Pei Ling is a second-term elected Member of Parliament in Singapore. She serves on the Public Accounts Committee (13th Parliament). She also serves on the Government Parliamentary Committee for Law/Home Affairs (2011-2015), Health (2011 – present), and Social & Family Development (2015 – present, Dy Chairperson). Pei Ling is currently an adviser to two unions – SISEU and SSSU – and various temples and clan associations.

In Parliament, Pei Ling actively championed issues pertaining to public healthcare, elderly, youth, and women. She also represented Singapore on various international platforms, including state visits, parliamentary exchanges and a visit to the European Union to promote the EU-Singapore Free Trade Agreement and other related matter.

Pei Ling co-authored PAP Women's Wing's position paper 2016, specifically in the areas of Family & Caregiving and Smart Women in Smart Nation. Key ideas included freeing up capacity and giving options to working mothers (and fathers) who also have to care for their loved ones through innovations and leveraging technology.

In April 2017, Pei Ling also moved a substantive motion with fellow Parliamentary colleagues. It was titled "Aspirations of Women" in Parliament to seek the House's affirmation of the familial, social and economic contributions of Singapore women and its support for them to fulfil their family and career aspirations and to be future-ready. The motion was passed unanimously in Parliament.

Prior to entering Parliament in 2011, Pei Ling was a business and management consultant in Ernst & Young Advisory with years of experience in strategy formulation & articulation, organization excellence, industry studies, channel strategies, competency frameworks, business process reviews and transformation change management within large client organisations, as well as in service excellence for large retail firms. Currently, Pei Ling is Director for Corporate Strategy with Jing King Tech Group. Pei Ling was also an active youth and grassroots leader for seven years prior to 2011.

Pei Ling holds a Master of Business Administration from leading business school of the University of Chicago (Chicago Booth). She also holds a Bachelor of Social Sciences (Honours) (University Scholars Programme) from the National University of Singapore. Pei Ling is an alumnus of Crescent Girls' School and Hwa Chong Junior College.