With reduced workload or even potential lab shutdowns on the horizon, you may be wondering what's the best way to prepare my GC-MS instrument for short or longer periods of inactivity?

With Shimadzu's patented Ecology mode, we have an automated solution for shorter standby periods up to two weeks without sample runs. While using Gas-Saver will help you save on your carrier gas consumption, equipping the instrument with "Ecology mode" not only reduces gas consumption when not running samples but also reduces the power consumed in analysis standby mode by 36%. Ecology mode can also be set automatically or manually, which makes it possible to reduce unnecessary power consumption. Please refer to the embedded YouTube video for more information regarding Eco Mode and how to enter successfully.
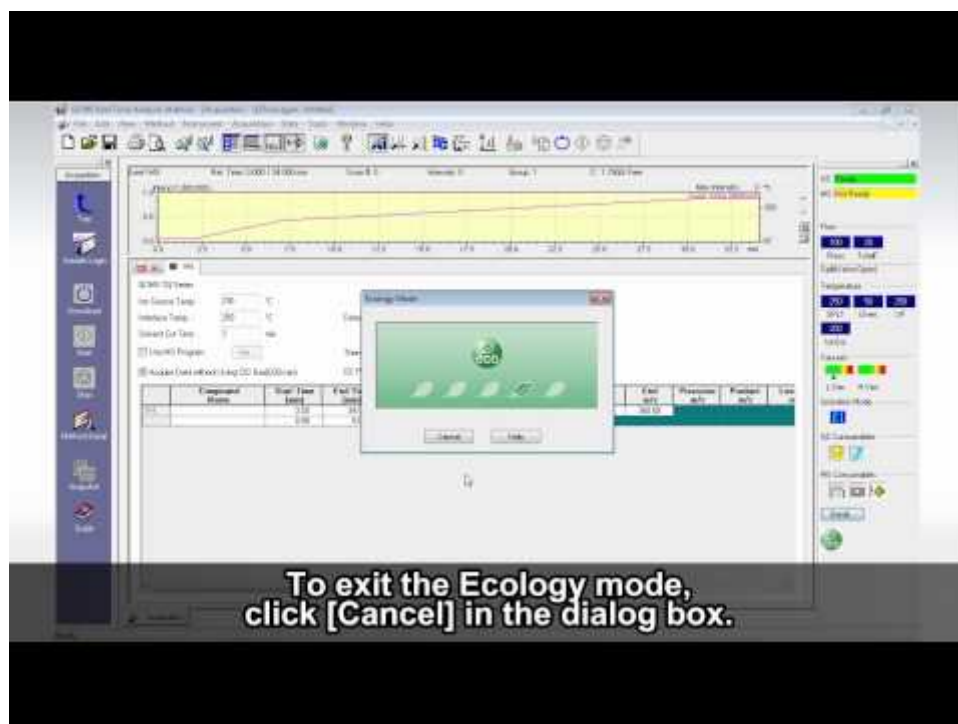
If the standby period is longer than two-weeks, it is highly recommended that a full shutdown should be performed to prevent total loss of carrier gas. Ecology Mode is designed for a temporary halt in samples last no longer than two weeks. It is also important to make sure the helium tank is at minimum ¼ full before entering two-week ecology mode setting. The procedure for shutting down the instrument completely can be found on the following pages.

This following description is only valid for basic GC-MS or GC-MS/MS instruments and does not mention all possible additions and modifications. If you own a more specialized instrument or if you are unsure, we strongly recommend contacting your local Shimadzu representative before taking any actions. Our specialists can give customized directions free of charge via telephone or e-mail and thereby prevent possible damages to your system.

Setting the Ecology Mode on your Shimadzu Gas Chromatograph - Mass Spectrometer (GC-MS) or GC-MS/MS

For temporary reduction of use up to two weeks.

Below is a short video of using your Ecology Mode within GCMSsolution software.

(https://www.youtube.com/watch?v=iBPVH1YfU84)

Eco Mode is available for all current Shimadzu GC-MS and GC-MS/MS models. Older models may not be supported due to hardware limitations. See the following table for details:
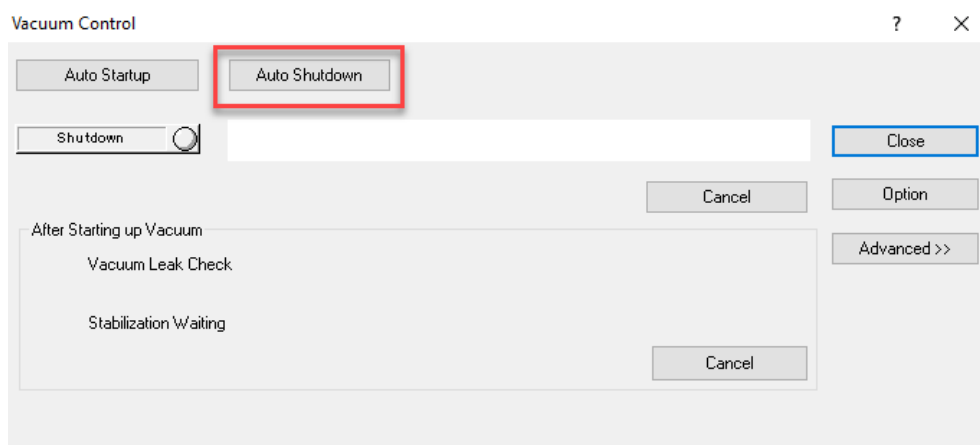
Model	Eco Mode capability
GCMS NX Series (SQ & TQ)	Yes
GCMS QP2020	Yes
GCMS QP2010 SE	Yes
GCMS QP2010 Ultra	Yes
GCMS QP2010 Plus	Yes
GCMS QP2010S	No
GCMS QP-5000	No

If you do not see or have the Eco Mode function, but instrument is supported, please contact your local Shimadzu representative and ask for a free software upgrade to accommodate Eco Mode capabilities. Please have serial number as well as instrument model readily available.

Preparing your Shimadzu Gas Chromatograph – Mass Spectrometer for a complete Shutdown
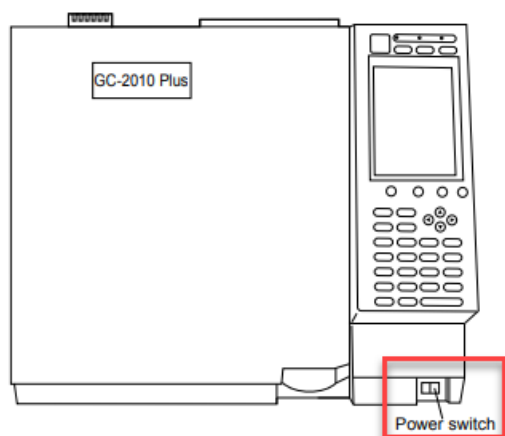
For longer periods without use above two weeks.

a) In GCMSsolution Real Time Analysis, enter the Vacuum Control window located on the left-hand side of the screen in the assistant bar. Vacuum control can also be located across the top menu screen (Instrument Vacuum Control).

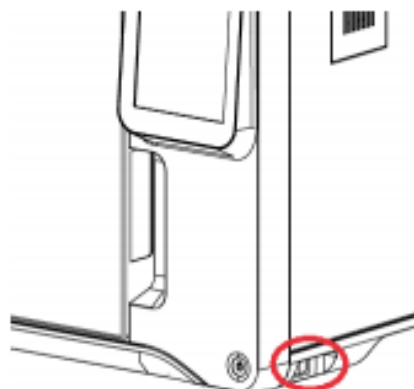b) Perform Auto Shutdown in the vacuum control window.

c) After completing Auto Shutdown, you may exit the GCMSsolution Software.

d) Once you have exited the software you may now turn of the PC, GC and MS in the mentioned order. The electronic gas flow controllers will stop when the GC is powered off.

Power button for GC-2010 series – in front

Power button for the GC-2030 – on right side

GC-2010 Plus

Power switch

Power button for all Mass Spectrometers – on the lower left corner on the backside

e) Manual flow controllers must be turned off by the user (use cut-off valves or turn the regulators off). We recommend for long-term shutoff, turn the gas tanks off as well.

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