The global climate is changing and human activities are contributing to that change. Scientific research is required to improve our ability to predict climate change and its impacts on countries and regions around the globe. Scientific research provides a basis for mitigating the harmful effects of global climate change through decreased human influences (e.g., slowing greenhouse gas emissions, improving land management practices), technological advancement (e.g., removing carbon from the atmosphere), and finding ways for communities to adapt and become resilient to extreme events. Forests also influence local, regional and global climates. For example, 50-80% of the moisture in the air above tropical forests comes from trees by transpiration and evaporation. Forests are vital to the global carbon cycle and acts as a brake on a possible runaway greenhouse effect. Through photosynthesis trees remove carbon dioxide from an add oxygen to the air, explaining why they are called earth’s lungs. In Romania, one of the strategies for a sustainable landscape is protecting forests from air pollution and climate change. Forests at high elevation and downwind from urban and industrial centres are exposed to air pollution that can harm trees, especially conifers. Besides doing direct harm, prolonged exposure to multiple air pollutants makes trees much more vulnerable to drought, diseases and insects. Large-scale forest damage from air pollution has hit Romania. The solution is to slash emissions of the offending pollutants from coal-burning power plants, industrial plants and motor vehicles.