NISSAN MOTOR CORPORATION

Second Bilateral Business Matchmaking Event for The Joint Crediting Mechanism

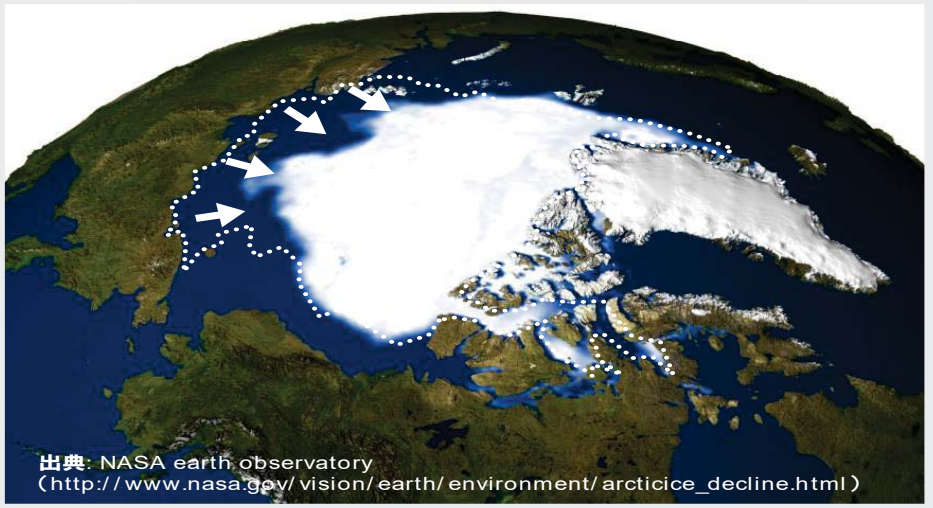
Nissan Motor Corporation
Overseas Division
Sasaki DGM

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

Expressway same lane Automated driving technology

ProPILOT

2019

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

More advanced automated driving

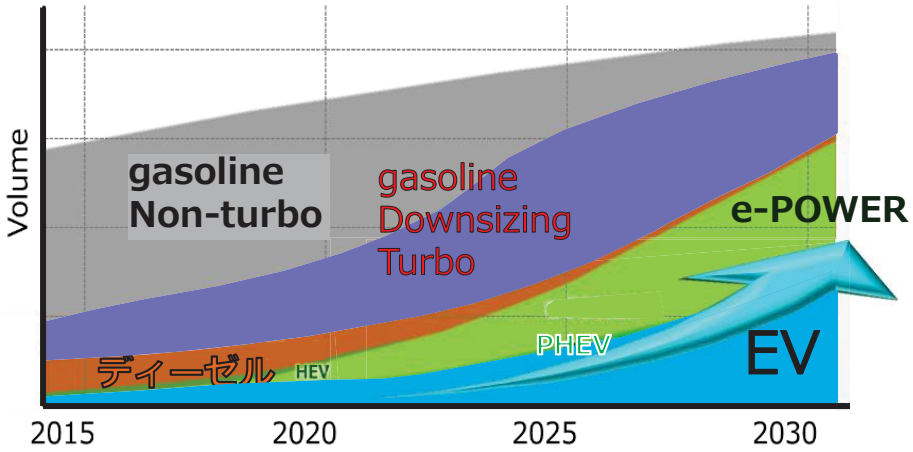
NISSAN INTELLIGENT MOBILITY

インテリジェント ドライビング

Intelligent Power

インテリジェント インテグレーション

Estimated global sales volume



Zero Emission

e-POWER

Nissan Electrified Products

LEAF

SYLPHY
Zero Emission

<BEV: Battery Engine vehicle>

e-NV200

e-NT400
(Performing demonstration tests)

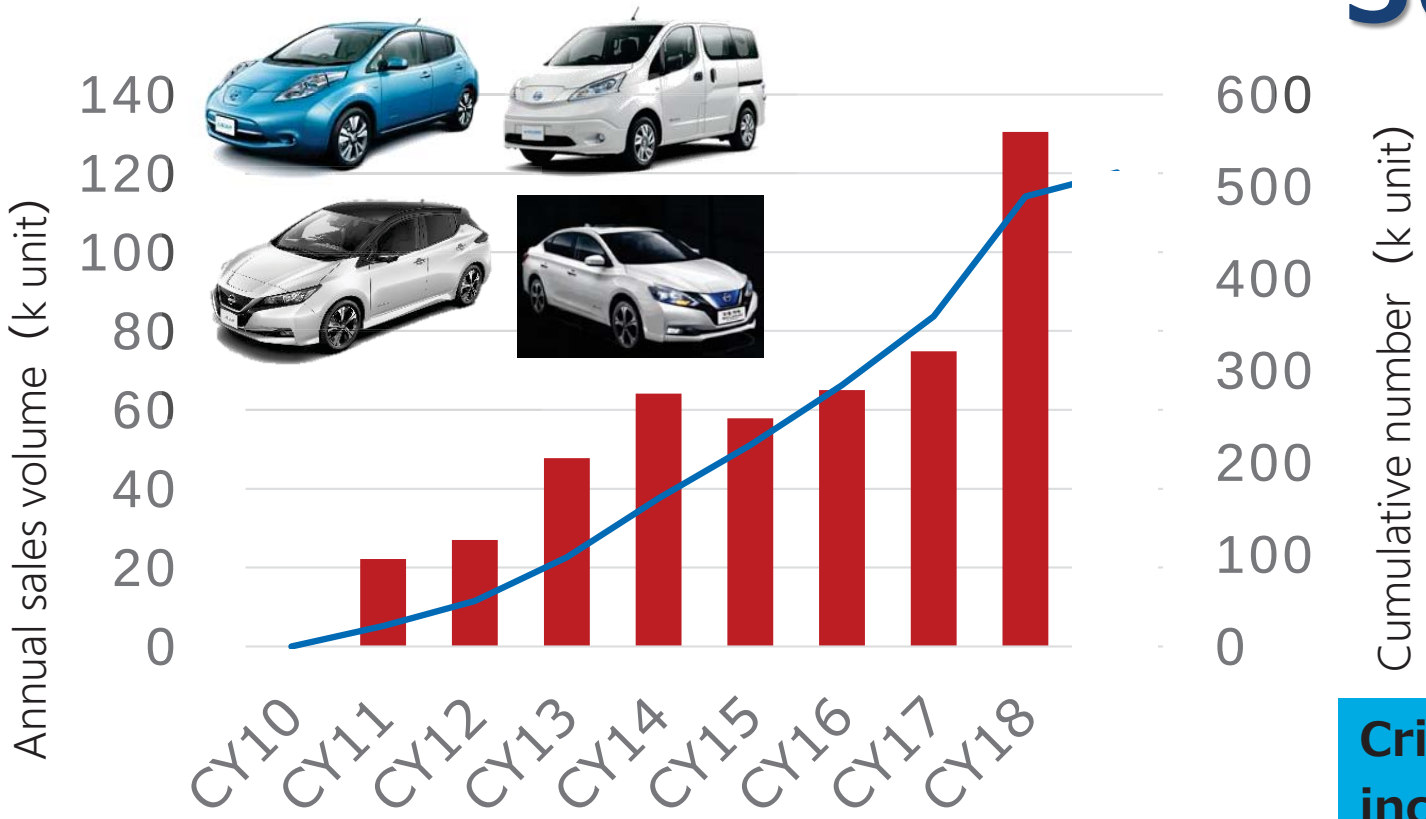
New Mobility Concept

<Range Extender>

NOTE e-POWER

SERENA e-POWER

Nissan EV sales volume



560k units

(by Aug. end 2019)

Critical Battery failure incidents

0 cases

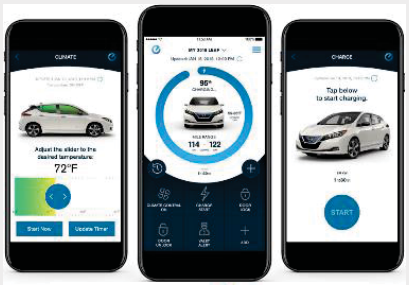
Nissan EV Total includes:LEAF, eNV200, Venucia e30, DFAC and ZNA's Dongfeng brand EV

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

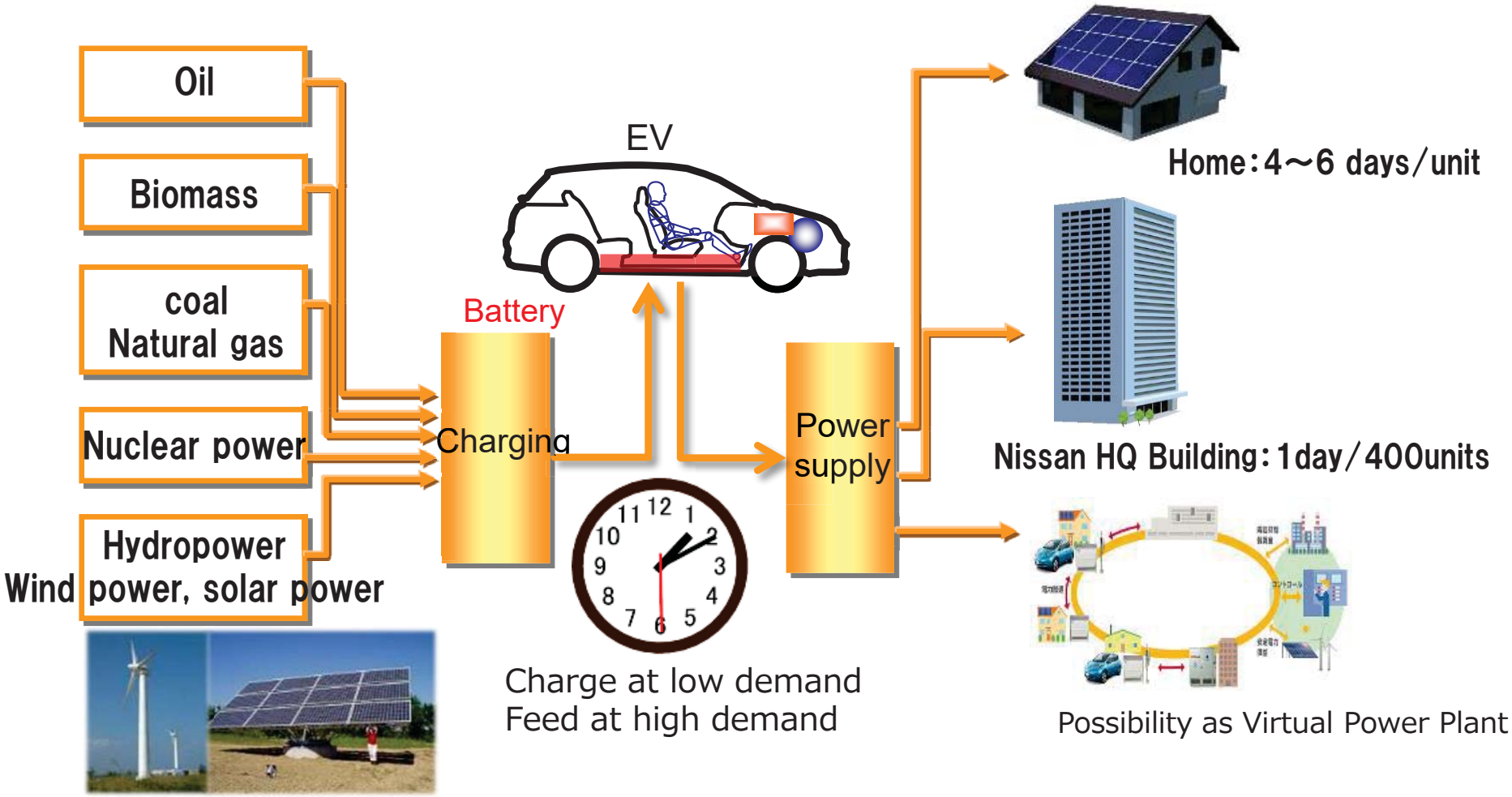
Intelligent Integration



LEAF to Home

Utilization of diverse energy and efficient supply and demand

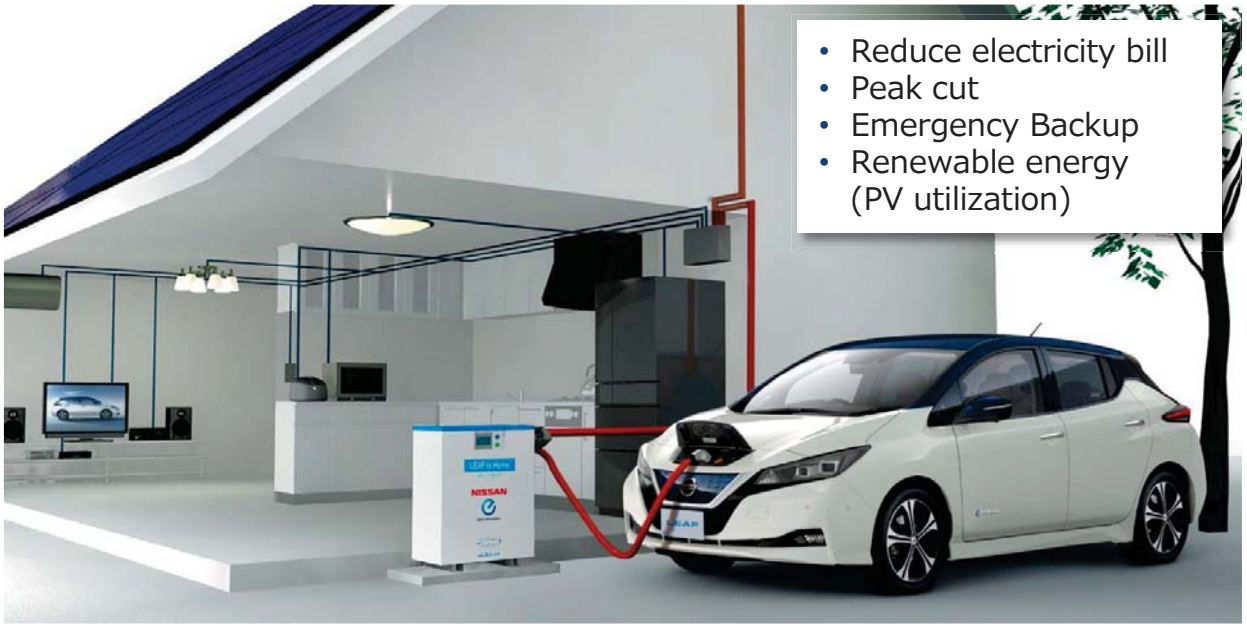
- Energy can be used efficiently by using electric vehicles as storage batteries.
- EV can also be a supplemental power supplier replacing main electrical power source.

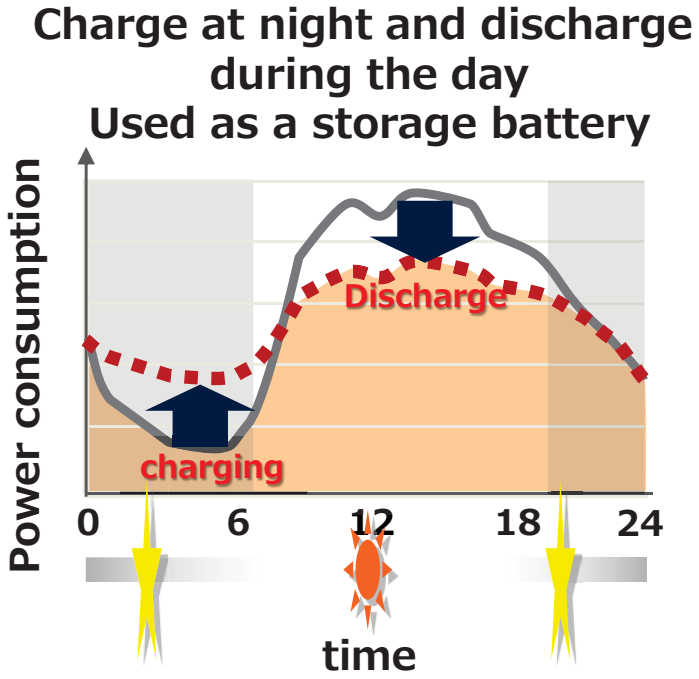


LEAF to Home

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





解説編 －背景その2

自然災害など非常時の備えとして

LEAF to HOME takes role to supply electricity during the black out by natural disasters

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

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

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)

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	・In case 40min by QC, 80% charge ・In case 8hour by NC, 100% charge	・In case 60min by QC, 80% charge ・In case 12.5hour by NC, 100% charge
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

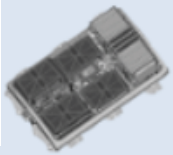
Deliver driving experience for those who are not good at driving by decreasing hesitation of parking

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 1st globally mass-produced EV** in 2010.
- LEAF is the icon of Nissan Intelligent Mobility, Nissan's approach to aim Zero-Emission & Zero-Fatality Society.

1st Generation LEAF (2010-2017)

Launched 2nd generation with complete new-design, and new-technology. Became more powerful, useful, & comfortable.

30 kWh battery added, expanded driving range to 250 km (NEDC).

Expanded 24 kWh battery range to 200 km (NEDC).

2nd Generation LEAF (2017-)

Battery: 30kWh → 40kWh→62kWh
Range: 250km → 322km→458km
(WLTC)

World No.1

Critical Ev Battery Incidents

… Over 50 EV Battery incidents are reported in world.

Nissan EV: **0** incidents.

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

<Environment>

2018 @New York Auto Show
World Green Car Award

2019 @Canada
Canadian Green Car of the year

2019 @Australia
Green Innovation Award

<Ownership Cost>

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

<Safety>

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

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

<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

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