

# LIVING WITH PRIUS

In April 2007, Toyota South Africa made a Prius Hybrid available to the Centre for Renewable and Sustainable Energy Studies at Stellenbosch University for a period of five years to be used to transport staff between the main campus of Stellenbosch University and the Sustainability Institute based at Lynedoch.

The Toyota Prius with its innovative hybrid driveline that makes use of an internal

and between Stellenbosch and Lynedoch on the R310. The vehicle is very easy to drive and the switching between the electric motor and internal combustion engine is unobtrusive.

During the period, a number of people were given the opportunity to experience the vehicle and all were impressed with the level of equipment and interior luxury, as well as the performance.

The current average fuel consumption

experiences with the Prius. "I'm very happy with its performance and comfort as a mayoral vehicle. It has a lot of space, and it is a smooth ride and extremely quiet, so it is easy for me to do my work in the car while I'm travelling. The only thing I like about being chauffeur-driven is that it saves me a lot of time and I can get a lot done.

"I hope that more hybrid and even purely electric vehicles will be on the market soon. The urgency of this for our environment is underlined by the fact that last year Cape Town experienced about 150 days where air pollution levels were higher than internationally accepted standards, and that cars account for about a third of all carbon emissions. This will increase in the next few years as Cape Town's economy continues to grow, so we need alternatives if we are to avoid the kind of traffic air pollution problems that are being experienced in major cities like Taipei and Mexico City."



combustion engine and an electric motor is designed to use significantly less fuel, especially in stop-start city driving. As one of the first hybrid vehicles introduced by a leading automotive manufacturer, the Prius turned out to be a reliable vehicle for everyday use as well as a commercial success, with more than 1 million units sold worldwide.

The success of the Prius paved the way for the future introduction of even more advanced technologies, such as fuel-cell powered vehicles which could rely solely on renewable energy sources and thereby reduce our dependence on fossil fuels and the associated CO<sub>2</sub> emissions contributing to global climate change.

It has now been eighteen months since the handover and the vehicle continues to impress everybody involved. Most of the driving was around the town of Stellenbosch

over a span of 18 405 km is 6,28l/100km or 16km/l. On a trip to the West Coast, it was observed to achieve a consumption figure, as indicated by the onboard computer, of just more than 5l/100km, at a reasonably steady 120km/h. During a heavy commute into Cape Town it used no fuel for approximately 5km, taking 20 minutes to cover the distance in stop-start conditions.

When driving at high speed against a strong wind on the N2 recently, the indicated consumption dropped to 7,5l/100km and the worst consumption of 7,38l/100km was recorded on that trip. The Prius seems to obtain the best fuel economy when there are sufficient descents to recharge the primary battery for later use, or of course in stop-start traffic.

The mayor of Cape Town, Helen Zille, also drives a Prius. When asked about her

## FUEL CONSUMPTION

Date	Odo	Litres	Dist.	l/100km	km/l
15-Apr	2860	30.78			
17-May	3517	42.5	657	6.47	15.5
06-Jun	4093	39.45	576	6.85	14.6
26-Jun	4830	42.74	737	5.80	17.2
27-Jul	5388	34.382	558	6.16	16.2
21-Aug	6042	41.01	654	6.27	15.9
21-Sep	6742	42.74	700	6.11	16.4
19-Oct	7344	37.89	602	6.29	15.9
24-Oct	7960	42.98	616	6.98	14.3
09-Nov	8605	32	645	4.96	20.2
29-Nov	9269	42.36	664	6.38	15.7
10-Dec	9951	43.77	682	6.42	15.6
22-Jan	10587	43.09	636	6.78	14.8
25-Jan	10858	14.47	271	5.34	18.7
30-Jan	11585	42.07	727	5.79	17.3
19-Feb	12230	43.42	645	6.73	14.9
09-Mar	12930	41.9	700	5.99	16.7
16-Apr	13610	42.8	680	6.29	15.9
06-May	14189	35.16	579	6.07	16.5
23-May	14724	31.94	535	5.97	16.8
13-Jun	15402	43.1	678	6.36	15.7
01-Jul	16046	41.6	644	6.46	15.5
05-Aug	16682	42.23	636	6.64	15.1
28-Aug	17359	41	677	6.06	16.5
05-Sep	18015	39.4	656	6.01	16.6
25-Sep	18615	40.73	600	6.79	14.7
16-Oct	19215	44.26	600	7.38	13.6
30-Oct	19969	42.24	754	5.60	17.9
26-Nov	20626	44	657	6.70	14.9
11-Dec	21265	39.82	639	6.23	16.0
TOTALS		1155.052	18405	6.28	15.9