\subsubsection{Stage 2. Establishing the Feedback Functions}

\paragraph{Human Activities Feedback}

In order to model how human activities affect carbon emition emission, we selected 3 key factors, which are:

\begin{enumerate}

\item global population $x\_1$

\item urban population $x\_2$

\item percentage of fossil fuel energy production in overall energy production $x\_6$

\end{enumerate}

As we can see in the data from the past, developed and undeveloped developing counrties varies vary 加greatly in carbon emission per capita 加throughout the recorded period of time, which This implies that generally, 去掉there are is an large impassible carbon-emission-去掉gap between urban residents areas/habitats and non-suburban ones. This gap inspire urges us to respectively 去掉consider population of diffenrent different areas 加in separate circumstances instead of as a whole.

also, In addition, 加petroleum-powered energy production is a major source of carbon emission today -- In 2021, $62\%$ of global energy production is contributed by fossil fuel, which occupies $20\%$ of industrial carbon emission.加引用