中国绿车排行榜

2014 Green Car China of the Year

The Innovation Center for Energy and Transportation (*i*CET)

www.GreenCarChina.org

The Innovation Center for Energy and Transportation (*i*CET) is a nonprofit NGO registered in both Beijing and California. *i*CET is a trusted leader in providing innovative support to policy-makers, industry players and consumers for promoting clean transportation and carbon management capacity building in China. *i*CET's mission is to advance better air quality, reduce GHG emissions and oil dependency.

In 2006, *i*CET received the support of the Energy Foundation for promoting the China Green Car System (initially named Environmentally Friendly Vehicle System). In collaboration with China's Vehicle Emissions Control Center of the Ministry of Environmental Protection (VECC-MEP), and under the guidance of the selected American Council for Energy Efficient Economy (ACEEE) a China-specific vehicle life-cycle assessment methodology was developed.

Since 2010, the China Green Car system became available both through a dedicated online user-friendly website and as an annual report release every June. In 2014 the China Green Car system received the esteemed support of the UNEP, which enabled the use of vehicle tailpipe health impact figures provided by VECC-MEP for constructing an additional vehicle smog index.

China Green Car Ranking covers all types of passenger vehicle models sold in today's Chinese market, including 80+ manufacturers and more than 7000 vehicle models. It is meant to guide a more stringent regulatory framework governing private vehicle development in China, inform industry players of their relative performance, and assist consumers to make more sustainable vehicle purchase choices.

We wish to thank the following organizations for their support in the China Green Car system!

ENERGY FOUNDATION
能源基金会

UNEP

环境保护部
机动车排污监控中心

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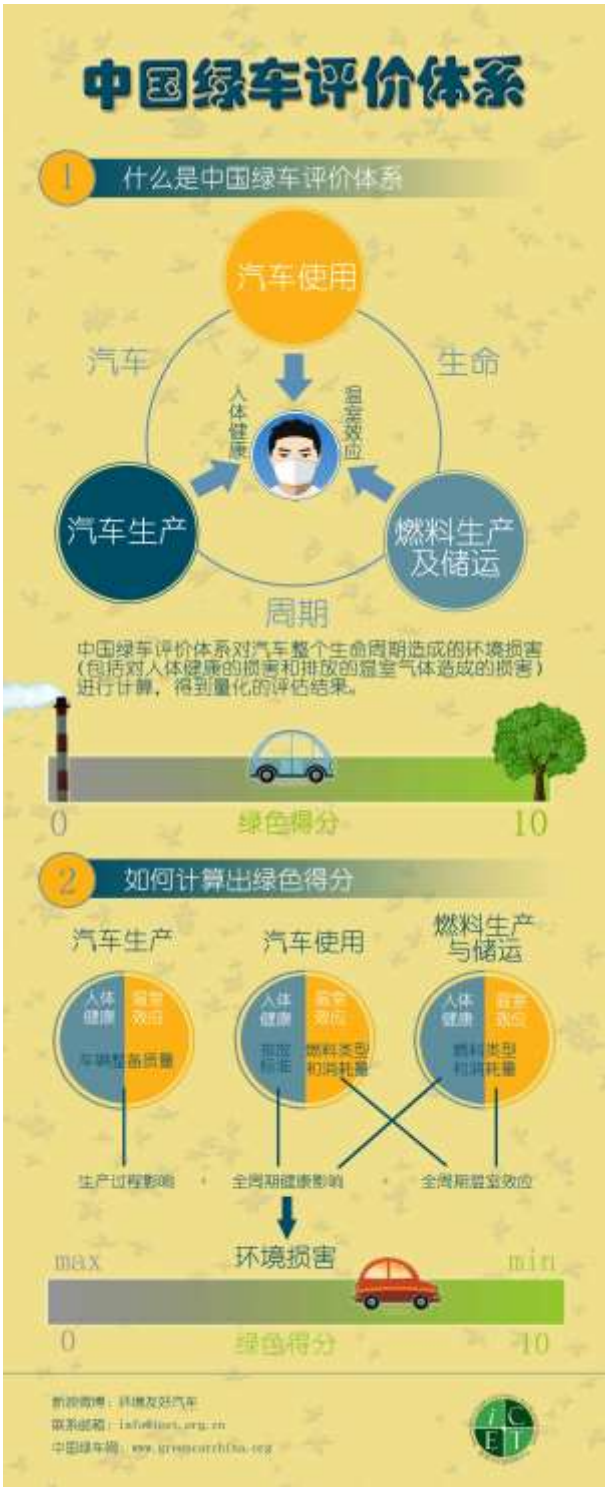
What to do?

- **Purchase a Green Car**: Use the China Green Car online system (greencarchina.org) to select a car that suits your needs and has a good green rating. Since cars have a major impact on city air pollution, your choice of car and driving behavior would affect urban air quality.

- **Purchase a fuel-efficient car:** Use the fuel consumption label to identify a car that consumes less fuel per km driven. This will reduce your car's use-phase pollutant and CO2 emissions, as well as reduce your fuel costs.

- **Reduce your mileage:** Cars are accountable for as much as third of China air pollution. You can contribute to pollution reduction by reducing your diving mileage, use public transport when possible, and jointly use your and your friend's cars (car sharing).

- **Maintain your car:** The greatest local air pollution impact of your car occurs at its use-phase. Maintain your car well to reduce its fuel consumption. For example, keep wheels' air pressure high and keep speed acceleration at a minimum.



China Green Car Weibo weibo.com/greencar2011

Join our China Green Car Weibo

Use the China Green Car ww.GreenCarChina.org

Select a car by model or brand and check out its green score

Enter your mileage to find out your car CO2 emissions

China Green Car Introduction

- **Green Score**

A life-cycle analysis of vehicles environmental and health evaluation index, ranging from 0 to 10, the higher the better performing. The green score evaluation is based on four main factors: tailpipe emissions, fuel type, fuel consumption, and fuel weight.

- **Smog Index**

A vehicle tailpipe emissions resulted heath impact rating index, where the smaller the index value the better the car performs. The smog index is based on figures provided by the Vehicle Emissions Control Canter of China's Ministry of Environmental Protection.

- **Green Rating**

A relative green evaluation index ranging from one start to five stars, where the market's top 5% are given five stars, next performing 6%-15% are given four stars, less performing 16%-30%, 31%-50%, 51%-100% receive a score of three, two and one stars, respectively.

China Green Score Highlights

- **Independent:** As a third party organization, iCET provides an objective and independent green rating.
- **Practical:** Based on global best practices combined with China-specific elements and data, iCET provides a reliable localized China Green Car evaluation system.
- **Transparent:** China Green Score system methodology and analysis results are available online for free, as well as its annual report.
- **Consistent:** China Green Car system was first published in 2010 and has been updated every year since.

This report makes use of vehicle classification provided by Sina, under the assumption that as one of China's largest consumer portals, a more consumer oriented vehicle segmentation will be available rather than using the Ministry of Industry and Information Technology (MIIT) official segmentation. The segmentation is based on the size of each vehicle, illustrated in the below table. Plus-in electric vehicles are excluded from the rating, as no official fuel consumption equivalent is currently available in China.

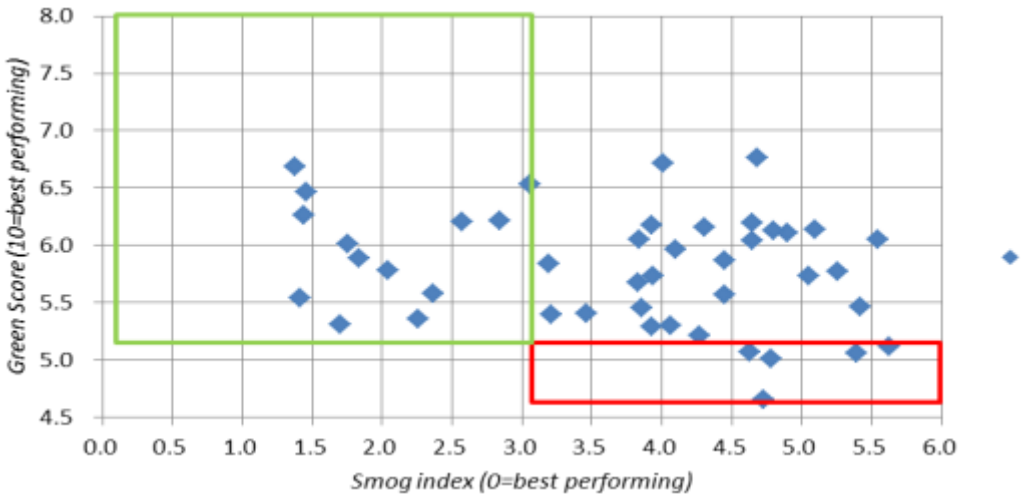
Category	Description
Small Car	A0/A00-class car, wheelbase between 2 and 2.5 meters, engine displacement generally between 0.8 and 1.6 liters.
Compact Car	A-class car, wheelbase between 2.5 and 2.7 meters, engine displacement between 1.6 and 2.0 liters.
Medium Car	B-class car, wheelbase between 2.6 and 2.8 meters, engine displacement between 2.0 and 2.4 liters.
Medium Large Car	Executive, C-class car, wheelbase normally over 2.8 meters, engine displacement between 2.5 and 3.0 liters.
Luxury Car	D-class car, wheelbase roughly 3 meters, perhaps longer. Engine displacement generally 3 liters and above.
MPV	Multi-Purpose Vehicle, usually has a one-compartment structure with the ability to function as a passenger car, travelling car, and transport vehicle. Engine displacement usually 2 liters and above.
SUV	Sport Utility Vehicle, to a certain extent can serve as a comfortable passenger car and an off-road vehicle. Normally has an engine displacement of 2.0 liters and above, has four-wheel drive.
Sports Car	Usually only has two doors with a hard or soft retractable roof. Engine is usually larger than normal passenger vehicles with superior acceleration and faster top speed.
Conventional Hybrid	Refers to vehicles that make use of electricity in the drive train of the vehicle, but that do not receive electricity from a source external to the vehicle.

To learn more about the China Green Car system, please visit **www.GreenCarChina.org**

2014 New Research Highlights

Highlight 1: 2013 Top 50 sales cars in China are performing well on the green rating, but less on the smog index.

2013 Top 50 Sales Cars' Green Score and Smog Index



Note: Green box marks best performing in terms of green score and smog index, while the red box marks worst performing cars.

Highlight 2: Japanese and Korean manufacturers perform well on both green rating and smog index; Domestic independent brands do not perform well on the smog index.

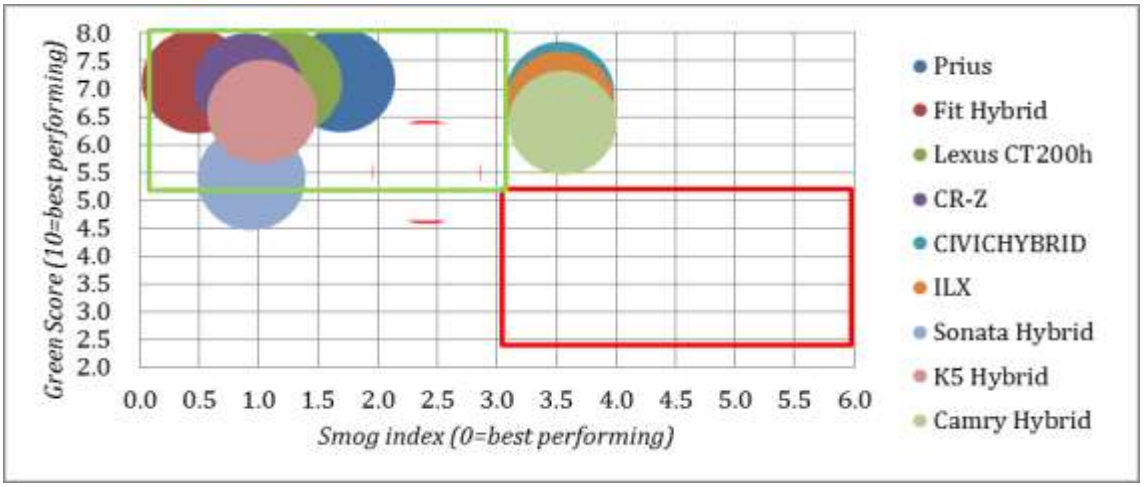
Green Rating and Smog Index by Company Type

Brand Type	EU-CN JVs	JP/KR-CN JVs	Domestic Independent	US-CN JVs
Smog Index	3.5	2.8	4.9	3.4
Green Rating	5.0	5.9	5.8	5.7

Note: Box color is illustrative of average vehicle relative performance on each of the rating (Smog Index and Green Rating), where the greenest is the best performing.

Highlight 3: Hybrid cars are best performing on both the green score and smog index out of China's major segments.

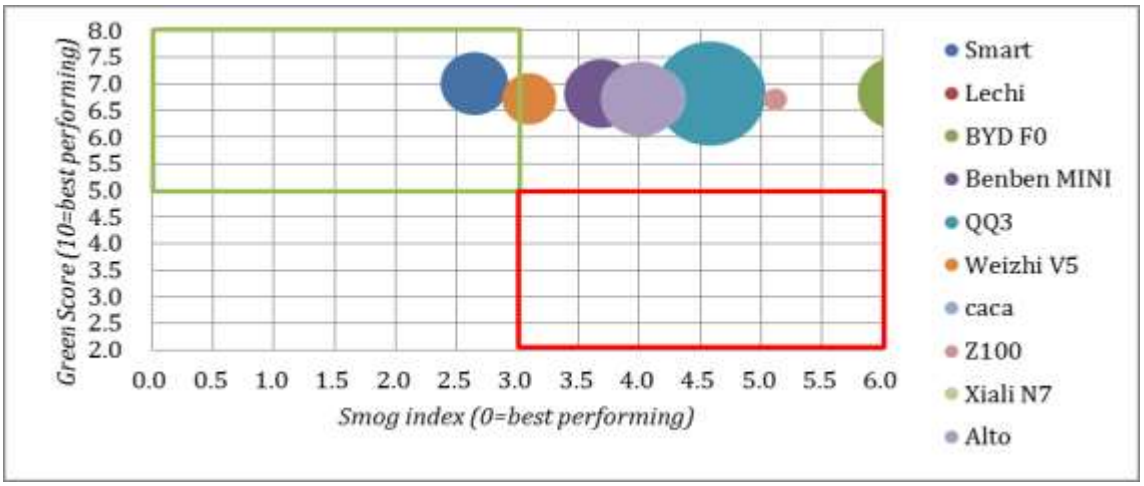
Green Score and Smog Index by Car Segment



Note: bubble size indicated 2013 sales volume; majority of models in this segment lack official sales figures thus an average is used as a default value.

Highlight 4: Although small segment cars enjoy a high green rating, their smog index demonstrates much room for improvement.

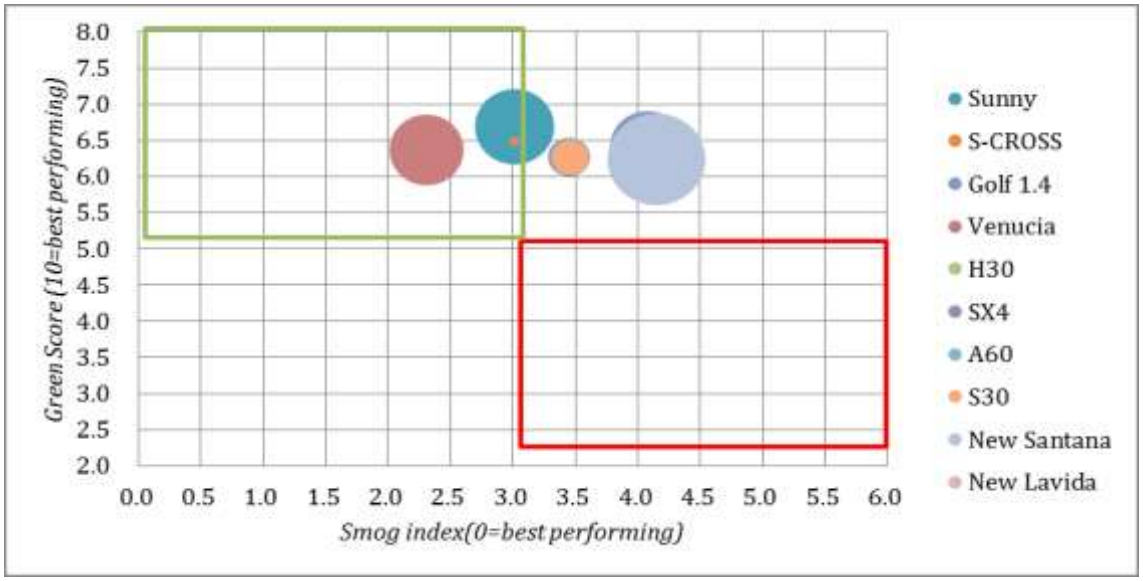
Green Rating and Smog Index of 2013 Best Selling Small Cars



Note: Bubble size illustrates 2013 car sales where available. Where not applicable, an average is used.

Highlight 5: China's best-selling compact cars enjoy a relatively high average green score of 6.35, yet an average smog index of 4.2.

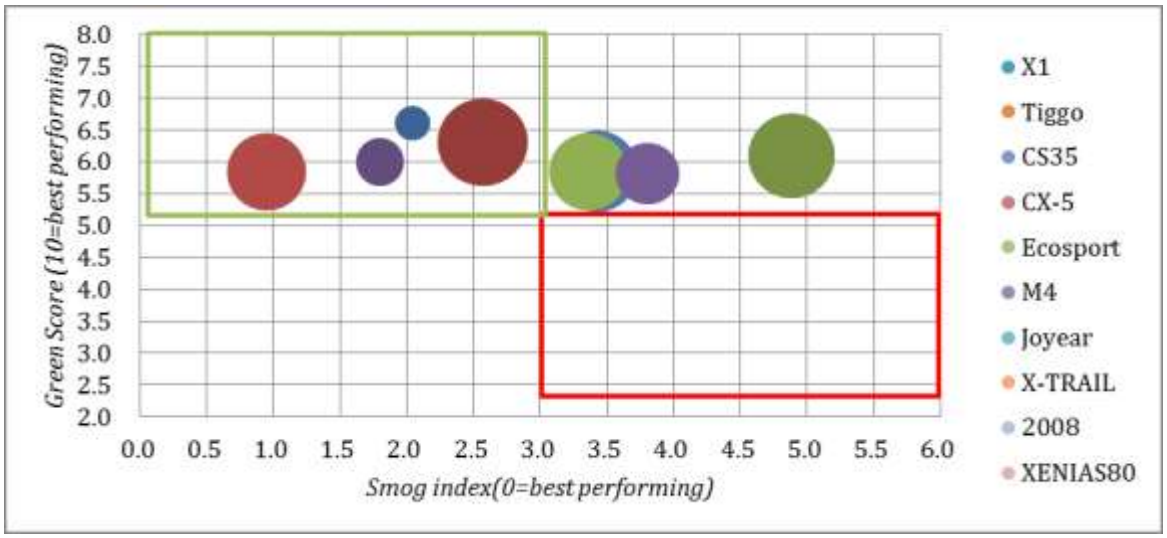
Green Score and Smog Index of 2013 Best Selling Compact Cars



Note: bubble size indicated 2013 sales volume.

Highlight 6: China's fastest growing SUV segment enjoys good green rating and smog index which is better than that of small cars on average.

Green Score and Smog Index of 2013 Best Selling SUVs



Note: bubble size indicated 2013 sales volume.

2014 By Segment Best Green Score Performing Cars

Segment	Model	Picture	Displacement	Fuel Consumption	Green Score	Smog Index	Green Level
Small	Smart		1.0	4.9	7.00	2.6	★★★★★
Compact	Sunny		1.0	5.6	6.69	1.4	★★★★★
Middle Class	BMW 316i		1.4	6.3	6.04	4.6	★★★★★
Large Class	Benz E 200		2.0	6.6	5.94	1.4	★★★★★
SUV	X1		1.5	5.6	6.61	2.0	★★★★★
MPV	Meriva		1.4	7.2	5.64	2.4	★★★★★
Sport Car	Scirocco		1.4	6.5	5.95	3.2	★★★★★
Luxury	Jaguar XJ		2.0	8.4	5.16	2.3	★★★★
Hybrid	Prius		1.8	4.3	7.16	1.7	★★★★★

Note: The above table includes the best performing model of each of China’s major nine vehicle segments.

2014 Top Sales Best Green Score Performing Cars

Rank	Model	Picture	Displacement	Fuel Consumption	Green Score	Smog Index	Green Level
1	QQ3		0.8	4.9	6.76	4.7	★★★★★
2	Xiali		1.3	5.1	6.71	4.0	★★★★★
3	Sunny-new		1.5	5.6	6.69	1.4	★★★★★
4	Sail		1.2	5.6	6.53	3.1	★★★★★
5	C30		1.5	6.0	6.47	1.5	★★★★★
6	COROLLA		1.6	6.5	6.26	1.4	★★★★★
7	LAVIDA-new		1.4	5.2	6.23	6.8	★★★★★
8	Tiida-new		1.6	6.2	6.22	2.8	★★★★★
9	SYLPHY		1.6	6.2	6.21	2.6	★★★★★
10	Sonata-new		1.4	5.9	6.19	4.6	★★★★★

Note: The above table includes 2013 top 10 performing of China top 50 annual sales, ranked by their green score.

2014 Top Sales Best Smog Index Performing Cars

Rank	Model	Picture	Displacement	Fuel Consumption	Green Score	Smog Index	Green Level
1	Corolla		1.6	6.5	5.46	1.0	★★★★★
2	520i		2.0	6.9	4.95	1.3	★★
3	Sunny		1.5	5.6	6.27	1.4	★★★★★
4	Accord		2.0	7.6	5.77	1.4	★★★★★
5	C30		1.5	6.0	6.12	1.5	★★★★★
6	CR-V		2.0	8.0	4.80	1.7	★★★
7	Corolla EX		1.8	6.7	6.56	1.8	★★★★★
8	Cruze		1.6	6.9	5.98	1.8	★★★★★
9	Camry		2.5	7.8	6.03	2.3	★★★★★
10	RAV4		2.0	7.3	5.16	2.4	★★★★

Note: The above table includes 2013 top 10 performing of China top 50 annual sales, ranked by their Smog Index performance.

2014 Green Score Best Performing Small Cars

Rank	Model	Picture	Displacement	Fuel Consumption	Green Score	Smog Index	Green Level
1	Smart		1.0	4.9	7.00	2.6	★★★★★
2	Lechi		1.2	5.1	6.83	4.1	★★★★★
3	BYD F0		1.0	4.9	6.83	6.1	★★★★★
4	Benben MINI		1.0	5.0	6.81	3.7	★★★★★
5	QQ3		0.8	4.9	6.82	4.6	★★★★★
6	Weizhi V5		1.5	5.3	6.72	3.1	★★★★★
7	caca		1.3	5.0	6.73	4.1	★★★★★
8	Z100		1.0	5.2	6.71	5.1	★★★★★
9	Xiali N7		1.3	5.1	6.71	4.1	★★★★★
10	Alto		1.0	5.0	6.72	4.0	★★★★★

2014 Green Score Best Performing Compact Cars

Rank	Model	Picture	Displacement	Fuel Consumption	Green Score	Smog Index	Green Level
1	Sunny		1.5	5.6	6.69	1.4	★★★★★
2	S-CROSS		1.6	5.6	6.48	3.0	★★★★★
3	Golf		1.4	5.4	6.41	4.1	★★★★★
4	Venucia		1.6	6.0	6.37	2.3	★★★★★
5	H30		1.5	5.9	6.27	3.5	★★★★★
6	SX4		1.6	5.9	6.27	3.4	★★★★★
7	A60		1.6	5.9	6.27	3.5	★★★★★
8	S30		1.5	5.9	6.27	3.5	★★★★★
9	New Santana		1.4	5.9	6.24	4.2	★★★★★
10	New Lavida		1.4	5.2	6.23	6.8	★★★★★

2014 Green Score Best Performing Mid-Size Cars

Rank	Model	Picture	Displacement	Fuel Consumption	Green Score	Smog Index	Green Level
1	Passat		1.4	6.3	6.04	4.6	★★★★★
2	Superb		1.4	5.9	6.02	4.8	★★★★★
3	BMW316i		1.6	6.6	6.02	3.0	★★★★★
4	428i		2.0	5.9	5.95	1.8	★★★★
5	Audi A5		2.0	6.2	5.94	3.7	★★★★
6	New Mondeo		1.5	6.9	5.74	2.5	★★★★
7	Sirui		1.5	6.7	5.72	3.9	★★★★
8	Audi A4		1.8	6.5	5.71	4.7	★★★★
9	Fortis		1.8	7.1	5.65	3.3	★★★
10	Accord		1.4	7.6	5.57	4.4	★★★

2014 Green Score Best Performing SUVs

Rank	Model	Picture	Displacement	Fuel Consumption	Green Score	Smog Index	Green Level
1	Benz E 200		2.0	6.6	5.94	1.4	★★★★★
2	520i		2.0	6.8	5.56	4.0	★★★★★
3	Jaguar XF		2.0	7.9	5.17	2.3	★★★★
4	AudiA7		2.5	8.0	5.09	2.5	★★★★
5	640i xDrive		3.0	8.8	4.81	1.3	★★★
6	Volvo S80		2.0	8.5	4.75	3.8	★★★
7	XTS		2.0	9.0	4.64	2.1	★★★
8	Crown		2.5	9.5	4.54	1.5	★★★
9	RLX		3.5	9.5	4.43	2.0	★★
10	300C		3.6	9.7	4.34	1.7	★★

2014 Green Score Best Performing SUVs

Rank	Model	Picture	Displacement	Fuel Consumption	Green Score	Smog Index	Green Level
1	X1		1.5	5.6	6.61	2.0	★★★★★
2	Tiggo		1.6	5.9	6.31	2.6	★★★★★
3	CS35		1.6	5.9	6.10	4.9	★★★★★
4	CX-5		2.0	6.6	6.00	1.8	★★★★★
5	Ecosport		1.0	5.7	5.92	7.4	★★★★★
6	M4		1.5	5.9	5.85	7.9	★★★★★
7	Joyear		1.6	6.6	5.85	3.4	★★★★★
8	X-TRAIL		2.0	7.1	5.85	0.9	★★★★★
9	2008		1.6	6.8	5.84	3.4	★★★★★
10	XENIAS80		1.5	6.8	5.82	3.8	★★★★★

2014 Green Score Best Performing MPVs

Rank	Model	Picture	Displacement	Fuel Consumption	Green Score	Smog Index	Green Level
1	Meriva		1.4	7.2	5.64	2.4	★★★★★
2	E'Z		1.8	7.4	5.62	1.5	★★★★★
3	Xenia M80		1.3	6.8	5.54	6.6	★★★★★
4	NV200		1.6	7.3	5.48	3.9	★★★★★
5	Zafira		1.4	7.0	5.45	4.5	★★★★★
6	Succe		1.5	7.6	5.43	2.9	★★★★★
7	Haima M8		2.0	7.6	5.37	3.1	★★★★★
8	Starry		1.3	7.3	5.27	6.1	★★★★
9	V80		1.5	6.9	5.26	7.2	★★★★
10	Carens		2.0	8.1	5.06	3.6	★★★★

2014 Green Score Best Performing Sports Cars

Rank	Model	Picture	Displacement	Fuel Consumption	Green Score	Smog Index	Green Level
1	Scirocco		1.4	6.5	5.95	3.2	★★★★★
2	Benz SLK 200		1.8	6.9	5.53	4.7	★★★★★
3	TOYOTA 86		2.0	7.5	5.42	3.9	★★★★★
4	Audi TTC		2.0	7.2	5.36	5.6	★★★★★
5	BRZ		2.0	7.5	5.33	4.8	★★★★★
6	Z4 sDrive18i		2.0	7.7	5.22	4.0	★★★★
7	EOS		2.0	7.6	5.19	4.3	★★★★
8	Benz CLS 300		3.5	8.2	5.02	2.5	★★★★
9	Benz SL 350		3.5	8.5	4.96	2.0	★★★★
10	Benz SLK 350		3.5	8.7	4.91	2.0	★★★★

2014 Green Score Best Performing Luxury Cars

Rank	Model	Picture	Displacement	Fuel Consumption	Green Score	Smog Index	Green Level
1	Jaguar XJ		2.0	8.4	5.16	2.3	★★★
2	Benz S 400 L		3.0	8.2	5.16	3.9	★★★
3	Audi A8L		2.5	8.8	4.96	2.5	★★
4	740Li xDriv		3.0	8.9	4.85	3.2	★★
5	Quattroporte		3.0	9.7	4.50	5.4	★
6	LEXUS LS460L		3.8	11	3.59	1.9	★
7	Equus		4.6	11.2	3.96	2.9	★
8	Phaeton		3.0	11.6	3.62	3.6	★
9	Wraith		6.6	13.8	2.59	3.7	★

2014 Green Score Best Performing Hybrid Cars

Rank	Model	Picture	Displacement	Fuel Consumption	Green Score	Smog Index	Green Level
1	Prius		1.8	4.3	7.16	1.7	★★★★★
2	Fit Hybrid		1.3	4.7	7.14	0.5	★★★★★
3	Lexus CT200h		1.8	4.5	7.10	1.2	★★★★★
4	CR-Z		1.5	4.8	7.07	0.9	★★★★★
5	fe		1.5	4.5	6.91	3.5	★★★★★
6	Acura ILX		1.5	4.8	6.74	3.5	★★★★★
7	Sonata Hybrid		2.0	5.4	6.60	0.9	★★★★★
8	K5 Hybrid		2.0	5.4	6.59	1.0	★★★★★
9	Camry Hybrid		2.5	5.3	6.39	3.6	★★★★★
10	S400 Hybrid		3.5	6.9	5.51	2.4	★★★★★

Note: Plug-in hybrid vehicles are excluded from the rating due to lack of official fuel consumption equivalent data.

*i*CET Clean Transportation Program Introduction

Program missions: Reduce oil dependency, GHG emissions, and air pollution of China's transport sector through policies and implementation.

Clean Transportation Program Approaches

*i*CET Clean Transportation Program Project Highlights:

1) Zero-Emissions Vehicles (ZEV) implementation:

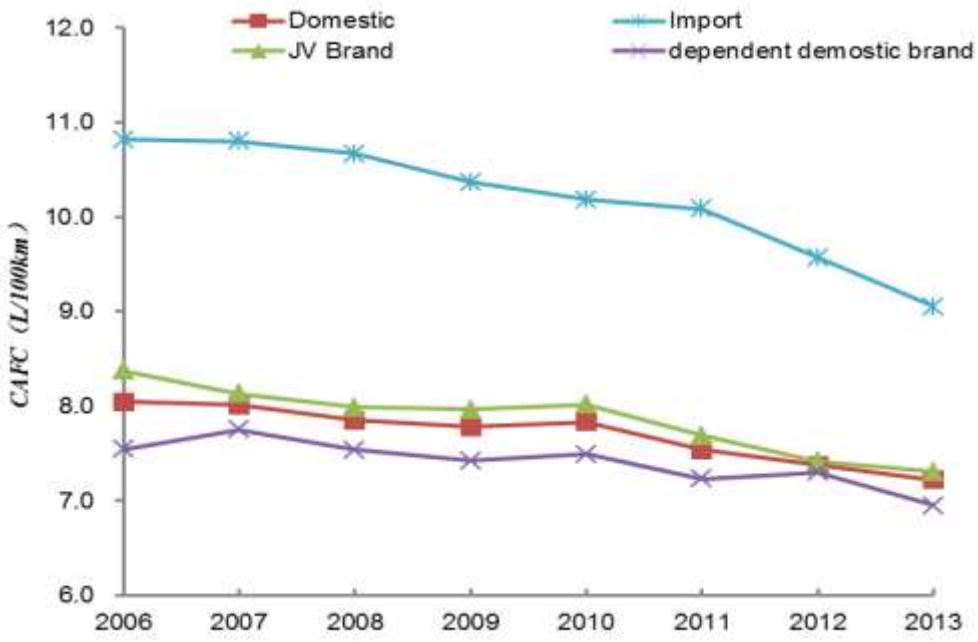
In 2013, *i*CET commenced an evaluation of California's leading and innovative ZEV-Credits program. In 2014, *i*CET received further funding and local government support for taking the ZEV-credits scheme one step forward and designing an initial scheme suitable for the Chinese market.

2) China Fuel Economy Implementation:

*i*CET has contributed greatly to introducing the fuel economy concept to Chinese policy-makers and the design of China's fuel consumption standards as of 2001.Since 2005,*i*CET has researched China's fuel consumption policy design and implementation effectiveness through actual market adoption.

China's corporate private vehicle average fuel consumption reduced by 8.35% between 2006 and 2013, from 8.05L/100km to 7.38L/100km. Among these, JVs have reduced their corporate fuel consumption by 12.1%, independent brands reduced their corporate average fuel consumption by 8%, and importing brands reduced their corporate average fuel consumption by as much as 16.3% (from 10.82L/100km in 2006 to 9.06L/100km in 2013).

Figure China Average Corporate Vehicle Fuel Consumption Trends (2006-2013)



Use the China Green Car System to Combat Air Pollution!