**Differences Between Conventional and Regenerative Braking**

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| **Sl No** | **Features** | **Conventional Brake in CV** | **Regenerative Braking in EV** |
| 1 | Improved efficiency while braking | No, energy lost as heat | Yes, either as longer mileage, improved power, larger storage of energy depending on the system fit |
| 2 | Is it possible to change the mode of braking? | No | Yes, as the mode dictates the deceleration, the ways to regenerate can be altered between maximum regeneration to even nil regeneration for the maintenance of uniform speed |
| 3 | Brake life | Low due to large heat dissipation without any proper ways of cooling, saving, and storing | High due to consistent deceleration thereby the braking force is normally reduced while applying brakes. |
| 4 | Environmental footprint | A large amount of heat is released during braking | Minimal in comparison to conventional mechanical braking Saves energy without the use of fossil fuels |
| Braking increases dust | Reduces wear and tear and improves the life of the components |
| Noise | No noise while deceleration/braking |
| 5 | Cost | Low | Though initial costs are high, the cost while calculating over a period of time shows the impact of regeneration |
| 6 | Types of vehicles that use | Gasoline cars | Almost every EV and Hybrid electric vehicle (HEV) Even conventional cars like BMW 5 series use this technology on their auxiliary power unit |
| 7 | Maintenance | Low | High and cumbersome due to the complexities of the parts |