

# Harbinger of Hybrids

S MURALIDHAR

After being hailed as the future, just a few years ago, hybrids started taking the metaphorical backseat in the world of automobiles. The problem has been that they are much more expensive compared to similar IC engine vehicles and weren't as green as a pure EV could be. Hybrids have both battery-electric and ICE powertrains, potentially costing nearly double that of a regular fossil fuel counterpart, and by nature they are focused on frugality and not so much on performance. So, they do tend to be construed as neither here nor there.

But, for a market that is focused on stretching the litre, hybrids could be a good solution. The only hurdle is the price point. For years Honda has futilely advocated technology agnosticism to the government, in an attempt at promoting hybrids as an interim solution. Finally, Honda Cars India seems to have hit upon an answer that will not need any subsidy support to make a hybrid saleable. At a time when the price of petrol is hovering close to the ₹115 mark, a mileage of 26.5kmpl must be tempting enough. The answer in the new City e:HEV is a hybrid system that is stronger than a mild hybrid, but milder than a strong hybrid (plug-in). Involving a small self-charging battery pack and a pair of electric motors that provide traction and battery regeneration, the City e:HEV manages to deliver the entire hybrid experience—full EV mode, series assist and parallel driving assist—in conjunction with its petrol engine. The advantage of the set up that Honda has chosen is re-

flected in its pricing power, with an ex-showroom price of ₹19.5 lakh.

## Design

The new City e:HEV isn't one of those hybrids that has been extensively restyled or designed to max out aerodynamics at the expense of looks. In fact, it looks pretty much identical to the regular City which is currently available with a petrol and a diesel powertrain. Very few exterior changes are unique to the e:HEV. The claw-like housing for the fog lamps in the front fender, the carbon-fibre finish to the rear diffuser and the boot spoiler that sits on top of the boot lid are the only additions. Of course, there is badging that identifies the hybrid and the ZX badge next to the e:HEV points to the one and only trim that is being offered with this dual powertrain version.

There are two additions to the sedan segment in the Skoda Slavia and the Volkswagen Virtus, and there is likely to be a lot more action in a segment that has been lacklustre overall with the only shining star there being the City. The Honda sedan was one of the best designed cars in the segment, with balanced proportions and a unique front fascia and rear design. This continues in the new City e:HEV and almost all of the design elements have been carried forward. There is a thicker chrome sash on the bonnet grille that connects the headlamps. The luminous blue shadow to the Honda logo identifying it as a hybrid is the only other e:HEV special.

Honda engineers apparently did consider a special low rolling resistance compound tyre in the initial stages. But the



need to maintain the ride quality and to handle the additional weight of the hybrid (about 130kgs) compared to the IC engine City, meant that parameters like the strength of the sidewalls had to be considered. The final choice had to be the Bridgestone Ecopia 185/65 R15. The spare under the boot floor is a space saver.

## Cabin

The story inside the cabin of the new City e:HEV is similar. Most of the dashboard features are identical to the ZX trim variants of the regular City, though the replacement of the handbrake with the electric parking brake is a conspicuous addition. A minor variation to the cabin colour theme can be seen only if you keep both the cars next to each other. The other interior feature that is different is the part digital instrument cluster. The e:HEV sports an analog speedometer and instead of the odometer the digital part displays multiple selectable info including active ADAS functions, and the energy flow via the powertrain with a

simplistic representation of the state of charge in the battery pack. The animation shows a real-time display of regen charge flow and series or parallel assist discharge from the battery.

There have been changes to the centre console with the hybrid's auto gear stickshift, auto brake-hold and 'Econ' mode buttons being the differences. The e:HEV also gets the 17.7cm high-def LCD screen, which does the job well enough, though it seems a bit dated in design and presentation with the array of buttons built onto the rectangular frame. The screen displays a bunch of info including power flow meters, controls for other cabin functions and the new ADAS (advanced driver assistance systems) functions that Honda is offering under the 'Honda Sensing' umbrella. Two of the best features of the City's cabin are the plump, well-bolstered seats, clad in leather in the e:HEV, and the amount of space in the cabin. In fact, Honda manages the



best leverage between the external footprint of the vehicle versus cabin space. The City is a good example of this. The only part of the City e:HEV where this hasn't worked is the boot, where the addition of the battery pack has meant that the storage capacity is now just 306-litres, about 200-litres lesser than the regular City.

## Hybrid Performance

The City e:HEV's powertrain is one of the most complex in the passenger car industry right now. The hardware set up seems simplistic enough to explain, but it is the control algorithm that is sensitive and complex. Honda also doesn't fully explain the algorithmic logic since it is proprietary. The hybrid powertrain includes Honda's 1.5-litre, i-VTEC, 4-cylinder, Atkinson cycle petrol engine, two AC synchronous electric motors and a 180-volt Lithium-ion battery pack. The engine has been tuned lower to deliver a peak power of 98PS and a peak torque of 127Nm.



Starting out on EV mode delivers instant torque and fuel efficiency, so it's both quick and frugal. **BIJOY GHOSH**

The drive motor delivers an additional 109PS of power and torque of 253Nm. While the drive motor delivers traction to the wheels, the other 'generation' motor feeds power back to the battery through regenerative braking. In traditional parallel-assist hybrids, the combined output would be simple math, but in the City e:HEV, the system varies the output depending on driving conditions and driver demands, offering multiple levels of assist and so multiple power and torque levels will be recorded. The Power Control Unit (PCU), the sort of brain of the entire hybrid system monitors all the parameters including feedback from an array of sensors to determine whether the vehicle runs on pure EV mode, series-assist mode or parallel-assist mode.

Together, the petrol engine and the battery-electric system get an e-CVT. Unlike the continuously variable transmission (CVT) gearbox of the regular petrol City and its range of gears, the e-CVT features just one gear ratio. The 'electrically coupled' CVT features an engine-linked wet-clutch, which

behaves like a lock-up clutch during engine operation. In hybrid mode, the engine acts like a generator feeding power to the battery, while the traction motor drives the wheels. The clutch is engaged in engine drive mode and effectively only with one gear. During my test drive, I did hear what seemed like gear changes and engine rpm levels rising and falling, but Honda engineers clarified that the system generates it only to mimic natural drive feel. Mind you none of these modes are selectable, they are seamlessly chosen by the system based on multiple parameters like throttle input, brake pressure, battery state of charge and engine speeds. The steering wheel does feature paddle shifters, but the is manual gear selection; instead, these paddles can be used to select higher or lower levels of regenerative braking. The electric servo brake helps direct power back to the self-charging battery pack. This is not a very large battery pack, so while there is a pure EV mode, mostly during initial start and acceleration, the range delivered purely on battery is not very

high. With some practice, it should be possible to do one-pedal driving of the new City e:HEV. Brake Regen works in the background and can be used to your advantage in city driving conditions.

In terms of the ride quality, the City e:HEV is the same level of likeable as before. The City doesn't feel particularly heavy or solid on the run, and instead feels pretty nimble off the block. But it doesn't thud through pot-holes or bad patches; it still delivers a confident, planted ride. Safety equipment in the one-trim variant e:HEV includes the LaneWatch camera for blind-spot assistance during lane changes, six airbags, vehicle stability assist and tyre pressure monitoring system.

## Bottom Line

The City e:HEV is also being offered with a suite of ADAS (advanced driver assistance systems), including road departure warning, lane keeping assist, adaptive cruise control and a collision mitigation system.

Most of these real-time functions are executed with the assistance of a camera mounted behind the rear-view mirror inside the cabin. The City e:HEV is effectively a Autonomous Level 2 vehicle, but Honda is hesitant to highlight this fact, lest customers mistake the level of assistance it offers. The functions have been extensively tested and calibrated in Indian conditions and offered consistent performance during my test drive.

The big relief is that the City e:HEV doesn't carry a technology premium. Priced at ₹19.5 lakh, it is still only about a couple of lakhs more than the regular petrol version.

## MADRAS CHIPBOARD LIMITED

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Website : www.madraschipboard.com

### NOTICE TO SHAREHOLDERS

#### TRANSFER OF SHARES HAVING UNCLAIMED DIVIDEND TO INVESTOR EDUCATION AND PROTECTION FUND (IEPF)

In accordance with Section 124(6) of the Companies Act, 2013; the shares in respect of which, dividend has not been paid or claimed for seven consecutive years shall be transferred by the Company to IEPF.

In accordance with that, the Company proposes to transfer to IEPF the equity shares in respect of which dividends remain unclaimed for seven consecutive years.

The Company has sent individual notices through Registered Post to the shareholders, whose dividends are lying unclaimed for the last seven consecutive years, advising them to claim the dividend expeditiously.

In terms of Rule 6(3) of the Investor Education and Protection Fund Authority (Accounting, Audit Transfer and Refund) Rules, 2016, the statement containing the details of the shareholders and the shares due for transfer is available on the Company's website, [www.madraschipboard.com](http://www.madraschipboard.com) for information and necessary action by the shareholders. In case, no valid claim is received for the dividend on or before 02<sup>nd</sup> August, 2022 the equity shares in respect of such unclaimed dividend will be transferred to IEPF in accordance with the Rules, on or before 01<sup>st</sup> September, 2022.

In the event of the shareholders not claiming the dividend and the shares are transferred to IEPF, the shareholders are still entitled to claim the shares from IEPF by making an online application in-Form No: IEPF-5 to the IEPF Authority. The procedure and the form are available at [www.madraschipboard.com](http://www.madraschipboard.com) and also on [www.iepf.gov.in](http://www.iepf.gov.in).

**For Madras Chipboard Limited,**  
**N.R.K.Ramkumar Raja**  
**Director**

**PLACE : Rajapalayam**  
**DATE : May 7, 2022**



## THE RAMARAJU SURGICAL COTTON MILLS LIMITED

Registered Office: P.O. Rox:2, P.A.C. Ramasamy Raja Salai, Rajapalayam — 626 117.  
CIN: L17111TN1939PLC002302;  
Ph: 04563-235904; Fax: 04563-235714 ; e-mail: rscm@ramcotex.com  
Website :www.ramarajusurgical.com

### NOTICE TO SHAREHOLDERS

#### TRANSFER OF SHARES HAVING UNCLAIMED DIVIDEND TO INVESTOR EDUCATION AND PROTECTION FUND (IEPF)

In accordance with Section 124(6) of the Companies Act, 2013; the shares in respect of which, dividend has not been paid or claimed for seven consecutive years shall be transferred by the Company to IEPF.

In accordance with that, the Company proposes to transfer to IEPF the equity shares in respect of which dividends remain unclaimed for seven consecutive years.

The Company has sent individual notices through Registered Post to the shareholders, whose dividends are lying unclaimed for the last seven consecutive years, advising them to claim the dividend expeditiously.

In terms of Rule 6(3) of the Investor Education and Protection Fund Authority (Accounting, Audit Transfer and Refund) Rules, 2016, the statement containing the details of the shareholders and the shares due for transfer is available on the Company's website, [www.ramarajusurgical.com](http://www.ramarajusurgical.com) for information and necessary action by the shareholders. In case, no valid claim is received for the dividend on or before 11<sup>th</sup> August, 2022 the equity shares in respect of such unclaimed dividend will be transferred to IEPF in accordance with the Rules, on or before 09<sup>th</sup> September, 2022.

In the event of the shareholders not claiming the dividend and the shares are transferred to IEPF, the shareholders are still entitled to claim the shares from IEPF by making an online application in-Form No: IEPF-5 to the IEPF Authority. The procedure and the form are available at [www.ramarajusurgical.com](http://www.ramarajusurgical.com) and also on [www.iepf.gov.in](http://www.iepf.gov.in).

**For The Ramaraju Surgical Cotton Mills Limited,**  
**Walter Vasanth PJ**  
**Company Secretary**

**PLACE : Rajapalayam**  
**DATE : May 7, 2022**



## INTELLECT DESIGN ARENA LIMITED

CIN : L72900TN2011PLC080183  
**Regd Office : Carex Centre, 244 (Old No. 713) Anna Salai, Chennai 600 006**  
**Corporate office : Plot No.3/G-3,SIPCOT IT Park, Siruseri, Chennai-600 130**  
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#### AUDITED STANDALONE AND CONSOLIDATED FINANCIAL RESULTS OF INTELLECT DESIGN ARENA LIMITED FOR THE QUARTER AND YEAR ENDED MARCH 31, 2022

(Rs. in Millions)

Particulars	CONSOLIDATED		
	QUARTER ENDED		YEAR ENDED
	MARCH 31, 2022 Refer Note a	MARCH 31, 2021 Refer Note a	MARCH 31, 2022 Refer Note a
Total Income from Operations	5,094.06	3,975.69	18,781.86
Profit / (Loss) for the period / year before share of profit / (loss) of associates, joint venture, exceptional item and tax	1,064.52	818.69	4,107.30
Net Profit / (Loss) for the period / year before tax (after Exceptional and/or Extraordinary items)	1,195.39	901.54	4,131.83
Net Profit / (Loss) for the period / year after tax (after Exceptional and/or Extraordinary items) - attributable to the Owners of the company	952.60	806.10	3,490.82
Total Comprehensive Income for the period / year [Comprising Profit / (Loss) for the period (after tax) and Other Comprehensive Income (after tax)] - attributable to the Owners of the company	857.49	831.54	3,653.53
Equity Share Capital	672.77	664.87	672.77
Earnings Per Share (of Rs. 5/- each)			
1. Basic	7.14	6.07	26.25
2. Diluted	6.83	5.92	25.14
Particulars	STANDALONE		PERIOD ENDED
	QUARTER ENDED		MARCH 31, 2022
	MARCH 31, 2022 Refer Note a	MARCH 31, 2021 Refer Note a	Refer Note a
Total Income from Operations	3,493.74	2,803.04	12,550.08
Net Profit / (Loss) for the period / year (before Tax, Exceptional and/or Extraordinary items)	716.91	593.29	2,643.76
Net Profit / (Loss) for the period / year before tax (after Exceptional and/or Extraordinary items)	716.91	593.29	2,643.76
Net Profit / (Loss) for the period / year after tax (after Exceptional and/or Extraordinary items) - attributable to the Owners of the company	517.39	557.30	2,020.82
Total Comprehensive Income for the period / year [Comprising Profit / (Loss) for the period (after tax) and Other Comprehensive Income (after tax)] - attributable to the Owners of the company	410.12	609.27	2,191.16
Equity Share Capital	672.77	664.87	672.77
Earnings Per Share (of Rs.5/- each)			
1. Basic	3.88	4.20	15.19
2. Diluted	3.71	4.09	14.55

#### NOTES :

- The standalone and consolidated financial results for the quarter and year ended March 31, 2022 were approved by the Board of Directors at its meeting held on May 5, 2022. These financial results are prepared in accordance with the India Accounting Standards (Ind-AS) as prescribed under Section 133 of the Companies Act, 2013 read with Rule 3 of the Companies (Indian Accounting Standards) Rules, 2015 and relevant amendment rules thereafter. The statutory auditors have conducted an audit of the above standalone and consolidated financial results. Further, the standalone and consolidated financial results for the quarter ended March 31, 2022 and March 31, 2021 are balancing figure between audited figures in respect of the full financial year and the unaudited published year to date figures upto the third quarter ended December 31 for respective years which are subject to limited review.
- Based on the "Management Approach" as defined under Ind AS 108 Operating Segments, the Company's performance is evaluated and resources are allocated based on an analysis of various performance indicators by a single business segment i.e. 'Software Product License & related services'.
- The Company has taken into account all the possible impacts of COVID-19 in preparation of these standalone and consolidated financial results, including but not limited to its assessment of, liquidity and going concern assumption, carrying amount of trade receivables, revenue accrued not billed, goodwill on consolidation, intangible assets and intangible assets under development. The Company has carried out this assessment based on available internal and external sources of information upto the date of approval of these standalone and consolidated financial results and believes that the impact of COVID-19 is not material to these standalone and consolidated financial results and expects to recover the carrying amount of its assets. The impact of COVID-19 on standalone and consolidated financial results may differ from that estimated as at the date of approval of these standalone and consolidated financial results owing to the nature and duration of COVID-19.
- Employee benefit expenses for the year ended March 31, 2022 in standalone and consolidated financial results includes aggregate employee stock based compensation of INR 92.04 million for quarter ending March 31, 2022 and INR 418.85 million for the year ending March 31, 2022 (includes a credit of INR 91.87 million towards waiver of a loan obtained by Intellect Design Arena Inc from Bank of America, NA under the Paycheck Protection Program during quarter ended June 2021, as such loan proceeds were used to retain workers and paying payroll costs).
- Tax expense for the quarter and year ended March 31, 2022 in the consolidated and standalone financial results includes reduction in deferred tax charge arising out of the estimated impact of the Taxation Laws (Amendment) Ordinance 2019. This is arising from the re-measurement of deferred tax liability that is expected to reverse in future when the Company will migrate to the new tax regime.
- For financial year 2022, the Board recommended a final dividend of ₹2.5/- (par value of ₹5/- each) per equity share. This payment is subject to the approval of shareholders in the Annual General Meeting (AGM) of the Company. For the financial year ended 2021, no dividend was declared by the Company.
- The Indian Parliament has approved the Code of Social Security, 2020 ('Code') which relates to the contributions by the Company towards Provident Fund and Gratuity. The effective date from which the changes are applicable is yet to be notified and the relevant rules are yet to be framed. In view of this, impact if any, of the changes will be assessed and accounted in period of notification of the Code
- Figures of the earlier period, wherever necessary, have been regrouped to conform with those of the current periods.

Place : Chennai  
Date : May 05, 2022

**For Intellect Design Arena Limited**  
**Sd/-**  
**Arun Jain**  
Chairman & Managing Director