Sustainable ITO films with reduced indium content deposited by AACVD

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Fig. S1 Cross-section images of In-Sn-O thin films derived from Precursor In0.6Sn0.9 deposited at different temperatures: (a) 435 °C, (b) 450 °C, (c) 465 °C, and (d) 480 °C.

Amounts of InCl3 (mmol)	Amounts of C4H9SnCl3 (mmol)	Name of the Corresponding Sample
0.3	1.2	In0.3Sn1.2
0.6	0.9	In0.6Sn0.9
0.9	0.6	In0.9Sn1.6
1.2	0.3	In1.2Sn0.3

Table S1 The amounts of InCl₃ and $C_4H_9SnCl_3$ in each precursor and names of the corresponding samples



Fig. S2 Sheet resistance of all samples derived from precursors containing varying In content. The samples are denoted by the moles of In in the precursors.



Fig. S3 Tauc plots of films with varying In contents: (a) In0.3Sn1.2, (b) In0.6Sn0.9, (c) In0.9Sn1.2 and (d) In1.2Sn0.3



Fig. S4 Original EDX figures of each primary element present in the films: (a) In0.3Sn1.2, (b) In0.6Sn0.9, (c) In0.9Sn0.6 and (d) In1.2Sn0.3



Fig. S5 The core level scan of C 1s in all samples.

Sample name	C 1s %	O 1s %	In 3d %	Sn 3d %	In/(In+Sn) %
In0.3Sn1.2	58.99	31.24	3.83	5.95	39.16
In0.6Sn0.9	48.84	33.62	6.68	10.86	38.08
In0.9Sn0.6	54.28	29.22	3.55	12.95	21.52
In1.2Sn0.3	51.20	31.46	10.07	7.27	58.07

Table S2 Elemental compositions of In-Sn-O films deposited from precursorscontaining varying In content calculated from the XPS measurements



Fig. S6 Large-scale cross-sectional SEM images of samples: (a) In0.3Sn1.2, (b) In0.6Sn0.9, (c) In0.9Sn0.6 and (d) In1.2Sn0.3