

3. RESEARCH DESIGN

3.1 CASE STUDY SELECTION CRITERIA

Our overall research strategy was to conduct case studies of a wide range of successful OBCS-supported innovations in order to examine the technology transfer activities leading to commercialization and use. Several criteria were used to select innovations for the case studies.

First, and most importantly, we wanted to examine successful innovations. For this report, the definition of success was that market entry or initial use of the technology or practice had been achieved. For the fully-commercialized cases, a market penetration of at least 4% was considered necessary.

Second, we sought representation of different types of building technologies and practices supported by OBCS. OBCS funds research on: lighting and windows; HVAC equipment and appliances; building materials; software; and testing procedures. Figure 3.1 shows the range of the case studies along these lines.

Third, we wanted to include a diversity of technology transfer approaches that would represent the spectrum of OBCS roles from exploratory R&D to support for market acceptance. Figure 3.2 classifies the 12 innovations according to the stage at which OBCS support was initiated. For six of the 12 innovations, support for the innovation was first initiated in the exploratory R&D stage. Four innovations first received support in the technology development stage, and two at the applied and information-based R&D stage. None of the innovations was first supported by OBCS during the market acceptance stage.