Kenya has been slow in talking up structured and policy-driven approach of enhancing green procurement adoption. More so, there has been a weak reference to public green procurement and a slow take-up of green procurement adoption. This research study investigated antecedents of green procurement adoption in NCWSC. The study established the influence of environmental knowledge, green purchase behavior and the government initiative on the green procurement adoption in NCWSC. There has been various researches done on challenges facing the implementation of green procurement; however, there is no evidence of comprehensive study that has been conducted on antecedents of green procurement adoption in Kenya. This study sought to fill the research gap. Descriptive research design was used in this research study. Data was collected using closed-ended questionnaires which were administered through drop and pick method. The population for this study was the entire staff of NCWSC. There was 330 employees working in NCWSC which constituted the target population. Data was analyzed using descriptive statistics and inferential statistics. Statistical package for Social Sciences was used to aid in data analysis .From factor analysis, 9 factors were extracted that explained 79.589% of the total variance. The study found that there needed to have vast knowledge among employees on green procurement for successful green procurement adoption. Further, employees need to be well trained in green procurement adoption within organizations as well as evaluation of the repercussions goods have on the environment. Green purchase behavior is needed for successful adoption of green procurement. The study revealed that Government initiatives are needed in order to achieve successful green procurement adoption. Critical government initiatives include; courses in learning institutions promoting environmental conversation, subsidized research in green purchases as well as government policies which encourage green purchase. The researcher recommends that the management of NCWSC responsible for adoption of green procurement to ensure that compliance with green procurements adoption is instituted within the organization. The researcher recommends subsidized research on technology for recycling waste products by NEMA officers'. These officers should enhance their commitment towards enforcing rules governing the production of green products as well as eradication of environmentally descriptive practices.