A graduate of the Paris Institut d'Études Politiques and the Ecole Nationale d'Administration, as well as an alumnus of the Master in Politics at New York University, Marie-Anne Barbat-Layani has served as a senior civil servant for close to 20 years. She began her career in 1993 at the French Treasury as Deputy to the Secretary General of the Club de Paris and later Deputy to the Head of the Energy, Mines and Telecoms Office of the State Investments Department.

In 1997, she joined the French Permanent Representation to the European Union in Brussels as Financial Attaché in charge of competition, state aid and financial services.

Three years later, she joined the cabinet of the Minister of the Economy, Finance and Industry as a technical advisor in charge of European Affairs. From 2000 to 2007, she worked at the Treasury, first as Head of the Office of Credit Institutions and Investment Firms and Secretary General of the National Euro Committee, in the Financial Sector Department. She was later appointed Deputy Director of Banks and General Interest Financing.

In 2007, Marie-Anne Barbat-Layani became Deputy CEO of the National Federation of the Crédit Agricole. In 2010, she joined the Office of the Prime Minister as Deputy Chief of Staff. From 2012 to 2014, she was an Inspector General of Finance and from 2014 to 2019, became Chief Executive Officer of the French Banking Federation and the Association of French Banks.

In 2019, she was appointed General Secretary of the Ministry of the Economy and Finance, where she also served as Senior Defence and Security Official.

On 26th October 2022, Marie-Anne Barbat-Layani was appointed Chair of the Autorité des Marchés Financiers.

Marie-Anne Barbat-Layani is Chevalier of the Légion d'Honneur and Officier of the Ordre National du Mérite.