Critiacal material for wind turbines

For Tower: in the future S500 steel, save weight and cost

Now mainly use S335 steel

For Blade: now mainly carbon fibre, fibre reinforced polymers, glass and carbon fibre reinforced plastic

In the future carbon nanotubes

For gearbox: steel and polymer(different for different kinds of gearbox)

In the future direct drive wind turbines are being widely used, which means no gearbox and saving of some steel and polymer.