Comparatively few studies have examined the effects of frames employed in climate change news articles (Corbett, 2004; Hart, 2011; Leiserowitz, forthcoming; Nisbet et al., 2013). The current study aims to address that deficiency by looking at the effects of frame, as well as source and political ideology, on readers’ perceptions of the credibility of climate change news articles. As a message characteristic, four frames (ecological/meteorological, political economic, culture and society, and scientific) and two sources (news and government) were employed to test proposed hypotheses. Participants’ political ideology was also measured and categorized as either liberal or conservative. The findings showed that both the frame and source of climate change news have a significant effect on credibility perceptions. Articles with an ecological/meteorological frame were found to have the highest credibility of the four frames tested. Moreover, Climate change articles attributed to news sources were found to have higher credibility than those attributed to government sources. However, no significant interaction effects were found for frame, source and ideology, leaving open the question of how ideology impacts readers’ perceptions of climate change news credibility.