

**NISSAN MOTOR CORPORATION**



# **Second Bilateral Business Matchmaking Event for The Joint Crediting Mechanism**

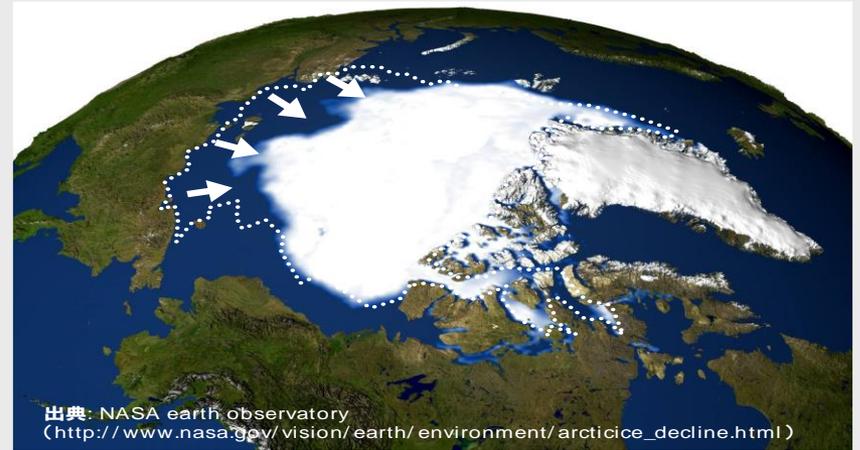
**Nissan Motor Corporation  
Overseas Division  
Sasaki DGM  
2019.10.3**

# Four issues for sustainable development

## Energy problems



## Global warming



## Traffic jam



## Traffic accident



# NISSAN INTELLIGENT MOBILITY

Nissan Intelligent Mobility transforms your car into a more exciting partner by redefining how your car is driven, powered and integrated into society.



**More Confident**

through increased safety, control and comfort for all on board.



**More Excited**

through driving pleasure that is also clean and efficient.



**More Connected**

by conveniently linking our cars and the wider society.

# NISSAN INTELLIGENT MOBILITY



2016

2019

**Expressway same lane  
Automated driving  
technology**

**Expansion of driving scene  
to change to multiple lanes  
(Driver main)**

**More advanced  
automated driving**

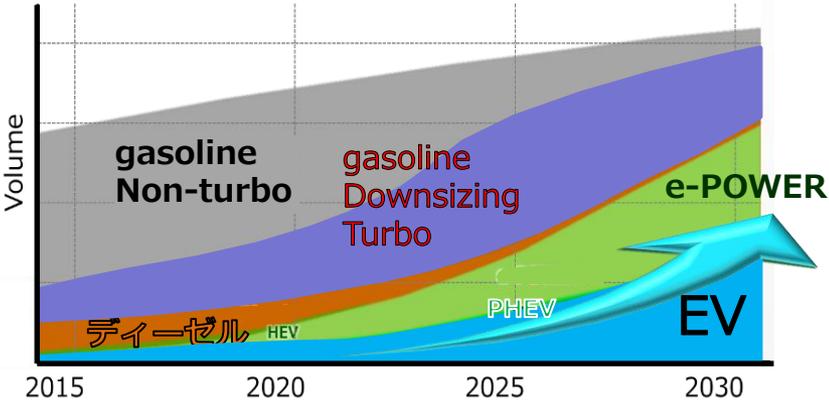


ProPILOT

# NISSAN INTELLIGENT MOBILITY



## Estimated global sales volume



Zero Emission



e-POWER

# Nissan Electrified Products



**LEAF**



**SYLPHY**  
Zero Emission

## <BEV: Battery Engine vehicle>



**e-NV200**



**e-NT400**



**New Mobility Concept**

(Performing demonstration tests)

## <Range Extender>

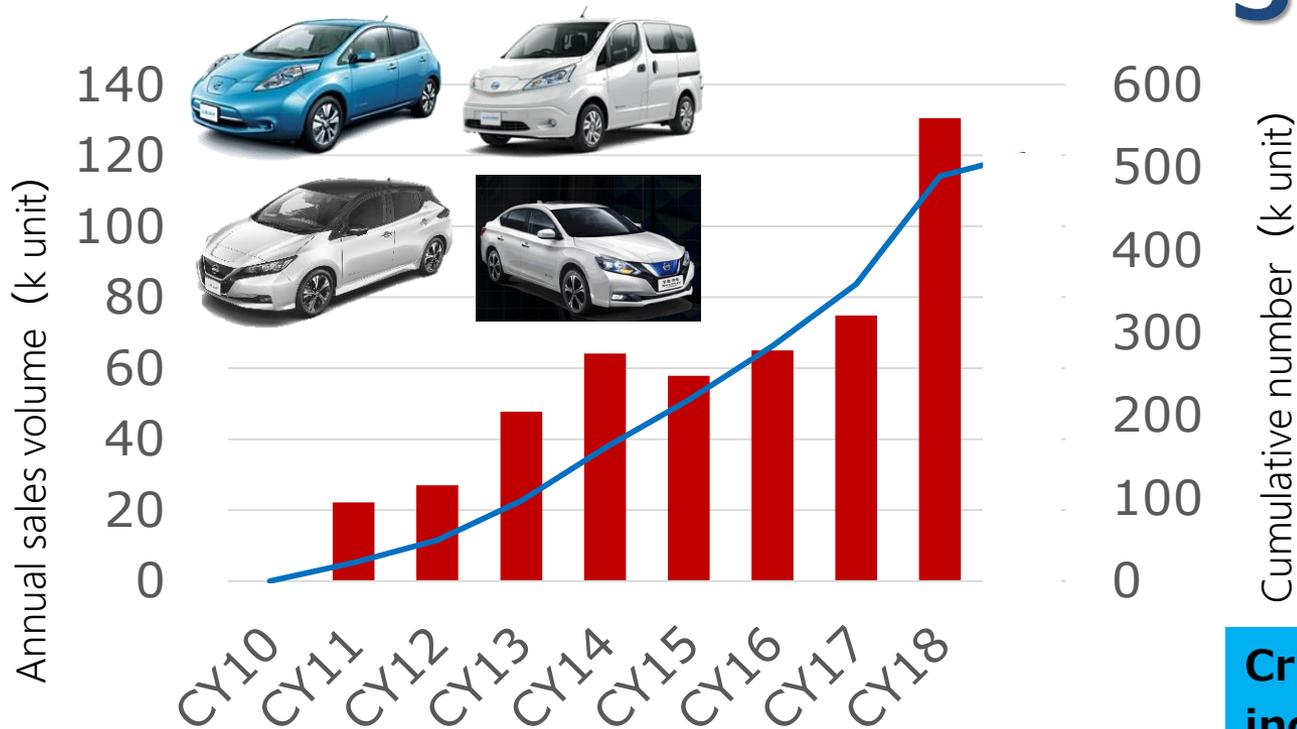


**NOTE e-POWER**



**SERENA e-POWER**

# Nissan EV sales volume



Nissan EV Total includes: LEAF, eNV200, Venucia e30, DFAC and ZNA's Dongfeng brand EV

## 560k units

(by Aug. end 2019)

**Critical Battery failure incidents**

**0 cases**

# NISSAN INTELLIGENT MOBILITY

インテリジェント  
ドライビング

インテリジェント  
パワー

Intelligent  
Integration



NissanConnect



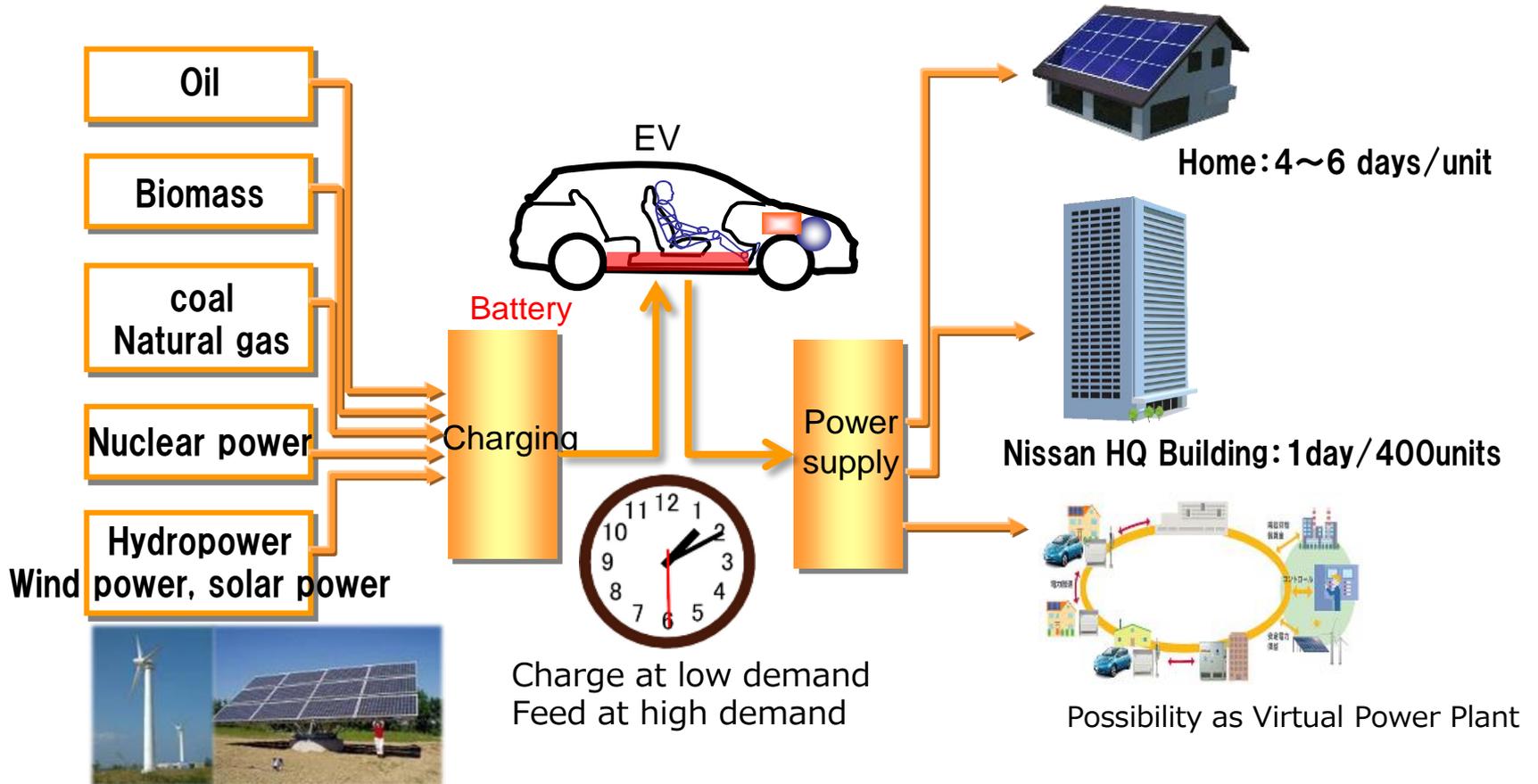
Easy Ride  
by Nissan & DeNA



LEAF to Home

# Utilization of diverse energy and efficient supply and demand

- Energy can be used efficiently by using electric vehicles as storage batteries.
- EV can also be a supplemental power supplier replacing main electrical power source.

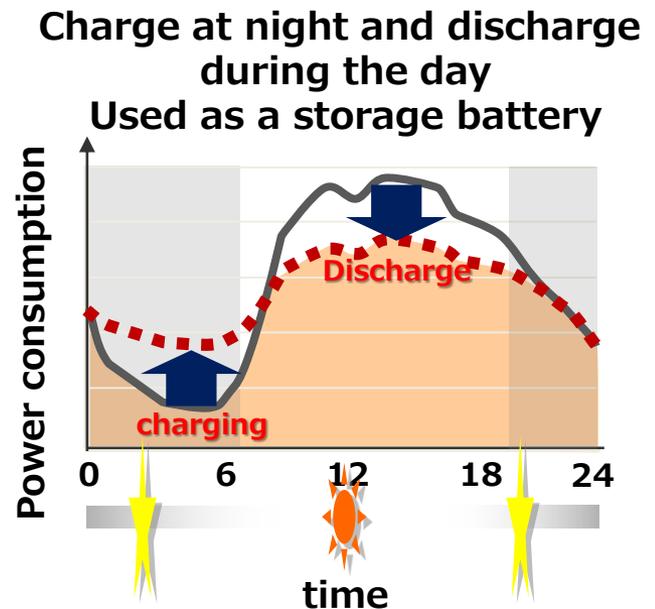
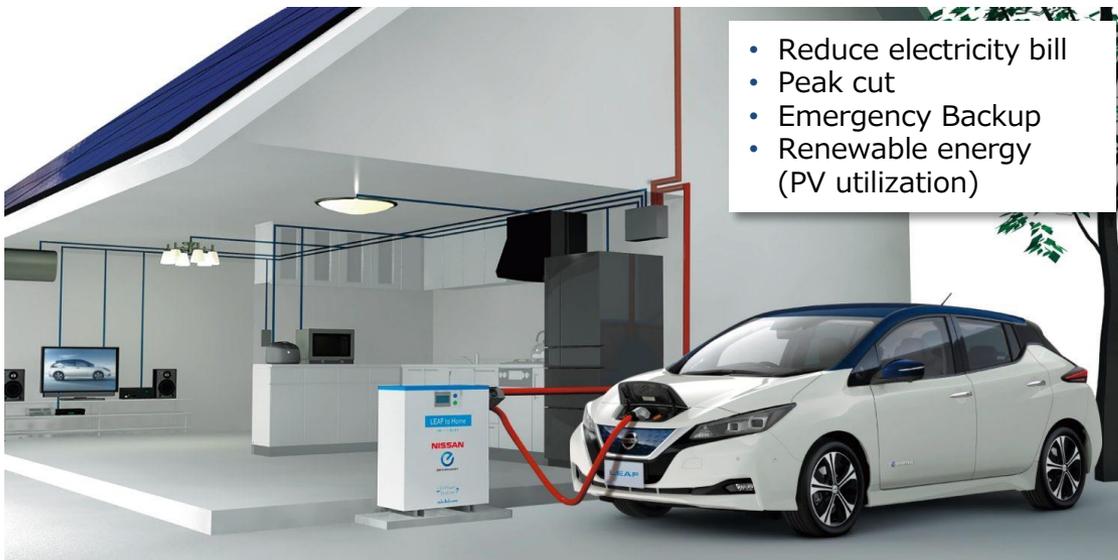


# LEAF to Home

World's first V2H (Vehicle to Home) System

Realizing a smart house by interactively managing the electrical energy of the vehicle and home

PCS (Power Control System) Sales result: over 9,000 units



### 万一の際にも、大活躍する日産リーフ

例えば、地震や台風などの自然災害による停電。外部からの電気供給がない緊急事態のときでも、日産リーフなら貴重なエネルギー源として家庭や職場へ電気の供給が行えます。

#### 近年頻発している自然災害の事例

■ 2018年の主な災害 **EARTH QUAKE / TYPHOONE / RIVER FLOOD by HEAVY RAIN**



イメージ



地震

- 大阪府北部地震 (6/18, M6.1)  
▶ 停電、断水、ガス停止等が発生
- 北海道胆振東部地震 (9/6, M6.7)  
▶ 大規模停電、断水等が発生



イメージ



台風

- 台風21号 (9/4・5)  
▶ 広域で停電、関空閉鎖等が発生
- 台風24号 (9/29~10/1)  
▶ 広域で停電発生 (特に静岡で100万戸超)



イメージ



豪雨

- 平成30年7月豪雨 (6/28~7/8)  
▶ 河川氾濫、停電、断水等が発生

南海トラフ地震では、最大2,710万軒が停電すると想定。

近年、地球環境が変わったと言われ、今後も同様の災害が発生することが予想されます。



# ▶ 主なEVパワーコンディショナー一覧 PCS (Power Control System)

	据え付けタイプ Fixed type (分電盤に接続して利用)		Handy type 可搬タイプ (リーフの荷室に格納し運搬可能)	
メーカー	ニチコン	三菱電機	AESC	ニチコン
製品名称	LEAF to Home	SMART V2H	LEAF to 100V	パワー・ムーバー
出力	6kw	6kw	1.5kw	4.5kw
特徴	もっとも普及している機器 EVへの充電可能 (6kW)	系統(電力会社)、 太陽光発電双方と連携 EVへの充電も可能 (6kW)	コンセント3口(合計1500W) 重量12kg キャスター付	コンセント3口(各1500W) 重量38kg キャスター付
単価(税抜)	580千円～(発売中)	1,690千円～(発売中)	298千円*3	650千円(発売中)
工事費	別途	別途	不要	不要
				

## ■ 機器使用時間の1日のパターン例 (満充電時) Example of electricity consumption / day = 10Kwh



**日産リーフなら上記の機器が約 4～6 日間\*5 使用可能**

NISSAN LEAF able to deliver 4 days (40Kwh) ~ 6 days (62Kwh) electricity

# NISSAN LEAF

# Basic information



Item	Spec	
Battery capacity	40kWh	62kWh
Motor	AC synchronous motor (交流モーター/交流同期電動機)	
	150Ps/320Nm	218Ps/340Nm
Type of battery	Lithium Ion Battery	
Maximum torque of the motor	322Km(WLTC mode)	458Km(WLTC mode)
Charging time	<ul style="list-style-type: none"> <li>•In case 40min by QC, 80% charge</li> <li>•In case 8hour by NC, 100% charge</li> </ul>	<ul style="list-style-type: none"> <li>•In case 60min by QC, 80% charge</li> <li>•In case 12.5hour by NC, 100% charge</li> </ul>
Production Plant	Japan, U.S., United Kingdom	

# New Nissan LEAF Key Technology

## Newly installed technology on LEAF

Cross Traffic Alert



Auto Hi/Lo Headlamp



Forward Emergency Brake



Traffic Sign Recognition



Lane Departure Warning



Blind Spot Warning



## Services

LEAF to Home

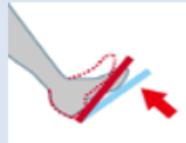


## Focus technologies

World 1st \*

### e-Pedal

Provide driving pleasure and comfortableness (City/Winding road)



Nissan 1st

### ProPILOT Park

Deliver driving experience for those who are not good at driving by decreasing hesitation of parking



Nissan 1st

### Bigger Battery, More Power

Battery Power  
(40kWh) 150Ps/320Nm  
(62kWh) 218Ps/340Nm

40kWh



62kWh



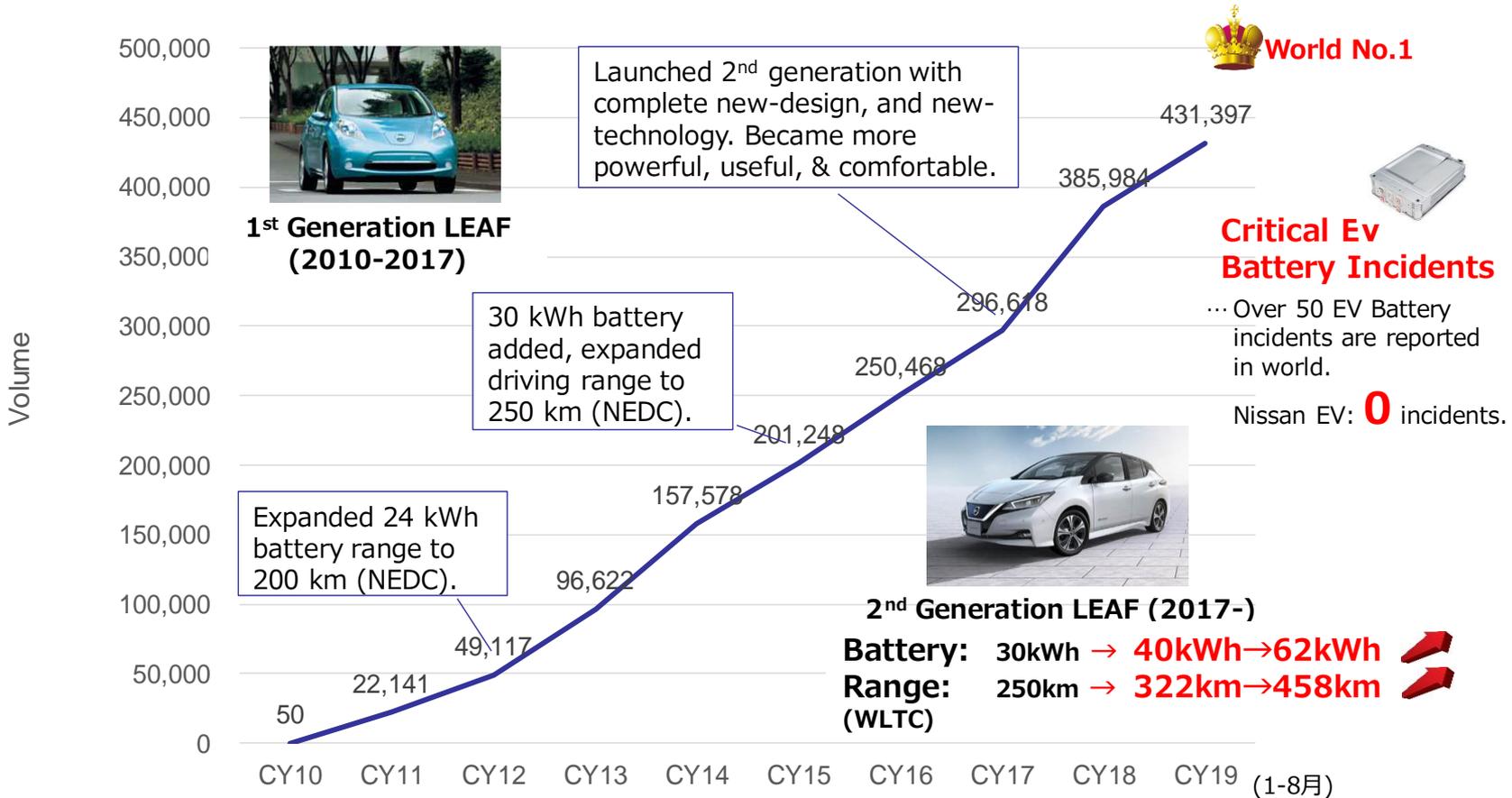
### ProPILOT

- Lane Keep Assist (LKA)
- Distance Keep Assist (DKA)
- Traffic Jam Pilot (TJP)



# Nissan LEAF Brand History

- LEAF is **World's No.1 EV model** with over 430,000 sales.
- NISSAN brought LEAF as the **World's 1<sup>st</sup> globally mass-produced EV** in 2010.
- LEAF is the icon of Nissan Intelligent Mobility, Nissan's approach to aim Zero-Emission & Zero-Fatality Society.



# New Nissan LEAF\_ Major Awards earned in World

## <Technology>



2018 @CES\*  
**World's Best of Innovation**  
\*Consumer Electronics Show



2018 @UK  
**Best Electric Car Award**

## <Safety>



2018 @EURO NCAP  
**Earned full 5-star on Safety rating**



2018 @JAPAN NCAP  
**Earned full 5-star on Safety rating**

## <Environment>



2018 @New York Auto Show  
**World Green Car Award**



2019 @Canada  
**Canadian Green Car of the year**



2019 @Australia  
**Green Innovation Award**

## <Design>



2019  
**J.D. Power Engineering  
Award for Highest-Rated  
Vehicle Redesign**

## <Sales>



2018 @Norway  
**Best Selling Car overall**



2018 @Europe  
**Best Selling EV across Europe**

## <Ownership Cost>



2018 @Chicago Motor Show  
**5-Year Cost to Own Award**  
(Lowest ownership costs)

# SYLPHY Zero Emission

# Basic information



Item	Spec
Motor	AC synchronous motor (交流モーター/交流同期電動機)
	109Ps/254Nm
Battery capacity	38kWh
Type of battery	Thin-film high-efficiency lithium-ion battery
Maximum torque of the motor	338Km
Charging time	In case 45min by QC, 80% charge In case 8hour by NC, 100% charge
Production Plant	P.R.C. (Dongfeng Nissan)

**END**