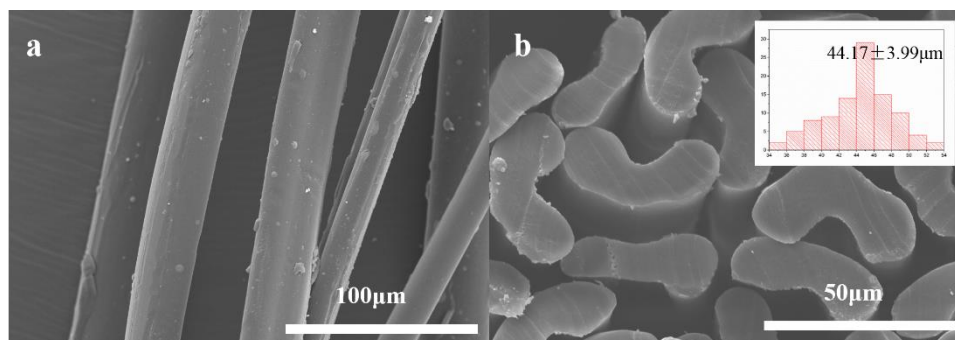


## Supporting Information



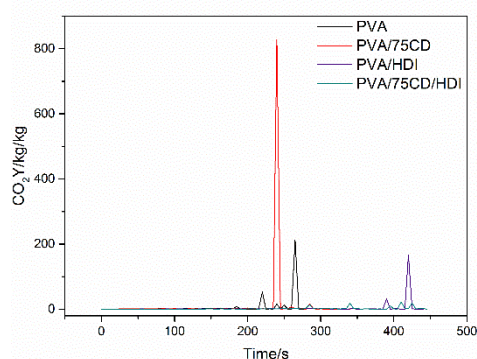
**Figure. S1** Surface and cross section of PVA/HDI, together with its diameter distribution.

**Table S1** Elemental analysis (EA) of PVA/HDI and PVA/CD/HDI.

Sample	C/%	H/%	O/%	N/%
PVA/HDI	51.21	9.22	39.04	0.53
PVA/75CD/HDI	45.84	8.47	42.82	2.87

**Table S2** Characteristic joints of TGA at air atmosphere.

Sample	T <sub>10%</sub> /°C	T <sub>peak loss</sub> /°C	T <sub>90%</sub> /°C	W <sub>550°C</sub> /%
PVA	223.3	238.3	514.2	0.9
PVA/75CD	233.3	248.3	535.8	5.5
PVA/75CD/HDI	234.2	247.5	527.5	6.4



**Figure. S2** CO<sub>2</sub> yield (CO<sub>2</sub>Y) of PVA, PVA/75CD, PVA/HDI and PVA/75CD/HDI in cone calorimeter.