

## ALL-NEW 2017 NIRO HYBRID UTILITY VEHICLE MAKES CANADIAN DEBUT AT THE 2016 CANADIAN INTERNATIONAL AUTO SHOW

- Kia's Hybrid Utility Vehicle boasts a number of firsts for the brand, including an all-new, dedicated eco-car platform and unique hybrid system
- Niro is a no-compromise package, maintaining the style and appeal of a utility vehicle while offering outstanding fuel economy
- Niro challenges the hybrid-electric segment with an innovative hybrid system that directly contributes to a dynamic driving experience

**(Toronto) February 11, 2016** – A key component to Kia Motors' Green Car Roadmap was unveiled at the Toronto Auto Show today as Kia Canada hosted the Canadian debut of the all-new 2017 Niro Hybrid Utility Vehicle (HUV). A no-compromise vehicle that combines driving enjoyment with eye-catching design, functional utility and hybrid efficiency, the all-new Niro strikes the perfect balance for today's consumers and stakes claim to a unique position between the hybrid-electric vehicle and CUV segments.

"The Niro will be an important vehicle for Kia Canada, offering Canadian consumers a hybrid-electric vehicle that will provide dynamic driving characteristics, exceptional fuel economy and a stunning design." said Ted Lancaster, Vice President and COO, Kia Canada Inc. "With the importance of the CUV market in Canada, the Niro will certainly make a statement within its segment as a distinctive and practical hybrid-electric vehicle."

The Niro is yet another vehicle introduced under the Kia Motors EcoDynamics environmentally friendly sub-brand and represents a number of firsts. While it was preceded by clean mobility products such as the Optima Hybrid and Soul EV, Niro is the first Kia to make use of an all-new, dedicated eco-car platform and is an important next step on the path to nearly tripling the brand's global green car line-up by 2020.

**\*\* more \*\***

## **An 'Un-Hybrid' design**

Designed at Kia's design centers in Irvine, California, and Namyang, Korea, the Niro demonstrates that owners don't have to sacrifice emotionally engaging design or functional utility in the name of efficiency. The HUV's design language is atypical of a hybrid, appearing strong and confident with subtly sculpted surfaces offset by robust styling cues. The Niro sports wide and low proportions with a long roofline and short overhangs that give it an overall athletic profile. Up front, the Niro bears a familiar front fascia highlighted by Kia's signature grille and flanked by aggressively shaped headlights that accentuate the Niro's strong shoulders. Contours on the hood lend visual interest and, along with voluminous wheel arches, rocker cladding, roof rails, and rear skid plate, contribute to a sporty look. Although the Niro has a cohesive crossover theme, it was designed with aerodynamics in mind, with its carefully shaped bodywork contributing to a relatively slippery coefficient of drag of .29.

Stepping inside the Niro reveals an inviting, modern, and high-tech interior. Glossy white or black accents underline the HUV's straightforward theme. The instrument panel is uncluttered and clean, with colorful and informative gauges at the forefront and perfectly positioned primary and secondary controls falling readily to hand. Interior roominess comes by way of the Niro's 106.3-inch wheelbase, body height, and wide stance, which affords ample leg-, head- and shoulder-room. Seats with increased pad density in the cushions ensure a comfortable ride, helping to prevent fatigue on longer trips. With its crossover-like proportions, the Niro boasts an elevated seating position much like the Kia Soul, providing drivers with a more commanding view of the road as well as easy ingress and egress. While the clever packaging of the high voltage battery assists in delivering a desirable driving experience, its location underneath the rear seats also increases cabin and cargo space and allows a flat load floor.

In addition to spaciousness and comfort, ensuring a quiet interior environment was also a key development focus for engineers. Copious insulation in the Niro's front structure, optimized suspension bushing stiffness, careful body sealing, and application of expanding foam inside the A- and B-pillars all prevent road and tire noise from entering the cabin. Furthermore, acoustic windshield glass and carefully shaped side mirrors mitigate wind noise.

Engineers also worked hard to address the innate issues often associated with hybrid powertrains. To that end, they minimized system noise and vibration at the source with specially designed engine mounts, equal-length driveshafts, and even added a damper inside the steering wheel hub to minimize vibrations felt in the steering wheel. Other NVH measures include a special embossed foam in the floor (under the carpet), and a dense insulating pad underneath the hood also help to keep unwanted noise to a minimum.

**\*\* more \*\***

### **Strong and light core**

The platform underpinning the Niro has been specifically engineered to accommodate the unique gasoline-electric hybrid powertrain, and with 53 percent of Advanced High Strength Steel (AHSS), including reinforcement in the A- and B-pillars as well as the roof rails, it is both a lightweight and durable structure. Extensive use of hot-stamped components and industrial joint adhesive increase torsional rigidity and structural integrity. As such, engineers are targeting the Niro to earn top honors from the National Highway Traffic Safety Administration (NHTSA) and Insurance Institute of Highway Safety (IIHS).

Weight reduction was a critical Niro development aspect, and in addition to the body, AHSS was also used to engineer other elements, including novel lightweight seat frames. Further, engineers were able to bring down the overall weight by using aluminum for the hood, tailgate and several suspension elements including the front lower control arms, front and rear knuckles, and in the brake calipers. Even the parking brake pedal contributes to the weight savings through the use of fiber-reinforced plastic construction. Finally, the engineers eliminated the traditional 12-volt battery to reduce weight, instead, utilizing the high-voltage lithium-ion polymer battery.

### **Uniquely engineered hybrid powertrain**

Motivating the Niro is a highly efficient and engaging powertrain starting with an all-new, state-of-the-art Kappa 1.6-liter GDI four-cylinder engine, engineered specifically for hybrid applications. Making 103 horsepower, the new engine marks the first combination of the Atkinson Cycle, cooled exhaust gas recirculation (EGR), GDI and a long-stroke-narrow-bore specification to maximize efficiency<sup>[1]</sup>. Efficiency and emissions are further improved via the Niro's exhaust heat recovery system, which speeds engine warm-up by routing coolant to a heat exchanger in the exhaust system. A 43-hp tractive motor, known as the transmission-mounted electric device (TMED), works in tandem with the gasoline engine to produce a robust 146 horsepower and 195 lb.-ft. of torque.

That power is transmitted through a newly developed, second-generation six-speed dual-clutch transmission (DCT), which not only boosts efficiency but is also a key factor to the Niro's great driving experience. The transmission delivers smooth, quick shifts for a natural and spirited feel in stark contrast to that of other hybrids equipped with continuously variable transmissions. Bringing the whole system together is a compact and lightweight 1.56-kWh Lithium Ion Polymer battery located underneath the rear seat. Because the high-voltage battery is both power and energy dense, engineers were able to use the downsized gasoline engine to maximize fuel economy and reduce emissions.

With its unique combination of the lightweight TMED, proven GDI and Atkinson Cycle technology in the internal combustion engine, along with the DCT providing a dynamic driving experience, the Niro offers enjoyment and efficiency all in one, targeting a combined fuel efficiency rating of 50 mpg.

**\*\* more \*\***

### **Driving Fun**

The Niro's parallel and simplified hybrid system creates seamless transitions of power delivered to the front wheels, resulting in a very un-hybrid-like driving experience. The hybrid system is neither intrusive nor obvious. The Niro accelerates quickly off the line and continues its smooth power delivery, inspiring driver confidence in everyday driving maneuvers like merging onto the highway.

Special attention was also paid to brake feel. Applying lessons learned through development of two generations of Optima Hybrids as well as the fully electric Soul EV, Kia engineers designed the Niro's regenerative system to seamlessly blend in hydraulic friction braking. Consequently, deceleration feels more consistent and linear than other hybrids.

### **Advanced hybrid tech**

Like the rest of Kia's lineup, the Niro will be offered with a suite of advanced driver assistance and convenience technologies. Familiar features that will be available on the HUV include Blind Spot Detection with Rear Cross Traffic Alert and Lane Change Assist; Advanced Smart Cruise Control; Lane Departure Warning; and Autonomous Emergency Braking.

All-new Eco-DAS (Driver Assistance System) features Kia's first application of Coasting Guide and Predictive Energy Control. The Coasting Guide aims at maximizing fuel economy by essentially coaching the driver on when to coast and brake. Predictive Energy Control, meanwhile, uses the navigation system and cruise control to anticipate topographical changes on the road ahead and actively manage energy flow, seamlessly determining when its best to recharge the battery and when its best to expend stored energy to optimize overall efficiency. Similar systems have been seen on German luxury makes, but Kia's system is the first in the industry to monitor and adjust for both ascending and descending scenarios. Other notable features include Smart Air Intake, which reduces drag by carefully managing the intake of outside air for the HVAC system, and also an accompanying Auto Defog system that prevents condensation from building on the glass by monitoring cabin air conditions to manage the cycling of the A/C compressor.

Editor's note: All technical specifications and standard/optional features in this press release refer to the North American models and may differ from models marketed in other regions.

###

### **About Kia Motors Corporation**

*Kia Motors Corporation ([www.kia.com](http://www.kia.com)) – a maker of quality vehicles for the young-at-heart – was founded in 1944 and is Korea's oldest manufacturer of motor vehicles. Over 3 million Kia vehicles a year are produced at 10 manufacturing and assembly operations in five countries which are then sold and serviced through a network of distributors and dealers covering around 180 countries. Kia today has over 50,000 employees worldwide and annual revenues of nearly*

*US\$44 billion. It is the major sponsor of the Australian Open and an official automotive partner of FIFA – the governing body of the FIFA World Cup™. Kia Motors Corporation's brand slogan – "The Power to Surprise" – represents the company's global commitment to surprise the world by providing exciting and inspiring experiences that go beyond expectations.*

#### **About Kia Canada**

*Kia Canada Inc. ([www.kia.ca](http://www.kia.ca) – [www.facebook.com/kiacanada](https://www.facebook.com/kiacanada)) a maker of quality vehicles for the young-at-heart is a subsidiary of Kia Motors Corporation (KMC), which was founded in 1999 and sells and services high quality, class leading vehicles like the Soul, Forte, Sorento and Cadenza luxury sedan through a network of 190 dealers nationwide. Kia Canada Inc. employs 149 people in its Mississauga, Ontario headquarters and four regional offices across Canada. Kia's brand slogan "The Power to Surprise" represents the company's global commitment to surprise the world by providing exciting & inspiring experiences that go beyond expectations.*

---