Energy recovery (brake energy recuperation)

When the vehicle is braked, and when the vehicle is in overrun mode or driving downhill, electrical energy is generated via the electric drive and stored in the high-voltage battery. The electric drive then acts as a generator and creates an engine braking effect. This procedure is known as brake energy recuperation.

The extent of the engine braking effect varies depending on the position *(→ Driving mode selection for electric vehicles)*. If there is a high level of brake energy recuperation, the brake lights on the vehicle can also light up. The higher the charge level of the high-voltage battery, the lower the recuperation and thus the engine braking effect effected. No brake energy recuperation occurs and therefore no engine braking effect occurs when the high-voltage battery is completely charged. If the vehicle detects that the road conditions do not allow the wheels to reliably contact the road surface, recuperation and thus the engine braking effect will be reduce automatically. The power meter provides information about the availability of brake energy recuperation and the engine braking effect *(→ Power display)*.

The vehicle performs brake energy recuperation in different ways depending on the selected position and on the settings in the Infotainment system:

D and ECO assistant deactivated	No brake energy recuperation.
D and ECO assistant activated	Automatic brake energy recuperation. The energy recovery level is selected automatically depending on the navigation data and traffic situation.
B	High brake energy recuperation.

The vehicle also performs recuperation when the brake pedal is pressed.

Eco assistant

The ECO assistant helps the driver to use the engine braking effect of the vehicle efficiently. It selects the energy recovery level depending on the navigation data and traffic situation.

The ECO assistant can be switched on and off in the vehicle settings in the Infotainment system.

Driving down hills

When driving down hills, you should drive in position **B** if possible.

Never allow the vehicle to roll down mountains or hills in the neutral position **N**.

WARNING

The higher the charge level of the high-voltage battery, the lower the engine braking effect, to the point where no engine braking effect may be generated at all. This puts more strain on the vehicle brake.

- Never fully charge the high-voltage battery at high elevations, e.g. at the top of a pass, in order to facilitate a braking effect by means of recuperation when descending.
- Reduce your speed before driving down a long, steep gradient.
- When driving down a long, steep gradient, slow the vehicle using the vehicle brake.