

# SCiB™

## Toshiba lithium-ion battery “SCiB™” used in various fields

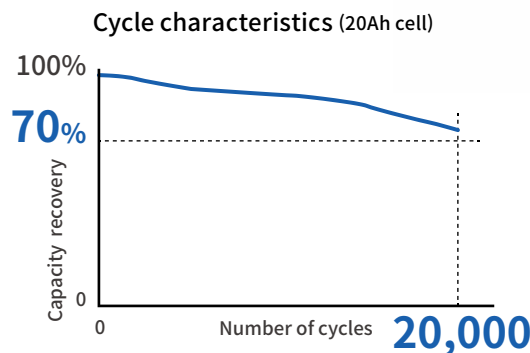
多様なフィールドで活躍する東芝の二次電池SCiB™



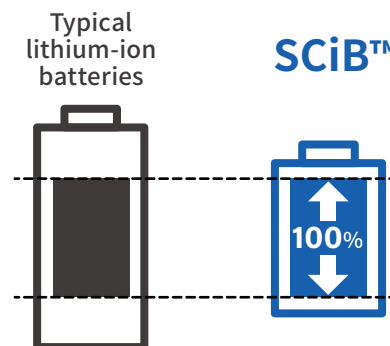
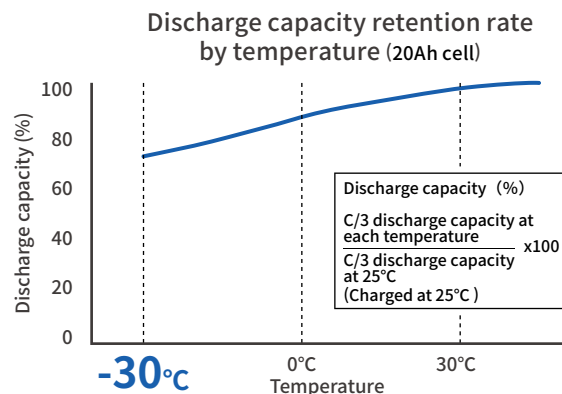
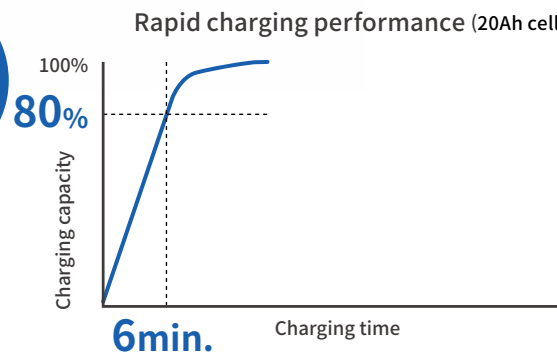
SCiB™ realizes reduction of fuel consumption and CO<sub>2</sub> / NO<sub>x</sub> emissions, reduction of lifecycle costs, improvement of operating rates and space saving, along with safe and reliable battery systems to be built.

Therefore, SCiB™ is used in a wide range of social infrastructure, from small devices, houses and roads, to factories, ports and power plants.

SCiB™は、燃費やCO<sub>2</sub>/NO<sub>x</sub>排出の削減、ライフサイクルコストの削減や稼働率向上、省スペース化に役立ち、安全性・信頼性が高い電池システムの構築が可能です。そのため、生活に身近な小型デバイス・住宅や道路から、工場や港湾・発電所に至るまで、社会インフラの幅広いフィールドで活躍しています。



Test conditions: Ambient temperature 25°C, Charge/discharge high current 3C (60A)/3C (60A)



## Six outstanding features

6つの優れた特長

- (1) Extremely low risk of fire or explosion**  
破裂・発火しにくい安全設計
- (2) Cycle life of 20,000 times or more**  
2万回以上のサイクル寿命
- (3) Rapidly charges to about 80% of the capacity in 6min**  
6分間で容量約80%を急速充電
- (4) Capable of use in hot environments with battery temperature as high as 60°C, to the ambient temperature as low as -30°C.**  
電池温度60°Cにもなる高温環境から、気温-30°Cまで使用可能
- (5) Large current for both input and output**  
短時間に大きなパワーを出し入れ可能
- (6) Available SOC range of 0% to 100%**  
SOC 0~100%で使用可能

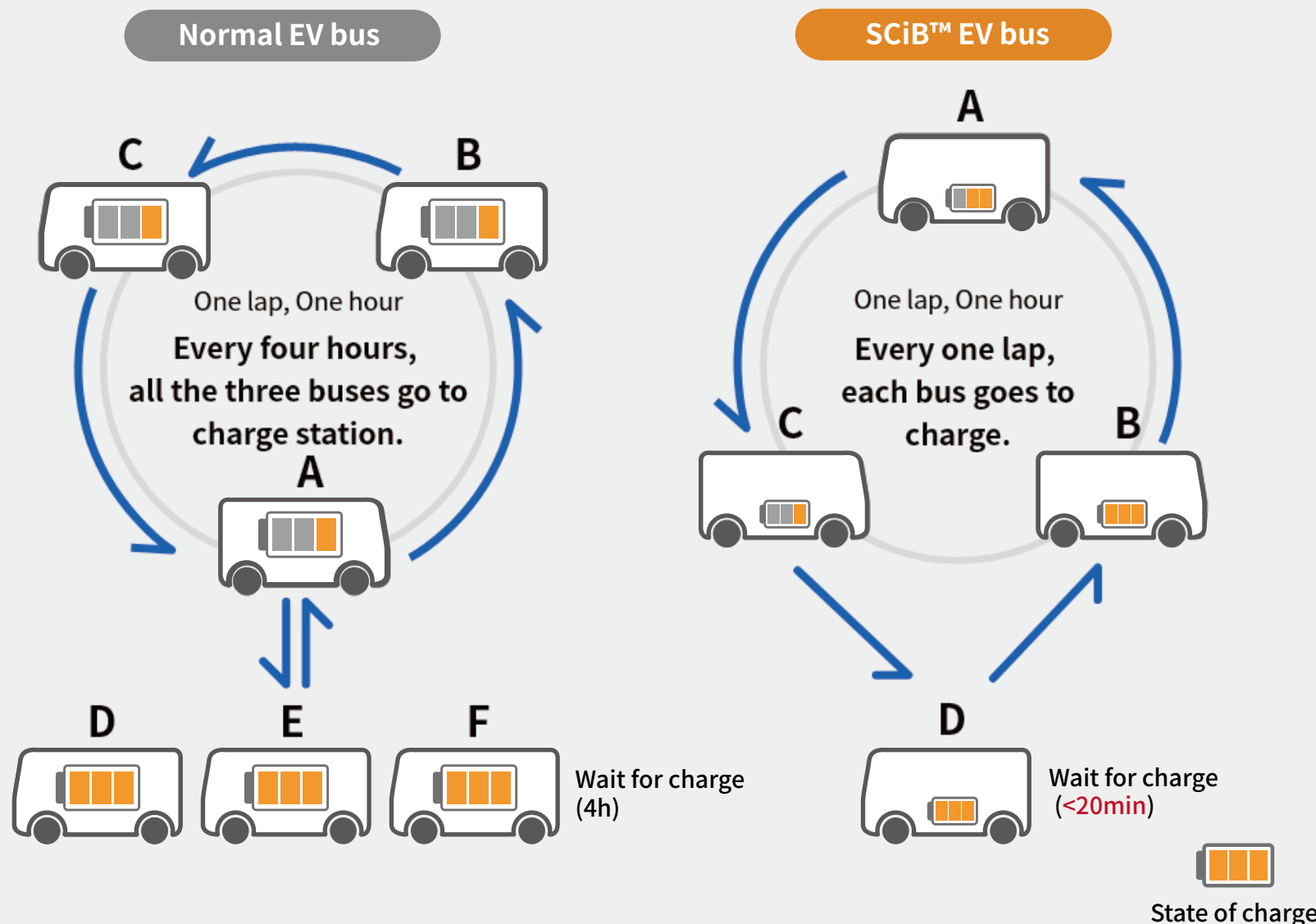
SOC: State of charge 充電状態



English

Japanese

### Comparison of conventional battery and SCiB™ in EV bus case



### Benefits of SCiB™ EV bus

#### 01 Reduce the number of buses and the battery capacity

バス台数および電池容量の削減

By boosting the operating efficiency by rapid charging, both the number of buses and the battery capacity can be reduced.

急速充電による運用効率の改善で、予備のバスも、1台当たりの電池搭載量も減らせます

#### 02 Larger cabin and improved power consumption due to weight reduction

広い車室と、軽量化による電費向上

Reduced battery capacity ensures passengers' comfort and leads to energy savings & operational cost reductions.

電池搭載量が減れば、乗る人も快適なうえ、省エネ&運用コストダウンにつながります

#### 03 Conserving natural resources

Long life with minimal deterioration even after repeated rapid recharging, enabling long-term use with less frequent replacement

急速充電を繰り返しても劣化が少ない長寿命だから、電池の交換頻度を抑えて長く使い続けることができます



English



Japanese

# TOSHIBA

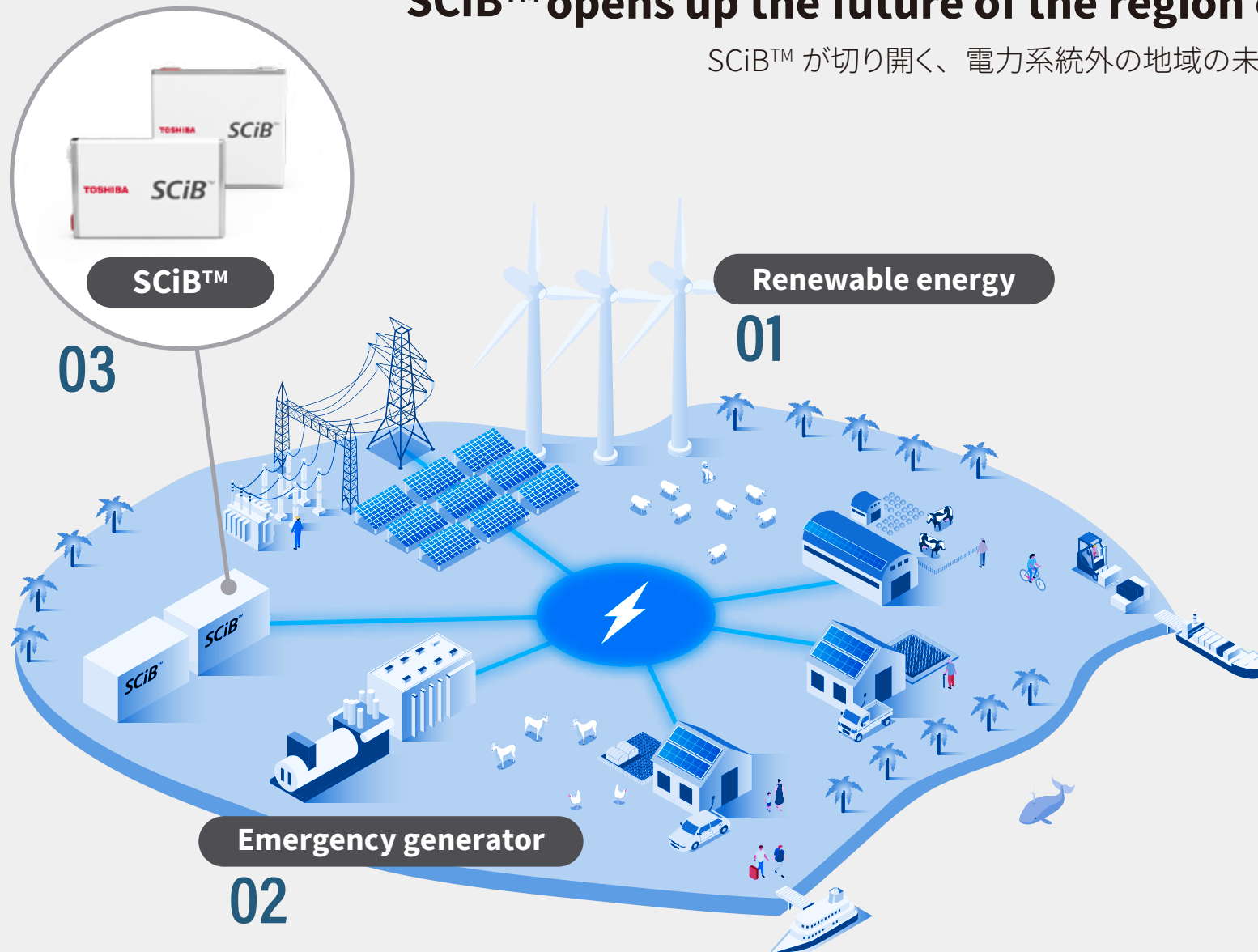
# SCiB™ effective usage

## SCiB™, the battery to go with your ideas

皆さまのアイデアと共にある電池、SCiB™

### SCiB™ opens up the future of the region outside the grid

SCiB™ が切り開く、電力系統外の地域の未来



#### 01 Efficient use of energy エネルギーの効率的活用

SCiB™ makes it possible to stabilize fluctuations in demand accompanying the introduction of renewable energies.

SCiB™ の高入出力特性が、再生可能エネルギー導入に伴う需要変動の調整を可能にします。

#### 02 Contributing to reducing global warming 温暖化抑制への貢献

Emergency generators will need to be started less frequently, reducing CO2 emissions.

非常用発電機の起動頻度が減り、CO2 排出量が削減されます。

#### 03 Conserving natural resources 資源の節約

Taking advantage of the long life of the SCiB™, batteries used for other purposes can be recycled.

SCiB™ の長寿命特性を活かし、他の用途に使用した電池をリサイクルすることができます。