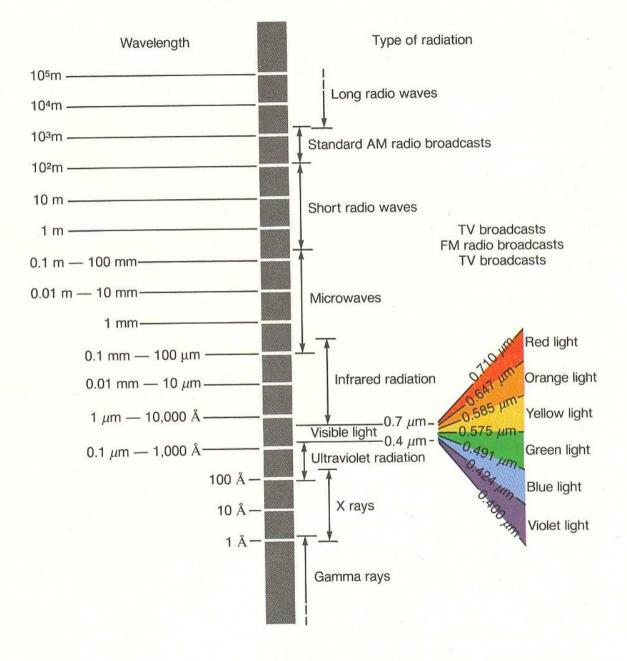


Figure 3.4 Approximately 30 percent of the solar radiation reaching the earth system is reflected or scattered back to space. The remaining 70 percent is absorbed within the atmosphere or at the surface.

Table 3.1 Typical Albedos of Terrestrial Materials*

Material	Albedo
Earth system as a whole	30
Sand	25
Dense forest	8
Field crops	25
Water (sun near horizon)	40-75
Water (sun overhead)	6
Fresh snow	85–95
Concrete	20–30

^{*}The albedo is the short wave energy reflection rate of an object or substance, stated in percent.



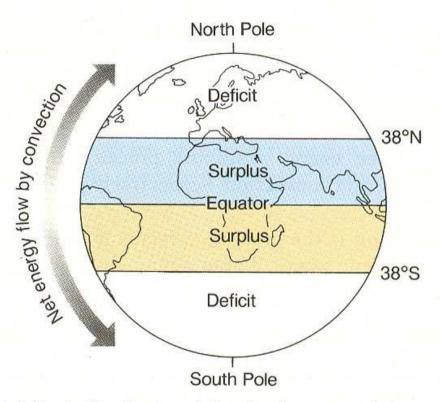


Figure 3.3 Latitudinal variation in the terrestrial energy budget. The earth receives more energy from the sun than it returns to space equatorward of 38°; this situation is reversed poleward of 38°.