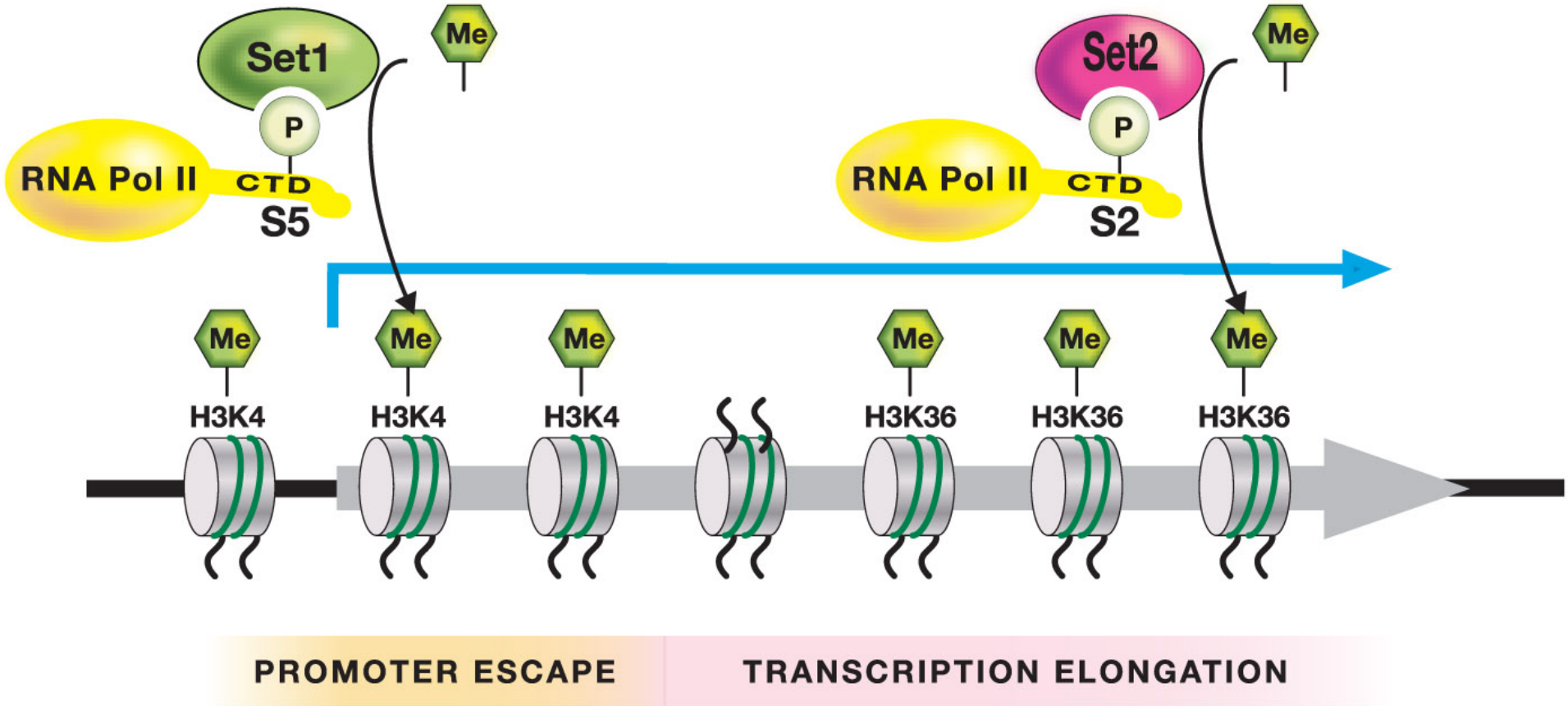

Figure 5. Role of Histone Lysine Methylation in Transcriptional Elongation

RNA polymerase II recruits distinct types of HKMTs, depending on the phosphorylation state of its carboxy-terminal domain (CTD). RNA pol II is activated for transcriptional initiation in the vicinity of the promoter, when Ser-5 is phosphorylated. This recruits the Set1 HKMT to methylate H3K4. Phosphorylation of Ser-2 occurs during transcriptional elongation, prompting H3K36 methylation as a result of Set2 HKMT recruitment to the chromatin template.