

Nissan Future Technology Brief



NISSAN Intellectual Asset Management
Office

SONE, KOHKI
Nov 29, 2007

Overview of Our Global Business



Headquarter in
Tokyo

Number of main branch offices: 67
worldwide

Number of employees (including
consolidated
subsidiaries) : 186,336 (as of
March 31, 2007)

Worldwide car production in
2006: 3,267,001

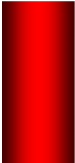


Nissan Design Europe
(London)



Canton plant
(Mississippi)

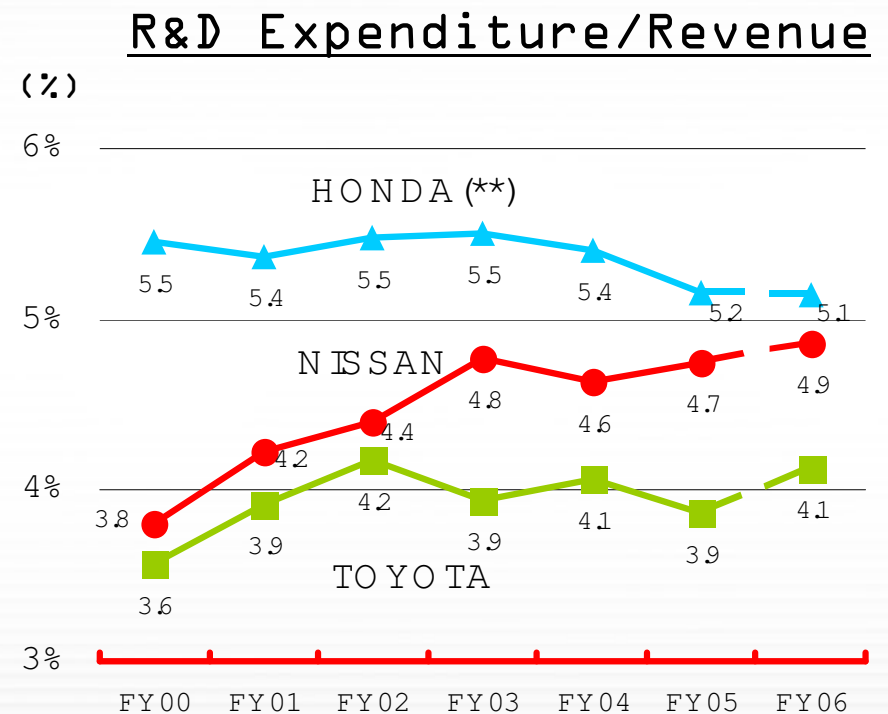
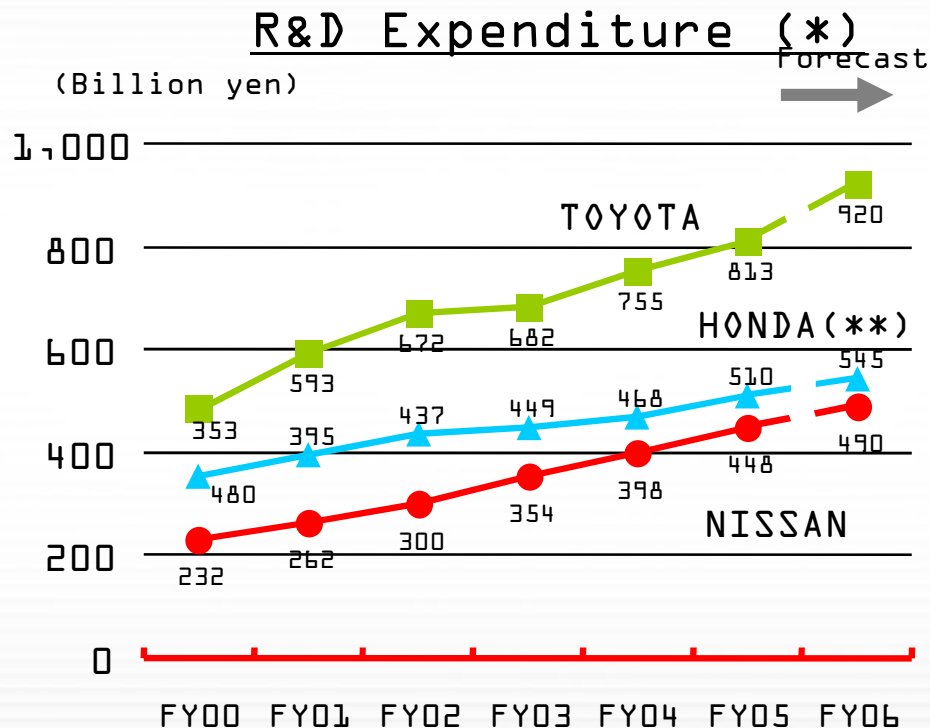
side
(64%)



1. R&D Investment

1-1. R&D Expenditure

■ Resource allocation to R&D is on par with major competitors.



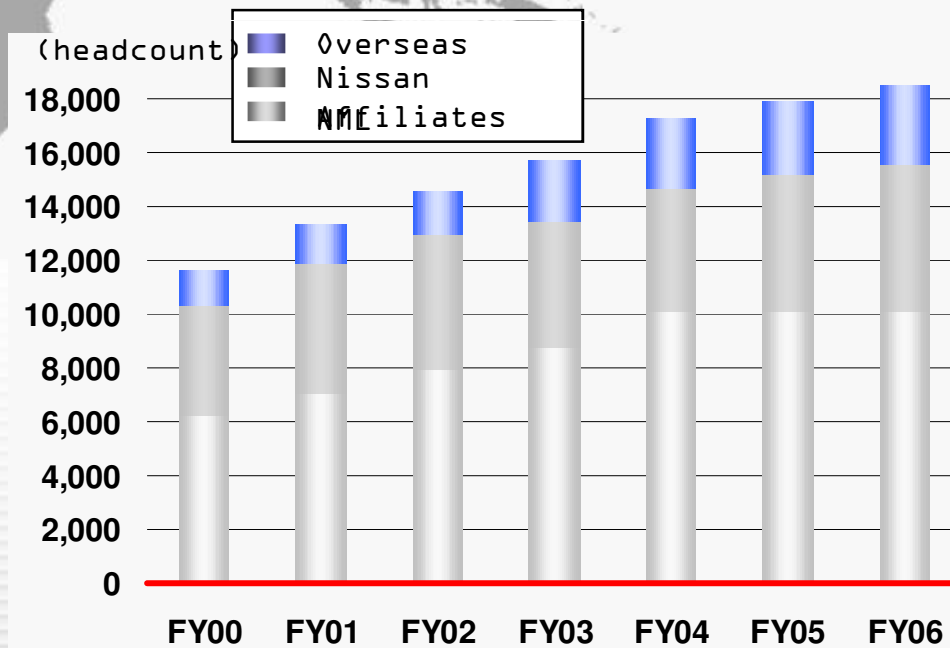
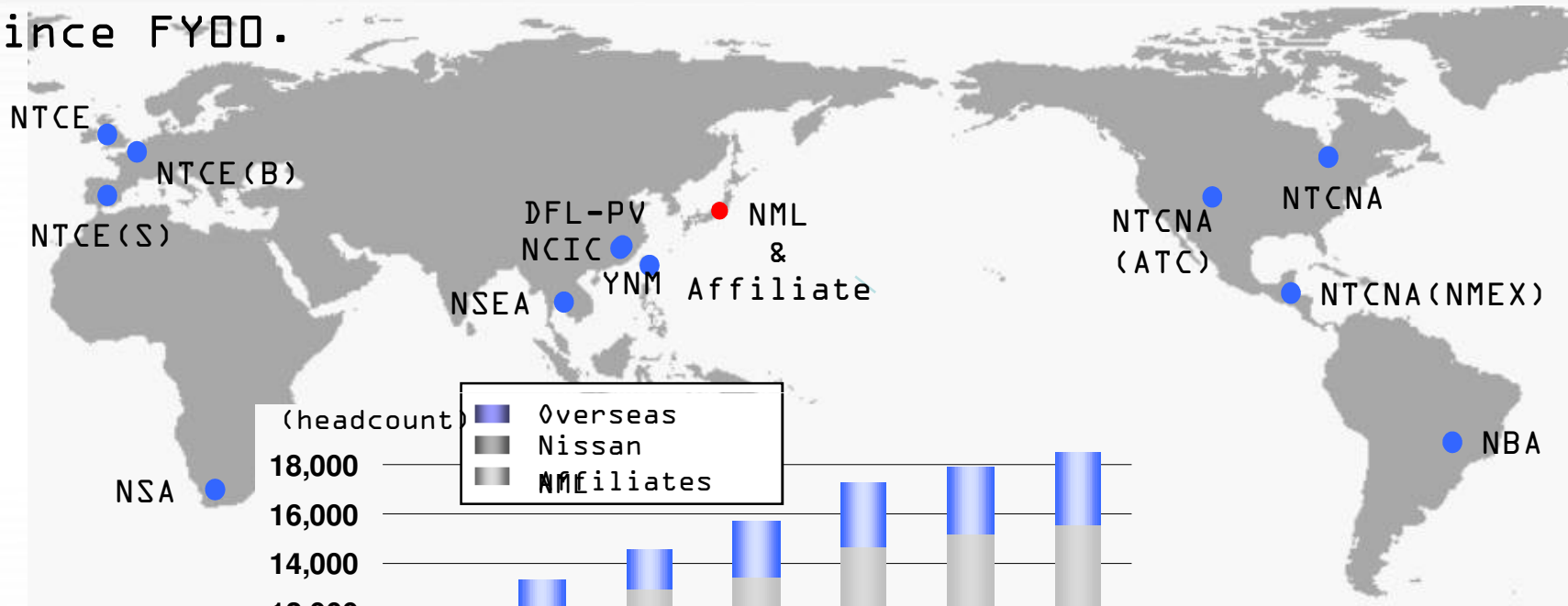
* R&D Expenses: Including planning, design, production engineering.

** Honda: Including motorcycles

source: Honda annual report
Toyota annual report

1-2. Global Workforce

■ R&D headcount increases every year since FY00.



Global Nissan:
Including NML, Nissan Sytai,
JATCO, Aichikikai, Nissan
Techno, NTCNA, NTCE,
DFL-PV, NCIC, YNM, NSA, NSEA, NBA

Including
Managers, engineers,
technicians & temporary
staff

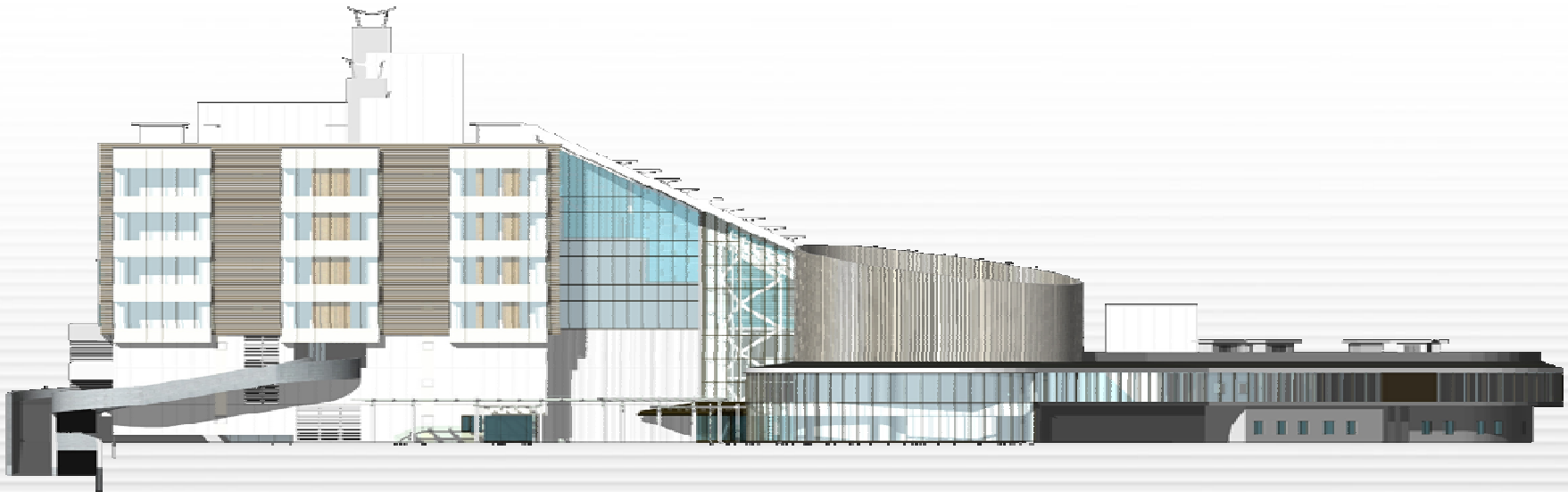
1-3. R&D Achievements (New technology rollout)

■ Technology applications on the rise.

▲World first ■ Japan first

	'90	'91	'92	'93	'94	'95	'96	'97	'98	'99	'00	'01	'02	'03	'04	'05
Vehicle system											•Hyper mini (EV) •HEV	•FCV Fleet(US) •FCV Fleet(Japan)		•FCV (In-house Stack)		FCV •
ITS									•Compass link •Laser radar auto cruise control •Emergency call			•Preview braking assist ACC with Low-speed following capability ▲Lane keep ■Braking control ACC		•Intelligent Brake Assist ■Carwings		•Cabin VOC
Environment																
Safety																
Dynamic performance																
Comfort																

2. Nissan Advanced Technology Center (NATC)



Recent Technologies



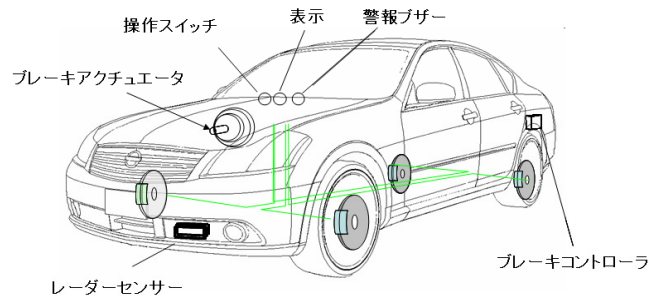
X-TRAIL FCV



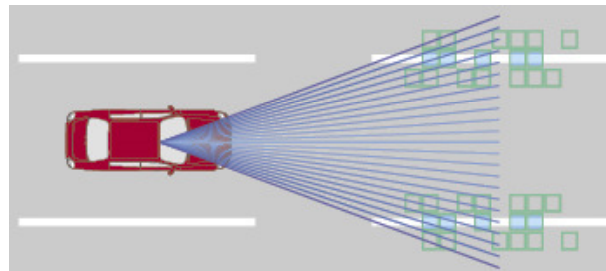
Altima Hybrid



XTRONIC CVT for
3.5L



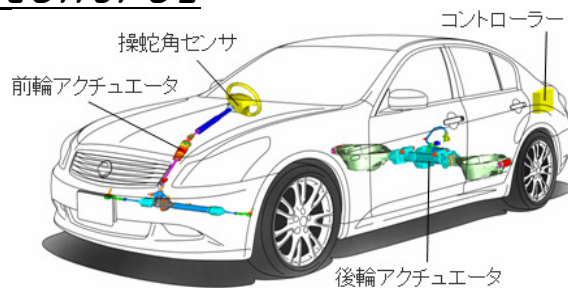
Intelligent Cruise
Control



Lane Departure
Warning



Qashqai 4x4



4 Wheel Active Steer

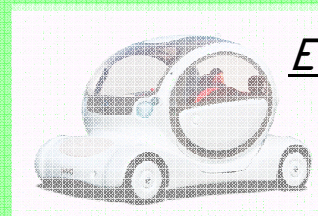


New Generation Carwings
&
Navigation System

Environment Technologies

Technologies on track to 'Nissan Green Program 2010'

SKY project (FY09)

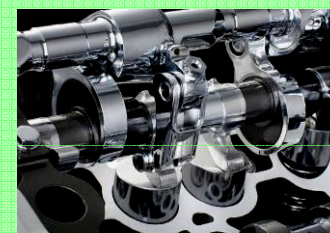


EV (FY09)

Cleart Diesels (FY08-10)



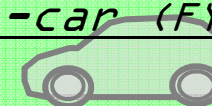
NISSAN
GREEN PROGRAM



V-VEL (FY07)

In-house HEV
(FY10)

3L-car (FY09)

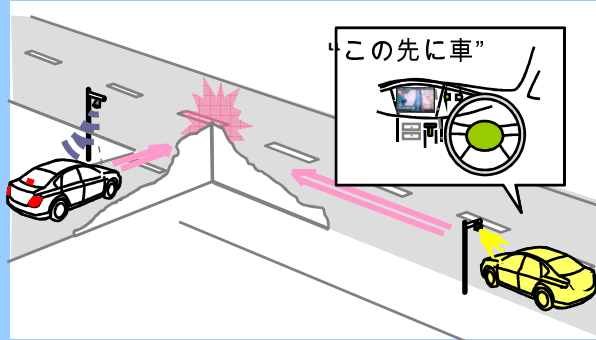


6 eco-car
(FY06)

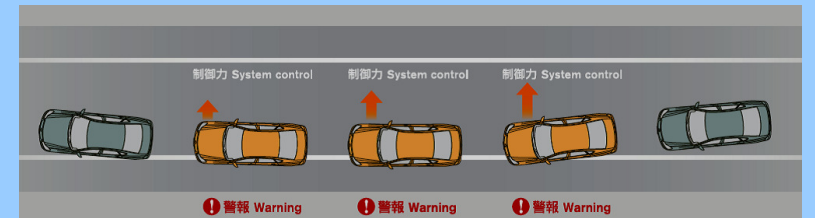


Safety Technologies

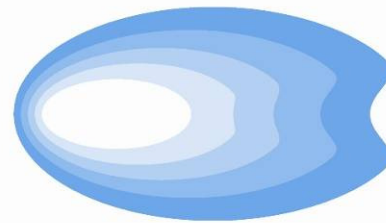
Provide leading technologies based on the concept
'Safety Shield' that vehicle helps protect



SKY PROJECT



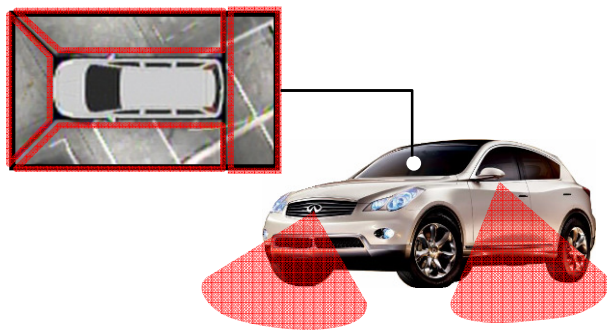
Lane Departure Prevention



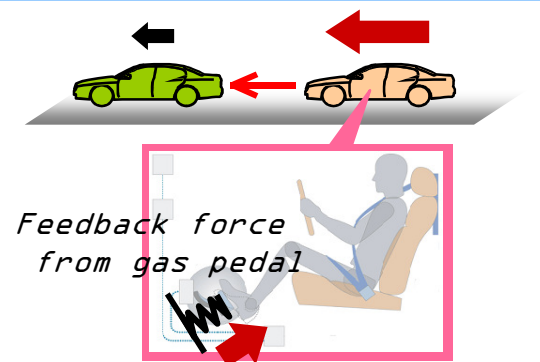
SAFETY SHIELD

Safety Shield Concept

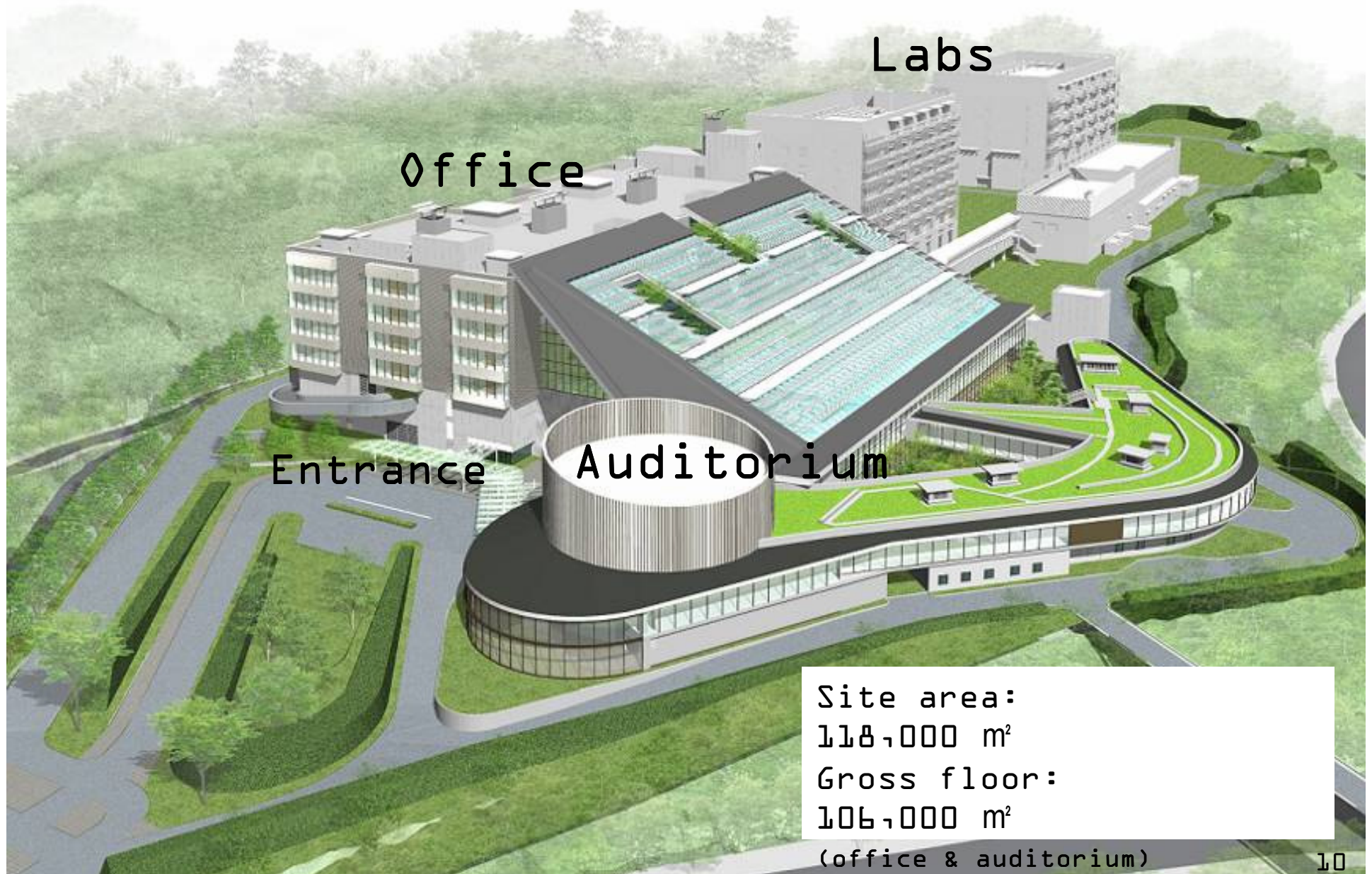
Around View Monitor



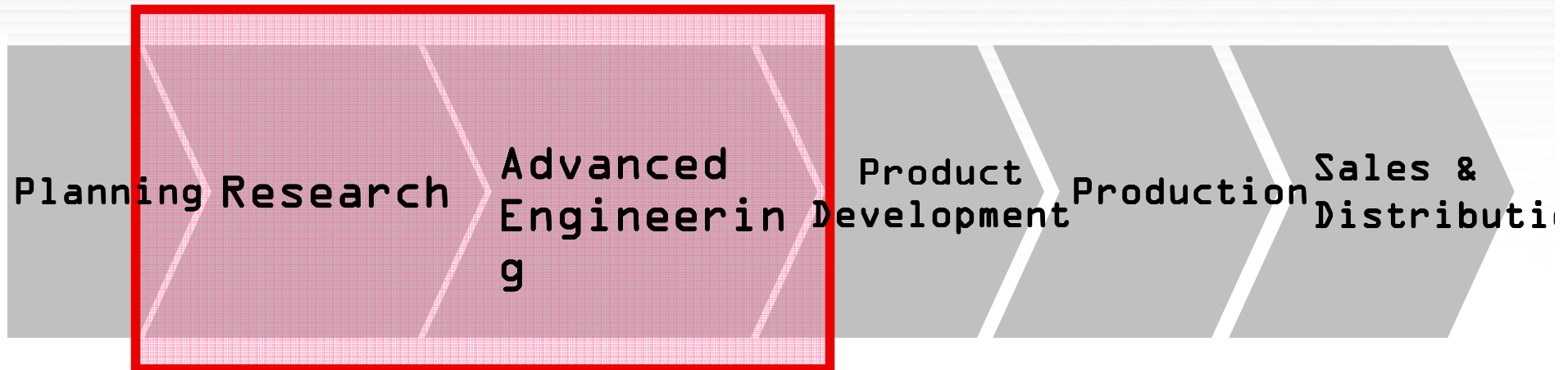
Distance Control Assist



NATC overview



NATC main focus



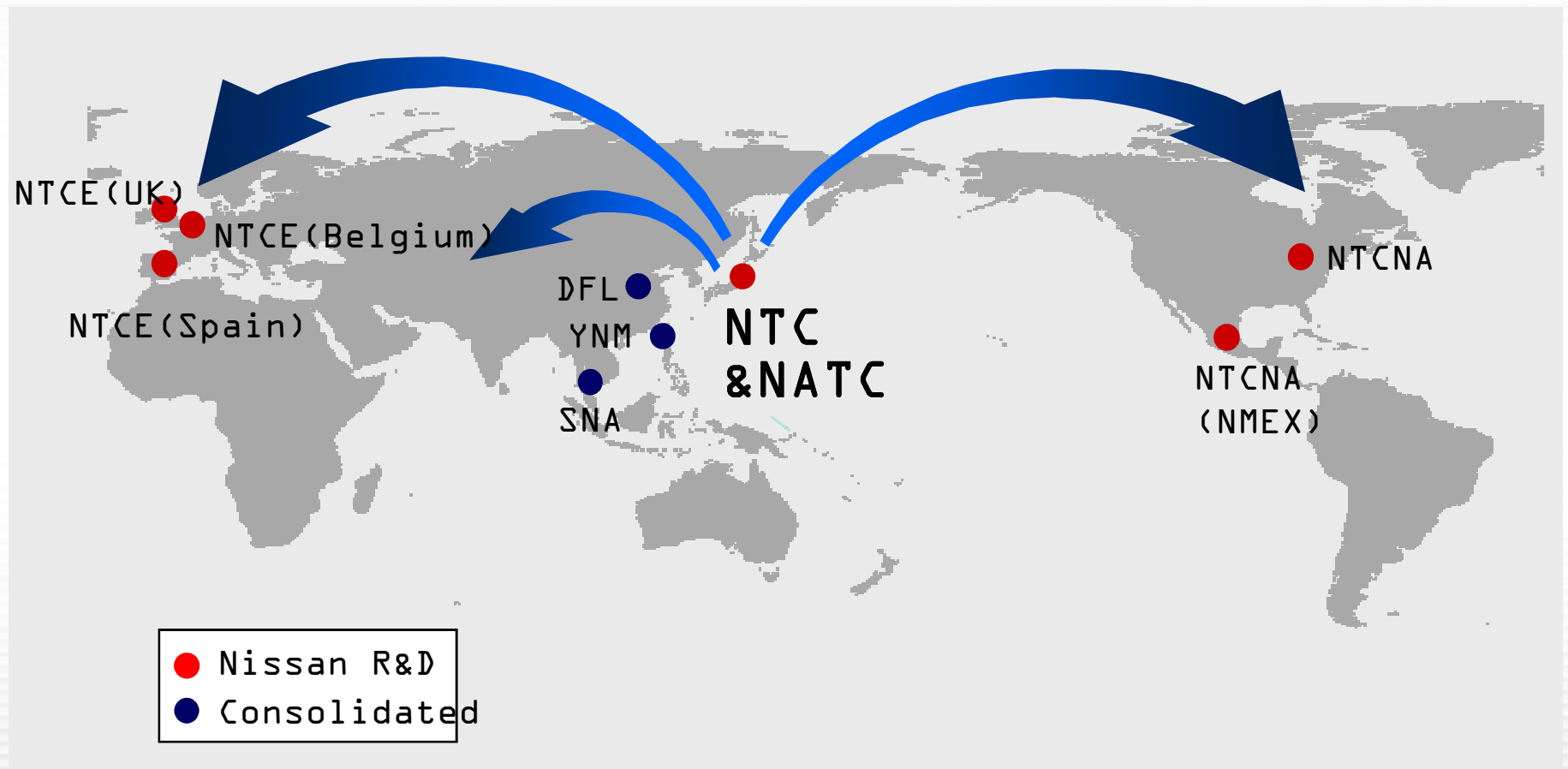
Research & Advanced engineering
to provide new technologies to Products

Focusing on:

- Advanced vehicle
- Electric powered vehicle & components
- IT / ITS
- Future mobility & society etc.

NATC in Global Nissan R&D

- Deliver new value and technologies from NATC



Craft room for quick prototyping

- 3 craft rooms on each floor
- Quickly repeat innovation cycle by prototyping near working desk



"Info-Street" to get latest knowledge and
stimuli new vehicles, technologies, and trend
of world
customers

Communicate to invoke innovative ideas

