As circular economy and sustainability gain greater attention of governments, industry and academia, business model innovation for circularity and/or sustainability is becoming fundamental to sustain companies' competitive advantage. A variety of business model innovation approaches have been proposed to suit circular economy or sustainability principles. Although they largely have been addressed independently as two separate knowledge areas, there is an opportunity to seize synergies from the intersection of both streams. This paper provides a review of approaches for business model innovation for circular economy and/or sustainability, based on a systematic review of academic literature and practitioner-based methodologies. The systematic literature review identified 94 publications and 92 approaches (including conceptual models, methods or tools). The different approaches were categorized according to the business model innovation process, following a three stage 'dynamic capability' view. Subsequently they were compared based on five characteristics (nature of data, boundaries of analysis, level of abstraction, time-based view, and representation style), to allow for a better understanding of how to use the approaches in research and practice. Based on the review, key findings outlining trends and a reflection about the interface of the scopes of circular economy-oriented and sustainability-oriented business model innovation are presented. Moreover, a number of gaps are identified and a framework outlined that maps a future research agenda to simultaneously advance both streams.