, and in parking lots, as well as on the go. Each use case has its own distinct economics.

This leaves fuel retailers with a fundamental question: where to play. In terms of markets, the biggest opportunities are likely to lie in China, the European Union, and certain parts of the United States, such as California. Among use cases, on-the-go charging offers the greatest potential for fuel retailers because it is closest to their

Exhibit 5

### On-the-go charging is expected to be highly attractive for fuel retailers.



Note: Figures may not sum exactly, because of rounding.  
Source: Expert interviews; International Energy Agency; McKinsey EV Demand Model

established fuel retail operations, makes use of their networks and experience, and offers the highest potential margin. It also offers considerable scope for growth: Shell, for instance, has announced plans to increase its EV charging points from 60,000 to 500,000 globally by 2025.<sup>8</sup>

However, on-the-go charging also presents the greatest uncertainty. On the one hand, it is likely to capture a convenience premium and offer positive spillovers to fuel retail. On the other hand, with recharging taking far longer than refueling, operators will need to adjust their formats to provide a great “food for now” offering, along with a safe environment, expanded seating, and decent restroom facilities.

EV charging for large business-to-business fleets may present more attractive opportunities than the consumer market as companies move to decarbonize their vehicles. Amazon, for instance, has placed an order for 100,000 electric vans,<sup>9</sup> UPS has 10,000 electric vehicles on order, and IKEA has committed to making all its home deliveries via zero-emission vehicles by 2025. Fuel retailers are in a unique position to tap into this market with a lucrative end-to-end offer, combining “on-the-go” and “at-depot” charging. To do so, they will need to partner with other players, such as shopping malls, convenience retailers, and parking companies.

The future will be complex. Oil and gas companies, utilities, and OEMs are already looking to move at scale, and other entrants are likely to experiment with EV charging. The key factors for success will be location, as always, and customer experience. To establish first-mover advantage, fuel retailers will need to invest early to learn about customer needs and experiment with new propositions and formats. In doing so, they can capitalize on synergies with their established operations and take advantage of the long transition period as the car parc gradually converts to electric.

### **What it takes to win**

To prepare for the energy transition, forecourt retailers should consider taking three steps:

- ***Extract maximum value from core business.*** Extract maximum value from the core business by using both traditional and digitally enabled levers. Traditional levers could include reducing procurement and logistics costs, enhancing the premium fuels proposition, and optimizing the physical footprint and working capital. Digitally enabled and data-driven levers could include dynamic fuel pricing based on internal and external data on traffic conditions, weather, competition, demographics, and so on; a next-generation loyalty program with personalized offers; and optimized operations

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<sup>8</sup> These numbers are for Shell's entire network, which includes home, workplace, fleet, and street charge points, as well as those at fuel stations. See Mark Kane, “Shell plans to deploy around 500,000 charging points globally by 2025,” Inside EVs, February 13, 2021, [insideevs.com](https://insideevs.com).

<sup>9</sup> Annie Palmer, “Amazon debuts electric delivery vans created with Rivian,” CNBC, October 8, 2020, [cnbc.com](https://www.cnbc.com).

**Fuel retailers will need to partner with other players, such as shopping malls, convenience retailers, and parking companies.**



using advanced analytics to accurately forecast demand and automate logistics.

- ***Develop a distinctive convenience value proposition.*** Capitalize on opportunities beyond fuel and develop a distinctive convenience proposition. By applying advanced analytics, companies can develop cluster- or even site-specific offers that take advantage of opportunities in their local areas and use internal data (such as transaction records) and external data (such as aggregated credit-card data) to customize their assortments, pricing, promotions, and so on.
- ***Craft a comprehensive EV strategy.*** Craft a comprehensive strategy, dedicate investments, and put in place a compelling customer experience to become the preferred destination for on-the-go EV charging. Such a strategy should identify future-proof business models for target customer segments and provide clarity on how to decide where and when to invest.

Fuel retailers concerned about the downturn in fuel demand in developed economies can find growth opportunities elsewhere by increasing utilization in their real estate, refocusing their energies on convenience retail, and entering EV charging in attractive markets. To do so, they will need to venture beyond their traditional capabilities and act quickly to get ahead of the many different players positioning themselves for success in this rapidly evolving industry.

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